

CHAPTER 1

THE CANADIAN FINANCIAL REPORTING ENVIRONMENT

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	M	9.	2	M	17.	6	M	25.	7	E
2.	1	E	10.	2	H	18.	6	M	26.	8	E
3.	1	E	11.	3	E	19.	6	H	27.	9	M
4.	1	E	12.	4	M	20.	6	M	28.	9	M
5.	1	E	13.	4	H	21.	6	E	29.	9	H
6.	1	M	14.	4	H	22.	6	M	30.	9	E
7.	2	M	15.	4	M	23.	6	E			
8.	2	E	16.	5	M	24.	6	M			
Exercises											
31.	1	M	34.	3	H	37.	6	H	40.	9	H
32.	2	H	35.	3	M	38.	6	M	41.	9	H
33.	3	E	36.	4	H	39.	7	M			

Note: E = Easy M = Medium H = Hard

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	3.	MC	5.	MC	31.	Ex				
2.	MC	4.	MC	6.	MC						
Learning Objective 2											
7.	MC	8.	MC	9.	MC	10.	MC	32.	Ex		
Learning Objective 3											
11.	MC	31.	Ex	33.	Ex	34.	Ex	35.	Ex		
Learning Objective 4											
12.	MC	13.	MC	14.	MC	15.	MC	36.	Ex		
Learning Objective 5											
16.	MC										
Learning Objective 6											
17.	MC	19.	MC	21.	MC	23.	MC	37.	Ex		
18.	MC	20.	MC	22.	MC	24.	MC	38.	Ex		
Learning Objective 7											
25.	MC	39.	Ex								
Learning Objective 8											
26.	MC										
Learning Objective 9											
27.	MC	28.	MC	29.	MC	30.	MC	40.	Ex	41.	Ex

Note: MC = Multiple Choice Ex = Exercise

CHAPTER STUDY OBJECTIVES

1. Explain how accounting makes it possible to use scarce resources more efficiently.

Accounting provides reliable, relevant, and timely information to managers, investors, and creditors so that resources are allocated to the most efficient enterprises. Accounting also provides measurements of efficiency (profitability) and financial soundness.

2. Explain the meaning of “stakeholder” and identify key stakeholders in financial reporting, explaining what is at stake for each one. Investors, creditors, management, securities commissions, stock exchanges, analysts, credit rating agencies, auditors, and standard setters are some of the major stakeholders. See Illustration 1-3.

3. Identify the objective of financial reporting. The objective of financial reporting is to communicate information that is useful to key decision makers such as investors and creditors in making resource allocation decisions (including assessing management stewardship) about the resources and claims to resources of an entity and how these are changing.

4. Explain how information asymmetry and bias interferes with the objective of financial reporting. Ideally, all stakeholders should have access to the same information in order to ensure that good decisions are made in the capital marketplace. (This is known as information symmetry.) However, this is not the case—there is often information asymmetry. Of necessity, management has access to more information so that it can run the company. It must also make sure that it does not give away information that might harm the company, such as in a lawsuit where disclosure might cause the company to lose. Aside from this, information asymmetry exists because of management bias whereby management acts in its own self-interest, such as wanting to maximize management bonuses. This is known as moral hazard in accounting theory. Information asymmetry causes markets to be less efficient. It may cause stock prices to be discounted or costs of capital to increase. In addition, it might detract good companies from raising capital in the particular market where relevant information is not available (referred to as adverse selection in accounting theory). The efficient markets hypothesis is felt to exist only in a semi-strong form, meaning that only publicly available information is assimilated into stock prices.

5. Explain the need for accounting standards. The accounting profession has tried to develop a set of standards that is generally accepted and universally practised. This is known as GAAP (generally accepted accounting principles). Without this set of standards, each enterprise would have to develop its own standards, and readers of financial statements would have to become familiar with every company's particular accounting and reporting practices. As a result, it would be almost impossible to prepare statements that could be compared. In addition, accounting standards help deal with the information asymmetry problem.

6. Identify the major entities that influence the standard-setting process and explain how they influence financial reporting. The Canadian Accounting Standards Board (AcSB) is the main standard-setting body in Canada for private companies, pension plans, and not-for-profit entities. Its mandate comes from the Canada Business Corporations Act and Regulations as well as provincial acts of incorporation. For public companies, GAAP is International Financial

Reporting Standards (IFRS) as established by the International Accounting Standards Board (IASB). Public companies are required to follow GAAP in order to access capital markets, which are monitored by provincial securities commissions. The Financial Accounting Standards Board (FASB) is also important as it influences IFRS standard setting. Private companies may choose to follow IFRS. Public companies that list on U.S. stock exchanges may choose to follow U.S. GAAP.

7. Explain the meaning of generally accepted accounting principles (GAAP). Generally accepted accounting principles are either principles that have substantial authoritative support, such as the *CICA Handbook*, or those arrived at through the use of professional judgement and the conceptual framework.

8. Explain the significance of professional judgement in applying GAAP. Professional judgement plays an important role in Accounting Standards for Private Enterprises (ASPE) and IFRS since much of GAAP is based on general principles, which need to be interpreted.

9. Discuss some of the challenges and opportunities for accounting. Some of the challenges facing accounting are oversight in the capital markets, centrality of ethics, standard setting in a political environment, principles versus rules-based standard setting, the impact of technology, and integrated reporting. All of these require the accounting profession to continue to strive for excellence and to understand how accounting adds value in the capital marketplace.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
d	1.	Accounting characteristics
a	2.	Nature of financial accounting
c	3.	Definition of financial accounting
b	4.	Definition of management accounting
d	5.	Efficient use of resources
c	6.	Capital allocation process
b	7.	Stakeholders in the financial reporting environment
d	8.	Preparation of audited financial statements
a	9.	Auditor's responsibility
c	10.	Causes of subprime lending crisis
b	11.	Objectives of financial reporting
c	12.	Preparation of biased information
c	13.	Existence of information asymmetry
b	14.	Efficient markets hypothesis
d	15.	Management bias
b	16.	Reduction of information asymmetry
c	17.	Responsibility of the AcSB
a	18.	Oversight of AcSB
c	19.	Authority over accounting standards in the U.S
d	20.	Development of financial reporting standards in Canada
b	21.	Adoption of IFRS
d	22.	Activities and authority of the OSC
b	23.	Use of ASPE
a	24.	IASB's standard setting process
c	25.	Primary sources of GAAP under ASPE
d	26.	Exercise of professional judgement
b	27.	SOX
c	28.	Rules-based vs. principles-based approach
c	29.	Changing financial reporting environment
a	30.	Advancement of technology on financial reporting

EXERCISES

Item	Description
1-31	Effective capital allocation
1-32	Stakeholders in the financial reporting environment
1-33	Objectives of financial reporting
1-34	Entity vs. proprietary perspective
1-35	User needs
1-36	Information asymmetry
1-37	Role of securities commissions and stock exchanges
1-38	Standard setting
1-39	Source of GAAP
1-40	SOX and standard setting
1-41	Challenges facing financial reporting

MULTIPLE CHOICE—Conceptual

1. The essential characteristic(s) of accounting is (are)
 - a) communication of financial information to interested internal parties only.
 - b) communication of economic information to external parties.
 - c) identification and measurement of financial information only.
 - d) identification, measurement, and communication of financial information.

2. Financial accounting is concerned with the process that culminates in
 - a) the preparation of financial reports.
 - b) specialized reports for inventory management and control.
 - c) specialized reports for income tax calculation and recognition.
 - d) reports on changes in stock prices and future estimates of market position.

3. Financial accounting can be broadly defined as the area of accounting that prepares financial statements to be used
 - a) by parties internal to the business enterprise only.
 - b) by investors only.
 - c) by parties both internal and external to the business enterprise.
 - d) primarily by external users and Canada Revenue Agency.

4. Management accounting can be broadly defined as the area of accounting that communicates financial information
 - a) to investors only.
 - b) to parties internal to the business enterprise only.
 - c) to parties both internal and external to the business enterprise.
 - d) primarily to external users and Canada Revenue Agency.

5. Whether a business is successful and thrives is determined by
 - a) free enterprise or competition.
 - b) competition and markets only.
 - c) markets and competition only.
 - d) markets, competition and free enterprise.

6. Which of the following is correct?
 - a) Reported accounting numbers do not affect the transfer of resources.
 - b) Credit rating agencies use accounting information to assess their assets.
 - c) Efficient capital markets promote productivity and encourage innovation.
 - d) Efficient capital markets promote productivity but do not encourage innovation.

7. Stakeholders who help in the efficient allocation of resources include
 - a) investors and creditors.
 - b) financial analysts and regulators.
 - c) creditors and auditors.

- d) management and auditors.
8. Audited financial statements are prepared by
- a) auditors.
 - b) financial analysts.
 - c) Canada Revenue Agency.
 - d) management.
9. The auditor's *primary* responsibility is to
- a) review financial statements and discuss them with management.
 - b) prepare financial statements.
 - c) report to Canada Revenue Agency.
 - d) report to standard setters.
10. The widely publicized subprime lending crisis was NOT caused by
- a) capital market participants who acted in their own self-interest.
 - b) a lack of transparency.
 - c) the practice of securitizing assets.
 - d) a lack of investor understanding of the investment's true risk.
11. Objectives of financial reporting do NOT include
- a) providing information that is useful to users in making resource allocation decisions.
 - b) providing information about the liquidation value of an enterprise.
 - c) providing information about an entity's economic resources, obligations, and equity/net assets.
 - d) providing information about changes in an entity's economic resources, obligations, and equity/net assets.
12. The preparation by some companies of biased information is sometimes referred to as
- a) conservative financial reporting.
 - b) full disclosure of all material facts.
 - c) aggressive financial reporting.
 - d) stewardship.
13. Where information asymmetry exists, the capital market may attract the wrong kind of company. This is known as
- a) moral hazard.
 - b) conservative accounting.
 - c) adverse selection.
 - d) an inefficient marketplace.
14. The "efficient markets hypothesis" proposes that
- a) market prices reflect information known only to internal stakeholders.
 - b) market prices reflect all information about a company.
 - c) market prices reflect information known only to external stakeholders.

- d) information asymmetry is required.
15. Which of the following does NOT describe a cause of management bias?
- a) the need to comply with contracts, such as debt covenants
 - b) the desire to meet financial analysts' expectations
 - c) the tendency to downplay negative events
 - d) the desire for all stakeholders to have access to all information
16. The problem of information asymmetry can be reduced by
- a) aggressive accounting.
 - b) accounting standards.
 - c) adverse selection.
 - d) only focusing on positive events.
17. As of 2011, the responsibilities of the Accounting Standards Board (AcSB) in Canada relate to setting standards for
- a) publicly accountable entities only.
 - b) both publicly accountable entities and private enterprises.
 - c) private enterprises, not-for-profit entities and pension plans.
 - d) not-for-profit entities and pension plans only.
18. In Canada, the body that has the responsibility of overseeing the Accounting Standards Board (AcSB) is the
- a) Accounting Standards Oversight Council (AcSOC).
 - b) International Accounting Standards Board (IASB).
 - c) Canadian Institute of Chartered Accountants (CICA).
 - d) Financial Accounting Standards Board (FASB).
19. In the United States, the body that has the final authority over accounting standards is the
- a) Financial Accounting Standards Board (FASB).
 - b) International Accounting Standards Board (IASB).
 - c) Securities Exchange Commission (SEC).
 - d) Accounting Standards Oversight Council (AcSOC).
20. In Canada, the body which is NOT instrumental in the development of financial reporting standards is the
- a) Accounting Standards Board (AcSB).
 - b) Financial Accounting Standards Board (FASB).
 - c) International Accounting Standards Board (IASB).
 - d) American Institute of Certified Public Accountants.
21. The adoption of International Financial Reporting Standards in Canada is an example of
- a) the impact of technology on user's needs.
 - b) the impact of globalization on capital markets.
 - c) ethical behaviour.

- d) the desire of most private companies to expand internationally.

22. Which of the following statements does NOT describe the activities and authority of the Ontario Securities Commission (OSC)?

- a) The OSC reviews and monitors the financial statements of companies whose shares are listed on the Toronto Stock Exchange
- b) The OSC issues its own disclosure requirements for listed companies.
- c) The OSC has the ability to fine or delist companies.
- d) The OSC issues financial accounting standards for Canadian companies.

23. Which of the following does NOT support the use of Accounting Standards for Private Enterprises (ASPE)?

- a) Private enterprises usually have less complex business models.
- b) Private enterprises that are “going public.”
- c) Private enterprises usually have fewer users.
- d) Private enterprises’ financial statement users tend to have first-hand information.

24. Which of the following does NOT describe a step in the IASB’s standard setting process?

- a) appointing trustees to the IFRS Foundation
- b) development of an Exposure Draft
- c) provision of strategic advice by the IFRS Advisory Council
- d) public consultation

25. Under ASPE, the primary sources of GAAP include

- a) accounting textbooks and journals.
- b) International Financial Reporting Standards.
- c) the CICA Handbook and appendices.
- d) research studies.

26. The exercise of professional judgement does NOT involve

- a) the use of knowledge gained through education.
- b) the application of knowledge gained through experience.
- c) the use of ethical decision making.
- d) aggressive accounting.

27. The Sarbanes-Oxley Act (SOX) was NOT enacted to

- a) help prevent fraud and poor financial reporting practices.
- b) ensure the act was applied internationally.
- c) enable the SEC to increase its policing efforts.
- d) introduce new independence rules for auditors.

28. In a rules-based approach (such as U.S. GAAP), compared to a principles-based approach (such as Canadian GAAP),

- a) the body of knowledge is smaller.
- b) the importance of communicating the best information to users is emphasized.

- c) since it is more prescriptive, it may be easier to defend how to account for a particular item.
- d) companies frequently do not interpret the rules literally.

29. Which of the following is/are major factors in the rapidly changing financial reporting environment in Canada?

- a) increased demand for accountants and the impact of technology
- b) globalization and the unethical actions of accountants
- c) the growing number of institutional investors who want more information regarding environmental and social issues
- d) increased use of the Internet

30. Which of the following is likely to be an advantage of the advancement of technology on financial reporting?

- a) Users of financial information will have access to more information.
- b) The quality and reliability of the information may be compromised.
- c) Equal and fair access may be at issue.
- d) Internet reporting will increase costs.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Item
1.	d	6.	c	11.	b	16.	b	21.	b	26.	d
2.	a	7.	b	12.	c	17.	c	22.	d	27.	b
3.	c	8.	d	13.	c	18.	a	23.	b	28.	c
4.	b	9.	a	14.	b	19.	c	24.	a	29.	c
5.	d	10.	c	15.	d	20.	d	25.	c	30.	a

EXERCISES

Ex. 1-31 Effective capital allocation

Explain the advantages of an effective capital allocation process.

Solution 1-31

An effective capital allocation process encourages innovation, promotes productivity, and provides a platform for buying and selling securities and obtaining and granting credit.

Ex. 1-32 Stakeholders in the financial reporting environment

Briefly describe the much-publicized subprime lending crisis in the United States, and identify the stakeholders and how they were affected.

Solution 1-32

At the centre of this issue were securitized mortgage assets that were sold to investors. These assets were based on mortgages that had been extended to high-risk borrowers who could no longer afford their mortgage payments once interest rates rose. This led to a flooding of the housing market as borrowers walked away from their houses (and debt). The primary stakeholders were the lenders, borrowers and investors. Lenders (acting in their own self-interest) sold these investments to investors who may not have fully understood the high-risk nature of their investment. Borrowers lost their homes they could no longer afford, and investors suffered large losses due to the defaulted loans.

Ex. 1-33 Objectives of financial reporting

What are the objectives of financial reporting by business enterprises?

Solution 1-33

The objectives of financial reporting are to provide information

1. that is useful to investors, members, contributors, creditors and other users in making their resource allocation decisions and/or assessing management stewardship.
2. to help users in evaluating an entity's economic resources, obligations and equity/net assets and the changes to these items.
3. to help users evaluate the economic performance of an entity.

Ex. 1-34 Entity vs. proprietary perspective

Explain the difference between the entity perspective and the proprietary perspective.

Solution 1-34

The entity perspective views companies as separate and distinct from their owners. e.g., corporate assets are viewed as assets of the company and not of a specific creditor or shareholder. Investors and creditors have liability or equity claims. On the other hand, the proprietary perspective holds that financial reporting should focus only on the needs of the shareholders, and is not considered appropriate. The entity perspective is adopted as part of the objective of general purpose financial reporting.

Ex. 1-35 User Needs

Explain why providing information to users is a challenging task.

Solution 1-35

First, users have very different knowledge levels. Some users have accounting designations or have worked in the finance industry for several years. Others have limited knowledge of how the information is gathered and reported. Second, users have very different needs. Some users are institutional investors who hold a large percentage of equity shareholdings and generally devote significant resources to managing their investment portfolios. Others are credit managers at banks or credit unions who deal mainly with small business or personal loans. Still others are labour negotiators whose knowledge of financial reporting is limited to periodic reviews of financial information for the purpose of negotiations.

Ex. 1-36 Information asymmetry

In markets where information asymmetry exists, there can be adverse selection and moral hazard. Explain what these terms mean.

Solution 1-36

Adverse selection refers to *hidden knowledge*, where the capital marketplace may attract the wrong type of company, such as companies who have the most to gain from not disclosing information. Given this situation, companies who do fully disclose all information may choose not to enter the marketplace if they are aware of the presence of adverse selection.

Moral hazard refers to *hidden actions*, and occurs as a result of human nature. People or companies may shirk their responsibilities if they think they can get away with it, e.g., not disclose negative information since they know it may be detrimental to their share price. This is a form of management bias.

Ex. 1-37 Role of Securities Commissions and Stock Exchanges

Explain the role of securities commissions and stock exchanges in financial reporting.

Solution 1-37

The securities commissions and stock exchanges monitor the financial statements of companies whose shares are publicly traded to ensure that they provide full and plain disclosure of material information, and to ensure that the companies may continue to list shares on the stock exchanges. Securities commissions oversee and monitor the capital marketplace.

Ex. 1-38 Standard setting

Explain the relationship between Canadian GAAP and International Financial Reporting Standards (IFRS).

Solution 1-38

Since the decision to adopt IFRS was made, Canadian GAAP has been continuously adjusted (converged) to mirror IFRS. Even prior to that convergence, both standards were principles based (rather than rules-based).

Ex. 1-39 Sources of GAAP

International Financial Reporting Standards (IFRS) are the primary source of GAAP for public enterprises in Canada. They are, however, insufficient to address all of the accounting issues

facing accountants. Explain why this is so and outline some other sources of GAAP that accountants use.

Solution 1-39

Although IFRS outline the specific accounting treatment for a multitude of items, for some items the guidelines are very general. Also, the business environment is complex and constantly changing and, therefore, some items may not be discussed at all. Thus, accountants must use IFRS in conjunction with other sources like professional judgement, pronouncements of other standard-setting bodies, accounting literature, and accepted industry practices.

Ex. 1-40 SOX and standard setting

After several highly-publicized accounting scandals in the U.S. such as Enron, Sunbeam and WorldCom, all of whom, coincidentally, were clients of the now basically defunct public accounting firm of Arthur Andersen, the U.S. regulators enacted the Sarbanes-Oxley Act (SOX). Pressure was put on Canada to follow a similar course. Explain what Canada has done to make public companies more accountable.

Solution 1-40

First, the Canadian Public Accountability Board (CPAB) was created to supervise accounting issues similar to those addressed by SOX. These included establishing auditing, quality control and independence standards and rules.

The Canadian Securities Administrators (CSA) has issued guidelines/rules that require (among other things)

1. company management to take responsibility for the appropriateness and fairness of the financial statements
2. public enterprises to have independent audit committees
3. management to report on the effectiveness of their internal controls
3. public accounting firms to be subject to CPAB
4. greater disclosures, such as ratings from rating agencies, legal proceedings, payments to stock promoters, details about corporate directors.

Ex. 1-41 Challenges Facing Financial Reporting

In North America, the financial reporting environment is changing at a very rapid pace. Briefly describe four challenges facing the accounting profession today.

Solution 1-41

1. Oversight in the capital marketplace. The Sarbanes-Oxley Act (SOX) instituted the Public Company Accounting Oversight Board (PCAOB), stronger independence rules for auditors, reporting on the effectiveness of the financial reporting internal control system, and disclosure of a code of ethics for senior financial officers.
Canada has followed suit and developed the Canadian Public Accountability Board (CPAB). As well, the Canadian Securities Administrators (CSA) requires company management to take responsibility for the appropriateness and fairness of the financial statements, public companies to have independent audit committees, and public accounting firms to be subject to the CPAB. The CSA also requires much greater disclosures. The overall impact of these financial reforms has been to put more emphasis on government regulation and less on self-regulation.

2. Centrality of ethics. Accountants are central in making the capital marketplace efficient and effective. However, ethical dilemmas are common, often precipitated by management bias. It is not always easy to “do the right thing.” Pressure to bend the rules, play the game or “just ignore it” are often there. There is no consensus (yet) among accounting professionals as to what a comprehensive ethical system is, and so it is up to the individual accountant to maintain a high standard of ethics at all times.
3. Standard setting in a political environment. Since standard setting is part of the real world, accounting standards often arise from political action. The stakeholders who lobby the hardest may unduly influence new or revised accounting standards. This is not surprising since many accounting standards have economic consequences. Thus standard setters such as the IASB must consider the needs of all stakeholders when creating or changing standards. The challenge is to find a balance between letting stakeholders have a say while not bowing to undue political pressure.
4. Principles vs. rules. Rules-based, prescriptive systems (such as U.S. GAAP or the Canadian income tax system) have a significantly larger body of knowledge than a principles-based approach such as IFRS and ASPE. However, there is a tendency to interpret the rules literally with a rules-based approach, possibly because it may be easier to defend the accounting for a particular item. A disadvantage of the rules-based approach is that it may not always communicate the best information to the user. The principles-based approaches are based on professional judgement, resulting in carefully reasoned application of the principle to the business facts. Since the body of knowledge is smaller with principles-based approaches, the standard setters must ensure it rests on a cohesive set of principles and conceptual framework, which is sufficiently flexible, and sufficiently detailed to provide good guidance.

Other challenges are the impact of technology and integrated reporting.

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CHAPTER 2

CONCEPTUAL FRAMEWORK UNDERLYING FINANCIAL REPORTING

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
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3.	2	M	16.	3	M	29.	4	H	42.	5	H
4.	2	E	17.	3	M	30.	4	M	43.	5	H
5.	2	E	18.	3	H	31.	4	M	44.	6	M
6.	2	M	19.	3	H	32.	4	M	45.	6	H
7.	2	M	20.	3	E	33.	4	M	46.	6	H
8.	2	M	21.	4	M	34.	4	M	*47.	7	M
9.	2	M	22.	4	M	35.	4	H	*48.	7	M
10.	2	M	23.	4	M	36.	4	H	*49.	7	M
11.	2	H	24.	4	M	37.	4	H	*50.	7	M
12.	2	H	25.	4	M	38.	4	H	*51.	7	M
13.	2	H	26.	4	E	39.	4	M	*52.	7	H
Exercises											
53.	1	M	56.	4	M	59.	4	M	62.	5	M
54.	2,3,4	H	57.	4	M	60.	4	M	63.	5	M
55.	3	M	58.	4	H	61.	4	M	64.	5	E

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

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1.	MC	2.	MC	53.	Ex						
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3.	MC	5.	MC	7.	MC	9.	MC	11.	MC	13.	MC
4.	MC	6.	MC	8.	MC	10.	MC	12.	MC	54.	Ex
Learning Objective 3											
14.	MC	16.	MC	18.	MC	20.	MC	55.	Ex		
15.	MC	17.	MC	19.	MC	54.	Ex				
Learning Objective 4											
21.	MC	26.	MC	31.	MC	36.	MC	56.	Ex	60.	Ex
22.	MC	27.	MC	32.	MC	37.	MC	57.	Ex	61.	Ex
23.	MC	28.	MC	33.	MC	38.	MC	58.	Ex		
24.	MC	29.	MC	34.	MC	39.	MC	59.	Ex		
25.	MC	30.	MC	35.	MC	40.	MC	54.	Ex		
Learning Objective 5											
41.	MC	42.	MC	43.	MC	62.	Ex	63.	Ex	64.	Ex
Learning Objective 6											
44.	MC	45.	MC	46.	MC						
Learning Objective 7											
*47.	MC	*48.	MC	*49.	MC	*50.	MC	*51.	MC	*52.	MC

Note: MC = Multiple Choice Ex = Exercise

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CHAPTER STUDY OBJECTIVES

1. Indicate the usefulness and describe the main components of a conceptual framework for financial reporting. A conceptual framework is needed to (1) create standards that build on an established body of concepts and objectives, (2) provide a framework for solving new and emerging practical problems, (3) increase financial statement users' understanding of and confidence in financial reporting, and (4) enhance comparability among different companies' financial statements.

The first level deals with the objective of financial reporting. The second level includes the qualitative characteristics of useful information and elements of financial statements. The third level includes foundational principles and conventions.

2. Identify the qualitative characteristics of accounting information. The overriding criterion by which accounting choices can be judged is decision usefulness; that is, the goal is to provide the information that is the most useful for decision-making. Fundamental characteristics include relevance and faithful representation. These two characteristics must be present. Enhancing characteristics include comparability, verifiability, timeliness, and understandability. There may be trade-offs.

3. Define the basic elements of financial statements. The basic elements of financial statements are (1) assets, (2) liabilities, (3) equity, (4) revenues, (5) expenses, (6) gains, and (7) losses.

4. Describe the foundational principles of accounting. (1) Economic entity: the assumption that the activity of a business enterprise can be kept separate and distinct from its owners and any other business unit. (2) Control: the entity has the power to make decisions and reap the benefits or be exposed to the losses (which are variable). (3) Revenue recognition: revenue is generally recognized when it is (a) earned, (b) measurable, and (c) collectible (realizable). (4) Matching assists in the measurement of income by ensuring that costs (relating to long-lived assets) incurred in earning revenues are booked in the same period as the revenues earned. (5) Periodicity: the assumption that an enterprise's economic activities can be divided into artificial time periods to facilitate timely reporting. (6) Monetary unit: the assumption that money is the common denominator by which economic activity is conducted, and that the monetary unit gives an appropriate basis for measurement and analysis. (7) Going concern: the assumption that the business enterprise will have a long life. (8) Historical cost principle: existing GAAP requires that many assets and liabilities be accounted for and reported based on their acquisition price. Many assets are later revalued. (9) Fair value principle: assets and liabilities are valued at fair value—that is, an exit price—and viewed from a market participant perspective. (10) Full disclosure principle: accountants follow the general practice of providing information that is important enough to influence an informed user's judgement and decisions.

5. Explain the factors that contribute to choice and/or bias in financial reporting decisions. Choice is the result of many things, including principles-based standards, measurement uncertainty, and increasingly complex business transactions. The conceptual framework is the foundation that GAAP is built on. If there is no primary source of GAAP for a

specific decision, then professional judgement must be used, making sure that the accounting policies chosen are consistent with the primary sources of GAAP and the conceptual framework.

Financial engineering is the process of legally structuring a business arrangement or transaction so that it meets the company's financial reporting objective. This is a dangerous practice since it often results in biased information.

Fraudulent financial reporting often results from pressures on individuals or the company. These pressures may come from various sources, including worsening company, industry, or economic conditions; unrealistic internal budgets; and financial statement focal points related to contractual, regulatory, or capital market expectations. Weak internal controls and governance also contribute to fraudulent financial reporting.

6. *Discuss current trends in standard setting for the conceptual framework.* The IASB and FASB will continue to work toward a common conceptual framework. The project on objectives and qualitative characteristics is complete. The boards are focusing on defining elements and the recognition/measurement frameworks.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Conceptual framework
d	2.	Objectives of financial reporting
c	3.	Fundamental qualitative characteristics
b	4.	Relevance
b	5.	Relevance
d	6.	Representational faithfulness
a	7.	Criterion for accounting information
c	8.	Enhancing qualitative characteristics
d	9.	Comparability
a	10.	Timeliness
a	11.	Comparability
c	12.	Timeliness
c	13.	Costs of providing useful information
b	14.	Common characteristic of assets and liabilities
c	15.	Equitable obligations
a	16.	Items included in equity under IFRS
d	17.	Definition of gains
b	18.	Other comprehensive income
c	19.	Statements prepared using ASPE
b	20.	Components of comprehensive income
d	21.	Economic entity assumption
c	22.	Timing of revenue recognition
a	23.	Example of full disclosure
d	24.	Economic entity assumption
c	25.	Recognition and measurement
b	26.	Periodicity assumption
d	27.	Going concern assumption
b	28.	Historical cost principle
b	29.	Matching principle
a	30.	Use of allowance for doubtful accounts
b	31.	Historical cost principle
a	32.	Economic entity assumption
b	33.	Matching principle
d	34.	Recording of depreciation
c	35.	Fair value of an asset
c	36.	Full disclosure principle
b	37.	Measurement uncertainty
b	38.	Full disclosure principle
c	39.	Management Discussion and Analysis
a	40.	Items included in MD&A
b	41.	Principles-based GAAP
c	42.	Financial engineering
d	43.	Fraudulent financial reporting
c	44.	Proposed new definition of asset
b	45.	Proposed new examples of assets
d	46.	Proposed new examples of liabilities
b	*47.	Input levels for estimating fair value

- a *48. Definition of the cost model
- b *49. Definition of the income model
- c *50. Definition of the market model
- d *51. Use of discounted cash flow model
- c *52. Remeasuring a liability at fair value

*This topic is dealt with in an Appendix to the chapter.

EXERCISES

Item	Description
2-53	Conceptual framework
2-54	Accounting terminology – fill in the blanks
2-55	Equitable obligations
2-56	Foundational principles
2-57	Identification of foundational accounting principles
2-58	Identification of foundational accounting principles and qualitative characteristics
2-59	Foundational accounting principles and qualitative characteristics – matching
2-60	Fair value measurement
2-61	Matching concept
2-62	Principles vs. rules based GAAP
2-63	Financial engineering
2-64	Fraudulent financial reporting

MULTIPLE CHOICE—Conceptual

1. Which of the following is NOT part of the conceptual framework for financial reporting?
 - a) Elements of financial statements
 - b) Qualitative characteristics of accounting information
 - c) Notes to financial statements
 - d) Foundational principles

 2. Which of the following is NOT an objective of financial reporting?
 - a) To provide information about an entity's economic resources, obligations and equity/net assets
 - b) To provide information that is useful to investors and creditors and other users in making resource allocation decisions and/or assessing management stewardship
 - c) To provide information that is useful in assessing the economic performance of the entity
 - d) To provide the most useful information possible even if the costs exceed the benefits

 3. Fundamental qualitative characteristics include
 - a) relevance and comparability.
 - b) representational faithfulness and timeliness.
 - c) relevance and representational faithfulness.
 - d) verifiability and relevance.

 4. Which of the following does NOT relate to the concept of relevance?
 - a) The information must be capable of making a difference in a decision.
 - b) Both material and immaterial information is important.
 - c) The information has predictive value.
 - d) The information has feedback/confirmatory value.

 5. Accounting information is considered to be relevant when it
 - a) can be depended on to represent the economic conditions and events that it is intended to represent.
 - b) is capable of making a difference in a decision.
 - c) is understandable by reasonably informed users of accounting information.
 - d) is verifiable and neutral.

 6. Representational faithfulness includes
 - a) completeness, neutrality and comparability.
 - b) neutrality, completeness, and understandability.
 - c) relevance, completeness and freedom from material error.
 - d) neutrality, completeness and freedom from material error.

 7. The overriding criterion by which accounting information can be judged is that of
 - a) usefulness for decision making.
-

- b) freedom from bias.
 - c) timeliness.
 - d) comparability.
8. Which statement is correct regarding enhancing qualitative characteristics?
- a) Full discussion of the information presented is a substitute for comparable information.
 - b) Numbers that are easily verifiable with a reasonable degree of accuracy are called soft numbers.
 - c) Information must be available before it loses its ability to influence users' decisions.
 - d) Financial information must be of sufficient quality and clarity that even uninformed readers can understand it.
9. Comparability allows any financial statement user to
- a) make timely decisions.
 - b) understand all the information presented.
 - c) verify all the data provided.
 - d) identify the real similarities and differences in economic phenomena.
10. Timeliness is increased by
- a) quarterly reporting.
 - b) comparative financial statements.
 - c) representational faithfulness.
 - d) annual reporting.
11. Sunbury Ltd. operates in both Canada and the United States. The company wants to improve the qualitative characteristics of its financial statements. Which of the following would MOST likely improve the *comparability* of Sunbury's financial statements?
- a) The restatement of its financial statements from Canadian GAAP to US GAAP for its American investors.
 - b) The preparation of monthly financial statements.
 - c) The introduction of a policy that specifies how Sunbury's capital assets should be depreciated.
 - d) The use of U.S.-trained accountants.
12. You want to improve the qualitative characteristics of your firm's financial statements. Which of the following options would MOST likely improve the *timeliness* of your company's financial statements?
- a) increasing the number of disclosures
 - b) changing the timing of when revenues are recognized
 - c) increasing the frequency of statements from annually to quarterly
 - d) decreasing the useful life of property, plant and equipment from ten years to five
13. The costs of providing useful information do NOT include
- a) collecting, processing and distributing information.
 - b) auditing financial statements.

- c) disclosure to competitors.
 - d) users' allocation of resources.
14. The common characteristic of both assets and liabilities is that they BOTH
- a) provide an economic benefit.
 - b) result from a past transaction or event.
 - c) represent a present responsibility.
 - d) represent contractual or other rights.
15. Equitable obligations arise due to
- a) statutory requirements.
 - b) contractual obligations.
 - c) moral or ethical considerations.
 - d) union agreements.
16. Under IFRS, equity does NOT include
- a) long term leases.
 - b) common and/or preferred shares.
 - c) accumulated other comprehensive income.
 - d) retained earnings.
17. Gains are defined as
- a) increases in economic resources resulting from an entity's ordinary activities.
 - b) decreases in economic resources resulting from an entity's ordinary activities.
 - c) the residual interest remaining after liabilities are deducted from assets.
 - d) increases in equity resulting from an entity's peripheral or incidental transactions.
18. Under IFRS, "other comprehensive income" does NOT include
- a) unrealized holding gains and losses on certain securities.
 - b) gains and losses on disposal of property, plant and equipment.
 - c) gains and losses related to certain types of hedges.
 - d) certain gains and losses related to foreign exchange transactions.
19. Financial statements prepared under ASPE include a
- a) statement of comprehensive income.
 - b) statement of cash flows and a statement of changes in shareholders' equity.
 - c) balance sheet and a statement of retained earnings.
 - d) statement of retained earnings and a statement of comprehensive income.
20. Which of the following elements of financial statements is NOT a component of comprehensive income?
- a) Revenues
 - b) Distributions to owners
 - c) Losses

d) Expenses

21. A local businessman owns several different companies. His accountant prepares separate financial statements for each of these businesses. This is an application of the

- a) full disclosure principle.
- b) periodicity assumption.
- c) going concern assumption.
- d) economic entity assumption.

22. Generally, revenue from sales should be recognized at a point when

- a) management decides it is appropriate to do so.
- b) the product is available for sale.
- c) an exchange has taken place and the earnings process is substantially complete.
- d) the entire amount receivable has been collected from the customer and there remains no further warranty liability.

23. During a major renovation project of its head office, a worker was seriously injured. While the company believes that it was not at fault, it does include the incident in the notes to its financial statements. This is consistent with the

- a) full disclosure principle.
- b) periodicity assumption.
- c) going concern assumption.
- d) economic entity assumption.

24. The economic entity assumption

- a) is inapplicable to unincorporated businesses.
- b) recognizes the legal aspects of business organizations.
- c) requires periodic income measurement.
- d) is applicable to all forms of business organizations.

25. When deciding whether to recognize a financial statement element (or not), and how to measure it, the accountant should

- a) always use estimates.
- b) record "hard" numbers and ignore "soft" numbers.
- c) determine an acceptable level of uncertainty.
- d) recognize a financial statement element even if it cannot be measured.

26. During the lifetime of an entity, accountants produce financial statements at arbitrary points in time in accordance with the

- a) full disclosure principle.
- b) periodicity assumption.
- c) going concern assumption.
- d) economic entity assumption.

27. The assumption that a business enterprise will NOT be sold or liquidated in the near future is known as the
- economic entity assumption.
 - monetary unit assumption.
 - fair value principle.
 - going concern assumption.
28. Valuing assets at their liquidation values rather than their cost is inconsistent with the
- periodicity assumption.
 - historical cost principle.
 - matching principle.
 - economic entity assumption.
29. Which of the following is NOT a good example of the matching principle?
- A machine that produces certain goods is depreciated over its useful life. The depreciation expense is matched with the proceeds from the sale of those goods.
 - The entire amount of a two-year insurance premium is expensed in the first year.
 - An uncollectible receivable is written off in the year that the sale was made.
 - Recognition of revenue for which associated expenses cannot yet be determined is delayed until such determination can be made.
30. Use of an allowance for doubtful accounts is an application of the
- matching principle.
 - revenue recognition principle.
 - historical cost principle.
 - full disclosure principle.
31. Which of the following statements does NOT apply to the historical cost principle?
- Historical cost represents a value at a point in time.
 - The principle does not apply to financial instruments.
 - Historical cost results from a reciprocal or two-way exchange.
 - Over time, historical cost becomes irrelevant in terms of predictive value.
32. Preparation of consolidated financial statements when a parent-subsidiary relationship exists is an example of
- the economic entity assumption.
 - the matching principle.
 - comparability.
 - reliability.
33. The matching principle is best demonstrated by
- not recognizing any expense unless some revenue is realized.
 - associating effort (expense) with accomplishment (revenue).
 - recognizing prepaid rent received as revenue.
 - measuring expenses correctly.

34. Which of the following serves as the justification for the periodic recording of depreciation expense?
- a) association of efforts (expense) with accomplishments (revenue)
 - b) minimization of income tax liability
 - c) immediate recognition of an expense
 - d) systematic and rational allocation of cost over the periods benefited
35. Fair value (of an asset) is
- a) an entry price.
 - b) an entity-specific measure.
 - c) an exit price.
 - d) not used when following IFRS.
36. Application of the full disclosure principle
- a) is theoretically desirable but not practical because the costs of complete disclosure exceed the benefits.
 - b) is violated when important financial information is buried in the notes to the financial statements.
 - c) is demonstrated by the inclusion of information such as information about contingencies.
 - d) requires that the financial statements be consistent and comparable.
37. Where there is a significant uncertainty with respect to the measurement of an item,
- a) do not record anything in the financial statements.
 - b) recognize the item in the financial statements and disclose the measurement uncertainty in the notes to the financial statements.
 - c) do not record anything in the financial statements but disclose the measurement uncertainty in the notes to the financial statements.
 - d) record the maximum amount in the financial statements.
38. The operations of a resource company's oil sands operations results in environmental damage. While the extent of the damage cannot be determined at this time, the situation is disclosed in its financial statements. This BEST demonstrates
- a) the application of professional judgement.
 - b) the full disclosure principle.
 - c) representational faithfulness.
 - d) good management stewardship.
39. Management Discussion and Analysis (MD&A) is
- a) notes on meetings between management and auditors.
 - b) internal documents not released to shareholders.
 - c) supplementary information included in the annual report.
 - d) supplementary information included in the notes to the financial statements.

40. Management Discussion and Analysis (MD&A) does NOT include
- a) notes to the financial statements.
 - b) key performance drivers.
 - c) the company's vision and strategy.
 - d) the company's capabilities (capital and other resources).
41. Principles-based GAAP is sometimes criticized for being
- a) too inflexible.
 - b) too flexible.
 - c) too inconsistent.
 - d) too difficult for the reader to understand.
42. Which of the following situations does NOT demonstrate an attempt at financial engineering?
- a) creating complex legal arrangements and financial instruments
 - b) structuring debt financing so that it meets the GAAP definition of equity rather than debt
 - c) accounting for bona fide business transactions in a transparent manner
 - d) aggressively interpreting GAAP so that the impact on critical ratios is minimized
43. Fraudulent financial reporting is a business reality. While it cannot be eliminated, the risk of fraudulent reporting can be decreased. Which of the following considerations is LEAST likely to lessen that risk?
- a) an independent audit committee
 - b) an internal audit function
 - c) vigilant management
 - d) an increased focus on tying bonuses to short-term company performance
44. The IASB and FASB are currently working on a joint project to complete a common conceptual framework. Which of the following statements best describes the *proposed* (new) definition of an asset?
- a) The asset must involve future economic resources and the entity has a right or access to the resources, while others do not.
 - b) The asset must involve future economic resources and the resource must be freely available to all.
 - c) The asset must involve present economic resources and the entity has a right or access to the resources, while others do not.
 - d) The asset must involve present economic resources and the resource must be freely available to all.
45. The IASB and FASB are currently working on a joint project to complete a common conceptual framework. According to the *proposed* (new) definition, which of the following would be considered assets?
- a) accounts receivable, accounts payable, and patents
 - b) insurance contracts and accounts receivable
 - c) land, accounts receivable and unearned revenue
 - d) property, plant and equipment and constructive obligations

46. The IASB and FASB are currently working on a joint project to complete a common conceptual framework. According to the *proposed* (new) definition, which of the following would be considered *liabilities*?

- a) accounts receivable and accounts payable
- b) constructive obligations, long term leases and insurance contracts
- c) accounts payable, unearned revenue, and copyrights
- d) lawsuits – both settled and in progress

*47. Which of the following statements is correct regarding the levels of inputs required for estimating fair value of financial statement elements?

- a) Level 3 inputs are the highest quality inputs.
- b) The lower the level of input, the greater the required disclosures.
- c) Level 2 inputs are generally not observable and hence more subjective.
- d) Level 1 inputs are the lowest quality inputs.

*48. Valuation models may be categorized into three groups. Cost models

- a) attempt to reflect the amount that would be required to replace the asset's service capacity.
- b) convert future amounts to current amounts, using, for example, discounted cash flows or options pricing models.
- c) use prices and other information generated from market transactions involving identical or similar transactions.
- d) use either discounted cash flows methods, or prices and other information generated from market transactions involving identical or similar transactions.

*49. Valuation models may be categorized into three groups. Income models

- a) attempt to reflect the amount that would be required to replace the asset's service capacity.
- b) convert future amounts to current amounts, using, for example, discounted cash flows or options pricing models.
- c) use prices and other information generated from market transactions involving identical or similar transactions.
- d) use either discounted cash flows methods or prices and other information generated from market transactions involving identical or similar transactions.

*50. Valuation models may be categorized into three groups. Market models

- a) attempt to reflect the amount that would be required to replace the asset's service capacity.
- b) convert future amounts to current amounts, using, for example, discounted cash flows or options pricing models.
- c) use prices and other information generated from market transactions involving identical or similar transactions.
- d) use either discounted cash flows methods or prices and other information generated from market transactions involving identical or similar transactions.

*51. Fair value estimates arrived at by using discounted cash flow models would NOT use

- a) estimates of cash flows.
- b) time value of money.
- c) uncertainty (risk).
- d) original cost of an asset.

*52. A formerly profitable company is currently experiencing losses and, as a result, is cash-squeezed. Thus, it may not be able to repay its bank debt according to the loan's terms. If fair value is being used to measure this liability, then

- a) the company's credit risk has decreased.
- b) the debit to equity ratio will increase.
- c) the present value of the liability will decrease, resulting in a gain booked through other comprehensive income.
- d) the present value of the liability will decrease, resulting in a gain booked through profit and loss.

MULTIPLE CHOICE ANSWERS—CONCEPTUAL

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	9.	d	17.	d	25.	c	33.	b	41.	b	*49.	b
2.	d	10.	a	18.	b	26.	b	34.	d	42.	c	*50.	c
3.	c	11.	a	19.	c	27.	d	35.	c	43.	d	*51.	d
4.	b	12.	c	20.	b	28.	b	36.	c	44.	c	*52.	c
5.	b	13.	c	21.	d	29.	b	37.	b	45.	b		
6.	d	14.	b	22.	c	30.	a	38.	b	46.	d		
7.	a	15.	c	23.	a	31.	b	39.	c	*47.	b		
8.	c	16.	a	24.	d	32.	a	40.	a	*48.	a		

EXERCISES

Ex. 2-53 Conceptual framework

Briefly describe the objectives of a soundly developed conceptual framework.

Solution 2-53

A soundly developed conceptual framework should

1. increase financial statement users' understanding of and confidence in financial reporting,
2. enhance comparability among companies' financial statements,
3. allow new and emerging practical problems to be solved more quickly.

Ex. 2-54 Accounting terminology - fill in the blanks

Fill in the blanks below with the accounting term(s) that best completes each sentence.

1. A soundly developed conceptual framework is a _____ set of standards and rules. _____ and _____ are the fundamental qualitative characteristics that make accounting information useful for decision-making.
2. Enhancing qualitative characteristics are _____, _____, _____ and _____.
3. Liabilities have three essential characteristics:
1. They represent a _____, 2. the entity has a _____, and 3. _____.
4. While consolidated financial statements are prepared from the perspective of the _____, taxes are paid from the perspective of the _____.
5. Collectability is one of the three conditions of the revenue recognition principle. Assuming the other two conditions are met, revenue should only be recognized if collectability is _____.
6. The _____ stipulates that anything that is relevant to decisions should be included in the financial statements.
7. A company's Management Discussion and Analysis (MD&A) is an example of _____.
8. A _____ - based approach, as used in Canadian GAAP and IFRS, is sometimes criticized for being too _____.
9. Under the _____ principle, _____ incurred during a particular period are matched with _____ earned during that same period.
10. The _____ is based on the assumption that a business enterprise will continue to operate for the foreseeable future.
11. One of the assumptions of the _____ is valuation at a particular point in _____.

time.

12. _____ is defined as “the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.”

13. Standard setters have given companies the option to use _____ instead of historical costs.

Solution 2-54

1. coherent, relevance, representational faithfulness
2. comparability, verifiability, timeliness, understandability
3. present duty or obligation, present enforceable obligation, the liability results from a past transaction or event
4. economic entity, legal entity
5. reasonably assured
6. full disclosure principle
7. supplementary information
8. principles, flexible
9. matching, expenses, revenues
10. going concern assumption
11. historical cost principle
12. Fair value
13. fair value

Ex. 2-55 Equitable obligations

Due to the current poor economic conditions, Latimer Corp, a medium size manufacturer in Burnaby, is downsizing its Shipping Dept, and has to let go two of the employees, Jinder and Tang. Both are excellent workers and have been with the company for several years. The Shipping Dept supervisor, Jane Kowalski, goes to the company CEO to see if there is another alternative for these employees (other than termination of their employment). Jane suggests that Jinder could be retrained to learn how to operate a forklift and Tang would like to learn how to be a first aid attendant. Since Latimer always needs employees with these skills, the CEO agrees to try this. Latimer's work force is not unionized.

What type of obligation is this? Discuss.

Solution 2-55

This would be an equitable obligation, which does not arise from a contractual obligation, but rather from moral or ethical considerations. Theoretically (since there is no union contract with attendant language regarding layoffs and terminations), the company has no obligation to Jinder and Tang and could let them go without any further ado. However, it appears that both Ms Kowalski and the CEO feel a moral obligation to help the employees by retraining them. This will have future benefits for Latimer. For example, the company will not lose good workers; it will benefit from their new skills; and it will improve morale among other workers who may feel threatened by potential future job losses.

Ex. 2-56 Foundational principles

Briefly explain the foundational principles of recognition, measurement, presentation and disclosure that underlie financial accounting.

Solution 2-56

These concepts help explain which, when, and how financial elements and events should be disclosed.

Recognition focuses on whether something should be included in a company's financial statements. It includes the economic entity assumption, control, revenue recognition and matching principles.

Measurement relates to the "conversion" of information into numbers. It includes the periodicity, monetary unit and going concern assumptions, and the historical cost and fair value principles.

Presentation/disclosure relates to how (and how much) information is conveyed to the user. It includes the general practice of providing information that is important enough to influence an informed user's judgement and decisions.

Ex. 2-57 Identification of foundational accounting principles

State the accounting principle or assumption that is most applicable in the following situations:

1. A company prepares consolidated financial statements for a subsidiary that it owns.
2. The decision to remove an asset from the balance sheet
3. A large sale on account is not recognized as revenue because collectability is an issue.
4. Disclosure of the liability from a lawsuit in the financial statements
5. Preparation of monthly financial statements
6. Using the Canadian dollar in financial statements
7. An energy company includes detailed information about its reserves in its notes to the financial statements.

Solution 2-57

1. Control or economic entity assumption
2. Derecognition
3. Revenue recognition principle

4. Full disclosure principle
5. Periodicity assumption
6. Monetary unit assumption
7. Full disclosure principle

Ex. 2-58 Identification of foundational accounting principles and qualitative characteristics
Presented below are a number of accounting procedures and practices followed by January Corp. For each of these items, list the assumption, principle, or qualitative characteristic that is NOT being followed.

1. Because the company's income is low this year, January switched from accelerated depreciation to straight-line depreciation.
2. The president of January believes it is foolish to report financial information on a yearly basis. She believes that financial information should be disclosed only when significant new information is available related to the company's operations.
3. January decides to establish a large loss and related liability this year because of the possibility that it may lose a pending lawsuit. The possibility of loss is considered remote by the corporation's lawyers.
4. One of the corporation's executives purchased a new home computer for personal use with company money, charging Miscellaneous Expense.
5. The corporation has not established an Allowance for Doubtful accounts, even though there are a significant number of their accounts that are either slow paying or may not pay their debts in full.

Solution 2-58

1. Representational Faithfulness/ Neutrality
2. Periodicity assumption
3. Matching principle
4. Economic entity assumption
5. Matching principle

Ex. 2-59 Foundational accounting principles and qualitative characteristics - matching
Listed below are several foundational accounting principles and qualitative characteristics. Match the letter of each with the appropriate phrase describing its application. Note that each item may be used more than once or not at all.

- | | |
|-------------------------------|------------------------------|
| a. Economic entity assumption | g. Matching principle |
| b. Going concern assumption | h. Full disclosure principle |
| c. Monetary unit assumption | i. Relevance |
| d. Periodicity assumption | j. Reliability |
| e. Historical cost principle | k. Comparability |

f. Revenue recognition principle

l. Representational faithfulness

- _____ 1. Using the Canadian dollar in the financial statements
- _____ 2. The earning process is completed and realized or realizable.
- _____ 3. Accounting information reflects the economic substance of the event or transaction.
- _____ 4. Quarterly financial reports
- _____ 5. The use of accruals and deferrals in adjusting the accounts
- _____ 6. Useful standard measuring unit for business transactions
- _____ 7. Including explanatory notes as part of the financial statements
- _____ 8. The affairs of the business are distinguished from those of its owners.
- _____ 9. A business enterprise is assumed to have a long life.
- _____ 10. Valuing assets at amounts originally paid for them
- _____ 11. Application of the same accounting principles as in the preceding year
- _____ 12. Presentation of timely information with predictive and feedback value

Solution 2-59

- 1. c
- 2. f
- 3. l
- 4. d
- 5. g
- 6. c
- 7. h
- 8. a
- 9. b
- 10. e
- 11. k
- 12. i

Ex. 2-60 Fair value measurement

The ongoing trend toward using fair value has both its supporters and its critics. Briefly explain arguments in favour of and against the use of fair value.

Solution 2-60Arguments in favour:

Fair values are current and therefore more relevant. The cost at which an asset is carried (using the cost at which it was acquired, say, twenty years ago) may bear little resemblance to its

current replacement cost.

Arguments against:

Fair values may be difficult to ascertain, especially when markets for the underlying assets do not exist. Fair values may subject financial statements to a significant degree of variability in volatile markets.

Ex. 2-61 Matching concept

A concept is a group of related ideas. Matching could be considered a concept because it includes ideas related to both revenue recognition and expense recognition. Briefly explain the theory behind a) revenue recognition and b) expense recognition.

Solution 2-61

a) The basis of revenue recognition includes the following:

1. Revenues are inflows of net assets from delivering or producing goods or services or other earning activities that are the major operations of an enterprise during a period.
2. Recognition is recording and reporting in the financial statements.
3. Revenues are *realized* when goods or services are exchanged for cash or claims to cash.
4. Revenues are *earned* when the earnings process is complete or virtually complete.

The revenue recognition principle says that revenue is recognized when performance is achieved (earned) and measurability and collectability are reasonably assured (realized/realizable).

b) The basis of expense recognition includes "expense" and "matching":

1. Expenses are outflows of net assets during a period from delivering or producing goods or services or other activities that are the major operations of the entity.
2. Expenses are recognized when the goods or services (efforts) make their contribution to revenue.

The matching principle says that expenses are matched with revenues. Expenses are matched three ways:

1. When there is an association with revenue, expenses are matched with revenues in the period the revenues are recognized.
2. When no association with revenue is evident, expenses are allocated on some systematic and rational basis.
3. When no association with revenue is evident and no future benefits are expected, expenses are recognized immediately.

Ex. 2-62 Principles vs. rules based GAAP

There has been much discussion about principles-based standards versus rules-based standards. Discuss the advantages and disadvantages of a principles-based approach.

Solution 2-62

Advantages of a principles based approach:

1. Decisions are based on the conceptual framework – so they should be consistent.

2. Flexibility – allows for making decisions about new or unusual transactions based on principles.
3. Allows accountants to use their professional expertise and professional judgement.

Disadvantages of a principles based approach:

1. Flexibility may result in reduced comparability between different firms.
2. Flexibility may be abused and bias may creep into decisions.

Ex. 2-63 Financial engineering

Explain the practice of financial engineering and how it relates to fraudulent financial reporting.

Solution 2-63

Financial engineering is a process whereby a business arrangement or transaction is structured legally such that it meets the company's financial reporting objective within GAAP. This is often done by using complex legal arrangements and financial instruments. This produces a transaction or item that may have the form of one kind of transaction or item when the substance is something different. Enron was involved in many transactions of this type. Since the substance of these arrangements is to obscure the real nature of the transactions or items involved, they are potentially fraudulent.

Ex. 2-64 Fraudulent financial reporting

Identify several factors that contribute to fraudulent financial reporting.

Solution 2-64

1. Unrealistic internal budgets and financial statement focal points arising from contractual, regulatory, or capital market expectations
2. Weak internal control and governance
3. Worsening economic conditions or industry

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CHAPTER 3

THE ACCOUNTING INFORMATION SYSTEM

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVES

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice - Conceptual											
1.	1	E	10.	4	E	19.	5	E	28.	7	E
2.	1	E	11.	4	M	20.	5	M	29.	7	E
3.	1	E	12.	4	M	21.	5	E	30.	7	E
4.	1	M	13.	4	E	22.	5	E	31.	7	E
5.	2	E	14.	4	M	23.	5	H	32.	7	M
6.	2	M	15.	4	E	24.	5	H	33.	8	M
7.	3	M	16.	4	E	25.	5	H	*34.	9	M
8.	4	M	17.	4	E	26.	5	H	*35.	9	H
9.	4	M	18.	5	M	27.	5	H			
Multiple Choice - Computational											
36.	5	E	41.	5	M	46.	5	H	51.	7	H
37.	5	E	42.	5	M	47.	7	H	52.	7	H
38.	5	E	43.	5	M	48.	7	H	*53.	9	M
39.	5	M	44.	5	M	49.	7	H			
40.	5	H	45.	5	H	50.	7	H			
Multiple Choice - CPA Adapted											
54.	5	H	56.	5	M	58.	5	H	*60.	9	M
55.	5	M	57.	5	H	59.	5	H			
Exercises											
61.	1	E	63.	4	E	65.	5	M	67.	7	M
62.	4	E	64.	5	M	66.	7	M	68.	7	M
Problems											
69.	4	E	72.	5,8	M	75.	5,7	M	78.	8	M
70.	5	E	73.	5,7	H	76.	7	E	79.	8	H
71.	5	M	74.	5,7	M	77.	7	M	80.	8	M

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	2.	MC	3.	MC	4.	MC	61.	Ex		
Learning Objective 2											
5.	MC	6.	MC								
Learning Objective 3											
7.	MC										
Learning Objective 4											
8.	MC	11.	MC	14.	MC	17.	MC	69.	Pr		
9.	MC	12.	MC	15.	MC	62.	Ex				
10.	MC	13.	MC	16.	MC	63.	Ex				
Learning Objective 5											
18.	MC	24.	MC	38.	MC	44.	MC	57.	MC	71.	Pr
19.	MC	25.	MC	39.	MC	45.	MC	58.	MC	72.	Pr
20.	MC	26.	MC	40.	MC	46.	MC	59.	MC	73.	Pr
21.	MC	27.	MC	41.	MC	54.	MC	64.	Ex	74.	Pr
22.	MC	36.	MC	42.	MC	55.	MC	65.	Ex	75.	Pr
23.	MC	37.	MC	43.	MC	56.	MC	70.	Pr		
Learning Objective 6											
Learning Objective 7											
28.	MC	32.	MC	50.	MC	67.	Ex	75.	Pr		
29.	MC	47.	MC	51.	MC	68.	Ex	76.	Pr		
30.	MC	48.	MC	52.	MC	73.	Pr	77.	Pr		
31.	MC	49.	MC	66.	Ex	74.	Pr				
Learning Objective 8											
33.	MC	72.	Pr	78.	Pr	79.	Pr	80.	Pr		
Learning Objective 9											
*34.	MC	*35.	MC	*53.	MC	*60.	MC				

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. **Understand basic accounting terminology.** It is important to understand the following terms: (1) event, (2) transaction, (3) account, (4) permanent and temporary accounts, (5) ledger, (6) journal, (7) posting, (8) trial balance, (9) adjusting entries, (10) financial statements, and (11) closing entries.

2. **Explain double-entry rules.** The left side of any account is the debit side; the right side is the credit side. All asset and expense accounts are increased on the left or debit side and decreased on the right or credit side. Conversely, all liability and revenue accounts are increased on the right or credit side and decreased on the left or debit side. Shareholders' equity accounts, Common Stock, and Retained Earnings are increased on the credit side, whereas Dividends is increased on the debit side.

3. **Explain how transactions affect the accounting equation.** In a double-entry accounting system, for every debit there must be a credit, and vice versa. This leads us to the basic accounting equation for corporations: $\text{Assets} = \text{Liabilities} + \text{Shareholders' Equity}$. The effect of individual transactions on the statement of financial position can be explained using the basic accounting equation. The shareholders' equity portion of the equation can also be expanded to illustrate the effect of transactions on components of equity such as common shares and retained earnings. Whenever a transaction occurs, the elements of the equation change, but the equality of the two sides of the equation remains unaffected.

4. **Identify the steps in the accounting cycle and the steps in the recording process.** The basic steps in the accounting cycle are (1) identification and measurement of transactions and other events, (2) journalizing, (3) posting, (4) the unadjusted trial balance, (5) adjustments, (6) the adjusted trial balance, (7) statement preparation, and (8) closing. The first three steps in the accounting cycle form the basis of the recording process used by most medium-sized companies on a daily basis. The simplest journal form is a chronological listing of transactions and events that are expressed as debits and credits to particular accounts. The items entered in a general journal must then be transferred (posted) to the general ledger. To help prepare financial statements, an unadjusted trial balance should be prepared at the end of a specific period (usually a month, quarter, or year) after the entries have been recorded in the journals and posted to the general ledger.

5. **Explain the reasons for and prepare adjusting entries.** Adjustments achieve a proper matching of revenues and expenses, which is needed to determine the correct net income for the current period and to achieve an accurate statement of the end-of-the-period balances in assets, liabilities, and owners' equity accounts. When preparing adjusting journal entries, you must first determine how the original transaction was recorded. For example, was an asset created earlier in the fiscal year (such as prepaid rent) when the initial payment was made? If so, an adjustment for the related expense is required. Alternatively, if a statement of comprehensive income account was used initially, an adjustment may be required to set up the proper statement of financial position account at the end of the period.

6. Explain how the type of ownership structure affects the financial statements. The type of ownership structure that a business enterprise uses determines the types of accounts that are part of the equity section. In a corporation, ordinary or common shares, contributed surplus, retained earnings, and accumulated other comprehensive income are commonly shown separately on the statement of financial position. In a proprietorship or partnership, a capital account is used to indicate the investment in the company by the owner(s). A drawings or withdrawal account may be used to indicate withdrawals by the owner(s). These two accounts are grouped or netted under owners' equity.

7. Prepare closing entries and consider other matters relating to the closing process. In the closing process, all of the revenue and expense account balances (income statement items) are transferred to a clearing account called Income Summary, which is used only at the end of the fiscal year. Revenues and expenses are matched in the Income Summary account. The net result of this matching, which represents the net income or net loss for the period, is then transferred to a shareholders' equity account (retained earnings for a corporation and capital accounts for proprietorships and partnerships).

Under a perpetual inventory system there are a few additional items to consider. For example, the balance in the inventory account should represent the ending inventory amount. When the inventory records are maintained in a periodic inventory system, a purchases account is used; the inventory account is unchanged during the period. The inventory account balance represents the beginning inventory amount throughout the period. At the end of the accounting period, the inventory account must be adjusted by closing out the beginning inventory amount and recording the ending inventory amount.

8. Prepare a 10-column work sheet and financial statements. The 10-column work sheet provides columns for the first trial balance, adjustments, adjusted trial balance, statement of comprehensive income, and statement of financial position. The work sheet does not replace the financial statements. Instead, it is the accountant's informal device for accumulating and sorting the information that is needed for the financial statements.

9. Identify adjusting entries that may be reversed. Reversing entries are usually used for reversing two types of adjusting entries: accrued revenues and accrued expenses. Prepayments may also be reversed if the initial entry to record the transaction is made to an expense or revenue account.

MULTIPLE CHOICE QUESTIONS—Conceptual

Answer	No.	Description
d	1.	Purpose of an accounting system
b	2.	Definition of transaction
a	3.	Definition of ledger
b	4.	Identification of a temporary account
d	5.	Double-entry system
b	6.	Account increased by debit
d	7.	Accounting equation
a	8.	Criteria for recording transactions
c	9.	Internal event
b	10.	Definition of journal
a	11.	Transaction analysis
d	12.	Transaction analysis
c	13.	Transaction analysis
c	14.	Event recording
b	15.	Definition of posting
b	16.	Purpose of the trial balance
d	17.	Trial balance
b	18.	Uses of adjusting entries
c	19.	Adjusting for accrued expenses
d	20.	Adjusting for accrued revenues
c	21.	Factors to consider in estimating depreciation
b	22.	Contra-asset account
a	23.	Effect of not recording depreciation
c	24.	Adjusting for bad debts
c	25.	Definition of accrued revenue
b	26.	Definition of unearned revenue
a	27.	Fair value adjustments for investments
d	28.	Income Summary account
c	29.	Closing net income or loss
b	30.	Post-closing trial balance
a	31.	Trial balance – correct statement
a	32.	Effect of understating ending inventory
d	33.	Work sheet
b	*34.	Identification of reversing entries
c	*35.	Required reversing entry

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE QUESTIONS—Computational

Answer	No.	Description
b	36.	Adjusting entry for prepaid lease
a	37.	Adjusting entry for interest receivable
c	38.	Adjusting entry for interest expense
b	39.	Adjusting entry for bad debts
c	40.	Adjusting entry for bad debts
a	41.	Adjusting entry for unearned rent
a	42.	Adjusting entry for interest receivable
d	43.	Calculate property tax adjustment
b	44.	Calculate balance in unearned revenue
c	45.	Adjusting entry for investments
d	46.	Adjusting entry for investments
b	47.	Calculate cash received for interest
a	48.	Calculate cash paid for salaries
c	49.	Calculate cash paid for insurance
c	50.	Calculate insurance expense
b	51.	Calculate interest revenue
c	52.	Calculate salary expense
a	*53.	Payment after reversing entry

MULTIPLE CHOICE QUESTIONS—CPA Adapted

Answer	No.	Description
c	54.	Calculate accrued interest payable
b	55.	Calculate balance of unearned revenues
b	56.	Calculate prepaid insurance
c	57.	Calculate interest receivable
b	58.	Calculate accrued salaries
c	59.	Calculate royalty revenue
d	*60.	Payment after reversing entry

*This topic is dealt with in an Appendix to the chapter.

EXERCISES

Item	Description
E3-61	Definitions
E3-62	The accounting cycle
E3-63	Recordable events
E3-64	Adjusting entries
E3-65	Adjusting entries
E3-66	Calculation of expense
E3-67	Calculation of expense
E3-68	Calculation of revenue

PROBLEMS

Item	Description
P3-69	Transaction journal entries
P3-70	Adjusting entries
P3-71	Adjusting entries and calculation of pre-tax income
P3-72	Adjusting entries and account classification
P3-73	Adjusting entries
P3-74	Adjusting and closing entries
P3-75	Adjusting and closing entries
P3-76	Closing entries
P3-77	Accrual accounting
P3-78	Eight-column work sheet
P3-79	Preparation of financial statements
P3-80	Trial balance correction

MULTIPLE CHOICE - Conceptual

1. Which of the following statements is true regarding accounting information systems?
 - a) Both large and small firms should use the same type of accounting system.
 - b) All firms should have the same types of transactions.
 - c) The volume of data to be handled should not vary between firms.
 - d) The kind of information that management requires of an accounting system will vary, depending on the type of firm.

2. An external event involving a transfer or exchange between two or more entities or parties is called a(n)
 - a) account.
 - b) transaction.
 - c) ledger.
 - d) accounting system.

3. The book (or electronic database) containing the accounts is called the
 - a) ledger.
 - b) transaction.
 - c) journal.
 - d) financial statement.

4. An example of a temporary account is
 - a) Unearned Revenue.
 - b) Salary Expense.
 - c) Inventory.
 - d) Retained Earnings.

5. The double-entry accounting system is
 - a) the procedure of transferring journal entries to the ledger accounts.
 - b) an accounting system first developed by Canada Revenue Agency.
 - c) the procedure of entering transaction data in the journal.
 - d) a system that records the dual effect of each transaction in appropriate accounts.

6. Which of the following accounts is increased by a debit?
 - a) Liability
 - b) Asset
 - c) Retained earnings
 - d) Revenue

7. Which of the following equations is correct?
 - a) Assets plus Liabilities = Equity.
 - b) Assets = Liabilities minus Equity.
 - c) Liabilities = Assets plus Equity.

d) $\text{Equity} = \text{Assets} - \text{Liabilities}$.

8. Which of the following criteria does NOT have to be met before an event or transaction should be recorded for accounting purposes?

- a) The event or transaction must be an external event.
- b) The event or transaction can be measured objectively in financial terms.
- c) The event or transaction is relevant and reliable.
- d) The event or transaction must meet the definition of an element.

9. Which of the following is an internal event?

- a) Sale of goods or services
- b) Payment of dividends
- c) Using raw materials in production
- d) Purchase of materials

10. The book of original entry where transactions and other selected events are first recorded is called the

- a) ledger.
- b) journal.
- c) account.
- d) statement of financial position.

11. The debit and credit analysis of a transaction normally takes place

- a) before an entry is recorded in a journal.
- b) when the entry is posted to the ledger.
- c) when the trial balance is prepared.
- d) when the financial statements are prepared.

12. Performing a service for a client on account will

- a) increase one asset and decrease another asset.
- b) decrease an asset and decrease a liability.
- c) increase an asset and decrease equity.
- d) increase an asset and increase equity.

13. The account credited for a receipt of cash on account is

- a) Cash.
- b) Service Revenue.
- c) Accounts Receivable.
- d) Accounts Payable.

14. Some events are NOT recorded in the accounting information system because

- a) the service has been provided but the cash has not yet been received.
- b) the service has not been provided but the cash has already been received.
- c) their measurement is too complex.
- d) the amounts are not material.

15. The process of transferring the essential facts and figures from the book of original entry to the ledger accounts is called
- a) journalizing.
 - b) posting.
 - c) double-entering.
 - d) adjusting.
16. A trial balance
- a) is a list of all the accounts in the ledger.
 - b) is a list of all the accounts and their balances at a specific date.
 - c) cannot be used in the preparation of financial statements.
 - d) cannot be used as a basis for preparation of adjusting entries.
17. A trial balance will NOT balance if
- a) an amount is posted to the wrong account.
 - b) a transaction has been entered twice.
 - c) a transaction has been omitted.
 - d) only the debit side of a journal entry has been posted.
18. Adjusting entries are NOT used to
- a) obtain a proper matching of revenues and expenses.
 - b) adjust nominal accounts to zero at the end of the fiscal year.
 - c) report an accurate picture of assets, liabilities and equity.
 - d) report proper net income and comprehensive income.
19. If, during an accounting period, an expense item has been incurred and consumed but not yet paid for or recorded, then the end-of-period adjusting entry would involve
- a) a liability account and an asset account.
 - b) an asset or contra-asset and an expense account.
 - c) a liability account and an expense account.
 - d) a receivable account and a revenue account.
20. For adjusting entries relating to accrued revenues,
- a) a liability-revenue account relationship exists.
 - b) the adjusting entry involves a credit to an asset account and a debit to a revenue account.
 - c) if an adjustment is not made, assets will be overstated.
 - d) before adjustment, both assets and revenues are understated.
21. Which of the following must be considered in estimating depreciation on an asset for an accounting period?
- a) only the original cost of the asset
 - b) only the asset's useful life
 - c) both the original cost of the asset and its useful life
 - d) the decline in its fair market value

22. The type of account and normal balance of "Accumulated Depreciation, Equipment" is
- a) Asset, Credit.
 - b) Contra-asset, Credit.
 - c) Contra-asset, Debit.
 - d) Liability, Credit.
23. If the accountant forgets to record an adjustment for Accumulated Depreciation, Building at the end of the accounting period, this will cause
- a) an overstatement of assets.
 - b) an understatement of assets.
 - c) an overstatement of expenses.
 - d) an overstatement of liabilities.
24. An adjusting entry for bad debts will generally
- a) increase an expense account and decrease an asset account.
 - b) increase an expense account and increase an asset account.
 - c) increase an expense account and increase a contra-asset account.
 - d) increase an expense account and increase a liability account.
25. An accrued revenue can best be described as an amount
- a) collected and currently matched with expenses.
 - b) collected and not currently matched with expenses.
 - c) not collected and currently matched with expenses.
 - d) not collected and not currently matched with expenses.
26. An unearned revenue can best be described as an amount
- a) collected and currently matched with expenses.
 - b) collected and not currently matched with expenses.
 - c) not collected and currently matched with expenses.
 - d) not collected and not currently matched with expenses.
27. Which of the following statements is INCORRECT regarding fair value adjustments for investments?
- a) Both FV-NI investments and FV-OCI investments could include equity investments or investments in debt securities.
 - b) FV-OCI investments exclude debt securities.
 - c) At each period end, an estimate is made of the fair value of both FV-NI and FV-OCI investments.
 - d) An adjusting entry is required to record a holding gain or loss on FV-NI investments.
28. In the closing process, all the revenue and expense accounts are transferred to a clearing or suspense account called
- a) Other Comprehensive Income.
 - b) Common Shares.

- c) Retained Earnings.
 - d) Income Summary.
29. A corporation's net income or loss is closed at year end to
- a) Accumulated Other Comprehensive Income.
 - b) Common Shares.
 - c) Retained Earnings.
 - d) Other Comprehensive Income.
30. A post-closing trial balance
- a) includes temporary accounts only.
 - b) includes permanent accounts only.
 - c) includes both temporary and permanent accounts.
 - d) may include expense accounts.
31. Which of the following statements about the trial balance is correct?
- a) The debits and credits must balance.
 - b) The equality of credits and debits ensures that no errors were made.
 - c) The post-closing trial balance includes temporary accounts only.
 - d) The post-closing trial balance is used to prepare the financial statements.
32. If the inventory account at the end of the year is understated, the effect will be to
- a) overstate the cost of goods sold.
 - b) understate the net purchases.
 - c) overstate the gross profit on sales.
 - d) overstate the goods available for sale.
33. Which of the following statements is INCORRECT regarding the work sheet?
- a) The work sheet is an informal device for accumulating and sorting information required for the financial statements.
 - b) It is often used to make end-of-period procedures easier.
 - c) It helps the accountant prepare financial statements on a more timely basis.
 - d) It can be used in place of financial statements.
- *34. Reversing entries are usually used for
- a) accrued revenues and bad debts.
 - b) accrued expenses and accrued revenues.
 - c) accrued expenses and depreciation.
 - d) accrued revenues and depreciation.
- *35. If the purchase of Office Supplies was originally debited to an expense account and correctly adjusted at year end, the reversing entry required in the next period would
- a) Debit Office Supplies, Credit Office Supplies Expense.
 - b) Debit Office Supplies Expense, Credit Income Summary.
 - c) Debit Office Supplies Expense, Credit Office Supplies.

d) Debit Office Supplies Expense, Credit Cash.

MULTIPLE CHOICE ANSWERS - Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	d	6.	b	11.	a	16.	b	21.	c	26.	b	31.	a
2.	b	7.	d	12.	d	17.	d	22.	b	27.	a	32.	a
3.	a	8.	a	13.	c	18.	b	23.	a	28.	d	33.	d
4.	b	9.	c	14.	c	19.	c	24.	c	29.	c	*34.	b
5.	d	10.	b	15.	b	20.	d	25.	c	30.	b	*35.	c

MULTIPLE CHOICE QUESTIONS - Computational

36. On September 1, 2013, Brown Corp. made the annual lease payment of \$9,000 for its fleet of delivery trucks. The payment covered the period September 1, 2013 to August 31, 2014. Assuming the entire amount had originally been debited to Lease Expense, the required adjustment at December 31, 2013 is

- a) debit Lease Expense and credit Prepaid Lease \$6,000.
- b) debit Prepaid Lease and credit Lease Expense \$6,000.
- c) debit Prepaid Lease and credit Lease Expense \$9,000.
- d) debit Lease Expense and credit Prepaid Lease \$9,000.

37. White Resources determines that it has not yet recorded the 2013 accrual for interest revenue to be received in 2014. Assuming the amount to be recorded for 2013 is \$4,000, the required adjustment at December 31, 2013 is

- a) debit Interest Receivable and credit Interest Revenue \$4,000.
- b) debit Interest Revenue and credit Interest Receivable \$4,000.
- c) debit Interest Payable and credit Interest Revenue \$4,000.
- d) Silly question: no adjusting entry is required.

38. On November 1, 2013, Green Corp. purchased equipment by signing a 3-month, 9% note for \$100,000. The December 31, 2013 adjusting entry required in connection with this note is

- a) debit Interest Expense and credit Interest Payable, \$9,000.
- b) debit Interest Expense and credit Interest Payable, \$750.
- c) debit Interest Expense and credit Interest Payable, \$1,500.
- d) debit Interest Expense and credit Cash, \$1,500.

39. Blue Corp.'s account balances at December 31, 2013 included:

Accounts Receivable, \$385,000 debit; Allowance for Doubtful Accounts, \$1,000 credit. From a review of the receivables, Blue estimates that \$20,000 of the December 31 receivables will be uncollectible. The required adjusting entry would include a credit to the allowance account for

- a) \$ 1,000.
- b) \$19,000.
- c) \$20,000.
- d) \$21,000.

40. Yellow Corp.'s account balances at December 31, 2013 included:

Accounts Receivable, \$860,000 debit; Allowance for Doubtful Accounts, \$600 debit.

Sales during 2013 were \$1,500,000. It is estimated that 2% of sales will be uncollectible. The required adjusting entry would include a credit to the allowance account for

- a) \$18,000.
- b) \$29,400.
- c) \$30,000.
- d) \$30,600.

41. On August 1, 2013, Black Corporation received \$6,000 cash from a tenant for one year's rent

in advance, and recorded the transaction with a credit to Rent Revenue. The December 31, 2013 required adjusting entry in connection with this would be

- a) debit Rent Revenue and credit Unearned Rent, \$3,500.
- b) debit Rent Revenue and credit Unearned Rent, \$2,500.
- c) debit Unearned Rent and credit Rent Revenue, \$2,500.
- d) debit Cash and credit Unearned Rent, \$6,000.

42. On December 1, 2013, Pink Inc. lent \$52,000 to Zinc Inc. in return for a three-month, 4.5% interest-bearing note. What adjusting entry should Pink Inc. make on December 31, 2013, in connection with this note?

- a) Debit Interest Receivable and credit Interest Revenue, \$195.
- b) Debit Cash and credit Interest Revenue, \$195.
- c) Debit Interest Receivable and credit Interest Revenue, \$585.
- d) Debit Interest Revenue and credit Interest Receivable, \$585.

43. Lime Limited has received its invoice for \$85,000 for property taxes for the calendar year 2013. The invoice was received and paid in June 2013 and the entire amount was debited to property tax expense. Assuming Lime does NOT prepare interim financial statements, the required adjustment on December 31, 2013 related to the property taxes is

- a) debit property tax expense and credit prepaid property tax \$49,583.
- b) debit prepaid property tax and credit property tax expense \$49,583.
- c) debit property tax expense and credit prepaid property tax \$35,417.
- d) Silly question: no adjusting entry is required.

44. On December 10, 2013 Peach Inc. received a cheque for \$60,000 from a customer for services that Peach will be performing in December 2013 and January 2014. By December 31, 2013, Peach had earned 40% of that amount. Assuming the appropriate year end adjustments were made, the 2013 balance in Peach's Unearned Revenue account will be

- a) \$60,000.
- b) \$36,000.
- c) \$24,000.
- d) zero.

45. On May 15, 2014, Grey Corp. purchased 1,000 common shares of Regal Bank for \$25,000, as a Fair Value through Other Comprehensive Income (FV-OCI) equity investment. At December 31, 2014, the fair value of these shares was \$27,200. The required adjusting entry to reflect this fact is

- a) debit Fair Value—OCI Investment, Cr Holding Gain on Investment (OCI) \$27,200.
- b) debit Holding Gain on Investment (OCI), credit Fair Value—OCI Investment \$27,200.
- c) debit Fair Value—OCI Investment, Cr Holding Gain on Investment (OCI) \$2,200.
- d) debit Holding Loss on Investment (OCI), credit Fair Value—OCI Investment \$2,200.

46. On May 15, 2014, Cream Corp. purchased 1,000 common shares of Regal Bank for \$25,000, as a Fair Value through Net Income (FV-NI) equity investment. At December 31, 2014, the fair value of these shares was \$22,800. The required adjusting entry to reflect this fact is

- a) debit Fair Value—Net Income Investment, Cr Holding Gain on Investment (OCI) \$22,800.
- b) debit Holding Gain on Investment (OCI), credit Fair Value—Net Income Investment

\$22,800.

- c) debit Fair Value—Net Income Investment, Cr Investment Income \$2,200.
- d) debit Investment Loss, credit Fair Value—Net Income Investment \$2,200.

Use the following information for questions 47 through 49:

Orange Corp reported the following items on its calendar 2013 statement of comprehensive income:

Interest revenue	\$75,500
Salaries expense	65,000
Insurance expense	9,600

As well, their statements of financial position showed the following balances:

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Accrued interest receivable	\$9,100	\$7,500
Accrued salaries payable	8,900	4,200
Prepaid insurance	1,100	1,500

47. The cash received for interest during 2013 was

- a) \$66,400.
- b) \$73,900.
- c) \$75,500.
- d) \$77,100.

48. The cash paid for salaries during 2013 was

- a) \$60,300.
- b) \$60,800.
- c) \$69,700.
- d) \$73,900.

49. The cash paid for insurance premiums during 2013 was

- a) \$ 8,100.
- b) \$ 8,500.
- c) \$ 9,200.
- d) \$10,000.

Use the following information for questions 50 through 52:

During calendar 2013, Purple Corp. paid or collected the following items:

Insurance premiums paid	\$ 12,400
Interest collected (revenue)	25,900
Salaries paid	125,200

As well, their statements of financial position showed the following balances:

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Prepaid Insurance	\$ 1,200	\$ 1,500
Interest Receivable	3,700	2,900
Salaries Payable	12,300	10,600

50. The insurance expense on the 2013 statement of comprehensive income was
- a) \$9,700.
 - b) \$12,100.
 - c) \$12,700.
 - d) \$15,100.
51. The interest revenue on the 2013 statement of comprehensive income was
- a) \$32,500.
 - b) \$26,700.
 - c) \$25,100.
 - d) \$19,300.
52. The salary expense on the 2013 statement of comprehensive income was
- a) \$102,300.
 - b) \$123,500.
 - c) \$126,900.
 - d) \$148,100.
- *53. At December 31, 2013, Aquamarine Corp. has not yet received its December invoice for utilities, and accrues an estimate of \$10,000. On January 15, 2014 Aquamarine receives the utilities invoice for \$11,000 and pays the invoice in cash. Assuming the accrual had already been reversed, the entry on January 15, 2014 is
- a) debit utilities expense and credit cash \$11,000.
 - b) debit cash and credit utilities expense \$11,000.
 - c) debit utilities expense and credit cash \$1,000.
 - d) debit cash and credit utilities expense \$1,000.

MULTIPLE CHOICE ANSWERS - Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
36.	b	39.	b	42.	a	45.	c	48.	a	51.	b
37.	a	40.	c	43.	d	46.	d	49.	c	52.	c
38.	c	41.	a	44.	b	47.	b	50.	c	*53.	a

DERIVATIONS - Computational

No.	Answer	Derivation
36.	b	$\$9,000 - (\$9,000 \times 4/12) = \$6,000.$
37.	a	
38.	c	$\$100,000 \times 9\% \times 2/12 = \$1,500.$
39.	b	$\$20,000 - \$1,000 = \$19,000.$
40.	c	$\$1,500,000 \times 2\% = \$30,000.$ (ADA balance is irrelevant).
41.	a	$7/12 \times \$6,000 = \$3,500.$
42.	a	$\$52,000 \times 4.5\% \times 1/12 = \$195.$
43.	d	
44.	b	$\$60,000 \times 60\% = \$36,000.$
45.	c	$\$27,200 - \$25,000 = \$2,200$ gain.
46.	d	$\$22,800 - \$25,000 = \$2,200$ loss.
47.	b	$\$7,500 + \$75,500 - \$9,100 = \$73,900.$
48.	a	$\$4,200 + \$65,000 - \$8,900 = \$60,300.$
49.	c	$\$9,600 - \$1,500 + \$1,100 = \$9,200.$
50.	c	$\$12,400 + \$1,500 - \$1,200 = \$12,700.$
51.	b	$\$25,900 - \$2,900 + \$3,700 = \$26,700.$
52.	c	$\$125,200 - \$10,600 + \$12,300 = \$126,900.$
*53.	a	

MULTIPLE CHOICE QUESTIONS - CPA Adapted

54. On September 1, 2013 Culver Corp. issued an 8% note payable to National Bank for \$900,000, payable in three equal annual principal payments of \$300,000, plus interest. On this date, the bank's prime rate was 7%. The first payment for interest and principal was made on September 1, 2014. At December 31, 2014, Culver should record accrued interest payable of

- a) \$24,000.
- b) \$21,000.
- c) \$16,000.
- d) \$14,000.

55. Rathbone Corp. sells major household appliance service contracts for cash. The service contracts are for a one-year, two-year, or three-year period. Cash receipts from contracts are credited to Unearned Service Revenues. This account had a balance of \$1,100,000 at December 31, 2013 before year-end adjustment. Service contract costs are charged as incurred to the Service Contract Expense account, which had a balance of \$325,000 at December 31, 2013. Service contracts still outstanding at December 31, 2013 expire as follows:

During 2014	\$170,000
During 2015	250,000
During 2016	110,000

What amount should be reported as Unearned Service Revenues on Rathbone's December 31, 2013 statement of financial position?

- a) \$775,000
- b) \$530,000
- c) \$325,000
- d) \$250,000

56. On December 1, 2013, Flynn Consulting paid \$18,000 for a three-year insurance policy (December 1, 2013 to November 30, 2016) and debited the entire amount to prepaid insurance. The December 31, 2013 required adjusting entry in connection with this policy would be

- a) debit prepaid insurance and credit insurance expense \$500.
- b) debit insurance expense and credit prepaid insurance \$500.
- c) debit insurance expense and credit prepaid insurance \$17,500.
- d) debit prepaid insurance and credit insurance expense \$17,500.

57. On June 1, 2013, Carr Corp. loaned Farr Corp. \$500,000 on a 6% note, payable in five annual instalments of \$100,000 (plus interest), beginning January 2, 2014. Interest on the note is payable on the first day of each month beginning July 1, 2013. Farr made timely payments through November 1, 2013. On January 2, 2014, Carr received payment of the first principal instalment plus all interest due. At December 31, 2013, Carr's interest receivable on this loan is

- a) \$0.
- b) \$2,500.
- c) \$5,000.
- d) \$7,500.

58. Grant Limited pays all salaried employees on a biweekly basis. Overtime pay, however, is

paid in the next biweekly period. Grant accrues salaries expense only at its December 31 year end. Data relating to salaries earned in December 2013 are as follows:

Last payroll was paid on Dec 27, 2013, for the two-week period ended Dec 27, 2013.

Overtime pay earned in the two-week period ended Dec 27, 2013 was \$5,000.

Remaining work days in 2013 were December 29, 30, 31, on which days there was no overtime.

The regular biweekly salaries total \$80,000. Assuming a five-day work week, Grant should record a liability at December 31, 2013 for accrued salaries of

- a) \$24,000.
- b) \$29,000.
- c) \$48,000.
- d) \$53,000.

59. Mark-Wall Corp.'s trademark was licensed to Rodgers Inc. for royalties of 12% of sales of the trademarked items. Royalties are payable semi-annually on March 15 for sales in July through December of the previous year, and on September 15 for sales in January through June of the same year. Mark-Wall received the following royalties from Rodgers:

	<u>March 15</u>	<u>September 15</u>
During 2012	\$6,000	\$8,000
During 2013	7,000	9,000

Rodgers estimates that sales of the trademarked items would total \$75,000 for July through December 2013. On their statement of comprehensive income for calendar 2013, Mark-Wall's royalty revenue should be

- a) \$9,000.
- b) \$16,000.
- c) \$18,000.
- d) \$20,000.

*60. Douglas Corp is reviewing their payroll accruals for December 2013. Salaries for the month of December total \$165,000 and will be paid on January 14, 2014. Assuming year end accruals were reversed on January 1, 2014, the entry to record the January 14 payment to employees is

- a) no entry is required.
- b) debit salaries payable and credit salaries expense \$165,000.
- c) debit cash and credit salaries expense \$165,000.
- d) debit salaries expense and credit cash \$165,000.

MULTIPLE CHOICE ANSWERS - CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
54.	c	56.	b	58.	b	*60.	d
55.	b	57.	c	59.	c		

DERIVATIONS - CPA Adapted

No.	Answer	Derivation
54.	c	$(\$900,000 - \$300,000) \times 8\% \times 4/12 = \$16,000.$
55.	b	$\$170,000 + \$250,000 + \$110,000 = \$530,000.$
56.	b	$\$18,000 \times 1/36 = \$500.$
57.	c	$\$500,000 \times 6\% \times 2/12 = \$5,000.$
58.	b	$\$5,000 + (\$80,000 \div 10 \times 3) = \$29,000.$
59.	c	$\$9,000 + (\$75,000 \times 12\%) = \$18,000.$
*60.	d	

EXERCISES

Ex. 3-61 Definitions

Define the following terms:

1. Event
2. Work sheet
3. Permanent accounts
4. Temporary accounts
5. Income summary
6. General ledger

Solution 3-61

1. An event is something of consequence that happens. For a business, an event is generally the source or cause of changes in assets, liabilities and equity.
2. Work sheets are used as informal tools to help accountants prepare financial statements.
3. Permanent accounts (also called real accounts) are assets, liability and equity accounts. Unlike temporary accounts, permanent accounts are NOT closed.
4. Temporary accounts are revenue and expense accounts. Unlike permanent accounts, they are periodically closed.
5. The income summary is an account that is used as part of the closing process. It facilitates the closing of the temporary accounts at year end.
6. A general ledger is a collection of all the business' accounts and may include subsidiary ledgers for specific accounts.

Ex. 3-62 The accounting cycle

Summarize the steps in the accounting cycle.

Solution 3-62

The accounting cycle may be summarized in 9 steps as follows:

1. Identification and measurement of transactions and other events
2. Journalization of current period's entries into journals
3. Posting of journals to the general ledger
4. Preparation of trial balance (unadjusted)
5. Preparation and posting of adjusting entries
6. Preparation of adjusted trial balance
7. Preparation of financial statements
8. Preparation and posting of closing entries

9. Preparation of post-closing trial balance
10. Preparation and posting of reversing entries (optional)

Ex. 3-63 Recordable events

Before transactions are entered into a corporation's accounting system, the underlying event must be analyzed, to determine how (and if) it should be recorded. The situations below relate to Maxwell Corporation.

Instructions

Indicate whether the items below are recordable events.

1. A new mortgage contract for its new factory building is signed.
2. The first mortgage payment is made.
3. Wages for the current month are paid.
4. A new secretary is hired.
5. Property taxes are paid.
6. HST collections for the current month are forwarded to the CRA.

Solution 3-63

1. Not recordable
2. Recordable
3. Recordable
4. Not recordable
5. Recordable
6. Recordable

Ex. 3-64 Adjusting entries

Present, in journal form, the adjustments that would be made on July 31, 2013, the end of the fiscal year, for each of the following:

1. The supplies inventory on August 1, 2012 was \$8,350. Supplies costing \$16,650 were purchased during the fiscal year and debited to Supplies Inventory. A count on July 31, 2013 indicated supplies on hand of \$6,810.
2. On April 30, a ten-month, 4% note for \$40,000 was received from a customer.
3. On March 1, \$8,400 was collected as rent for one year and a nominal (temporary) account was credited.

Solution 3-64

1. Supplies Expense (8,350 + 16,650 – 6,810)	18,190	
Supplies Inventory		18,190
2. Interest Receivable (40,000 x 4% x 3/12)	400	
Interest Revenue		400

3. Rent Revenue (8,400 x 7/12 unearned)	4,900	
Unearned Revenue		4,900

Ex. 3-65 Adjusting entries

Amadeus Ltd. wishes to record receipts and payments in such a manner that adjustments at the end of the period will not require reversing entries at the beginning of the next period.

Instructions

Record the following transactions in the desired manner; as well, record the adjusting entry on December 31, 2013. (Two entries for each part.)

1. An insurance policy for two years was purchased on April 1, 2013 for \$4,800.
2. Rent of \$4,200 for six months for a portion of the building was received on November 1, 2013.

Solution 3-65

1. Prepaid Insurance	4,800	
Cash		4,800
Insurance Expense (4,800 x 9/24)	1,800	
Prepaid Insurance		1,800
2. Cash	4,200	
Unearned Rent		4,200
Unearned Rent (4,200 x 2/6)	1,400	
Rent Revenue		1,400

Ex. 3-66 Calculation of expense

Sales salaries paid during 2013 were \$90,000. Advances to salesmen were \$1,300 on January 1, 2013, and \$800 on December 31, 2013. Sales salaries payable were \$1,300 on January 1, 2013, and \$1,400 on December 31, 2013.

Instructions

Calculate the Sales Salaries Expense for calendar 2013.

Solution 3-66

$\$90,000 + \$1,300 - \$800 - \$1,300 + \$1,400 = \$90,600$.

Ex. 3-67 Calculation of expense

The records for Jay Inc. showed the following for 2013:

	<u>Jan. 1</u>	<u>Dec. 31</u>
Accrued expenses	\$2,000	\$3,600
Prepaid expenses	900	800
Cash paid during the year for expenses, \$55,000.		

Instructions

Calculate the total amount of expenses that should be reported on the 2013 statement of comprehensive income.

Solution 3-67
$$\$55,000 - \$2,000 + \$3,600 + \$900 - \$800 = \$56,700.$$
Ex. 3-68 Calculation of revenue

The records for Oriole Corp. showed the following for 2013:

	<u>Jan. 1</u>	<u>Dec. 31</u>
Unearned revenue	\$3,000	\$3,400
Accrued revenue	1,400	1,100
Cash collected during the year from revenue, \$85,000.		

Instructions

Show the calculation of the amount of revenue that should be reported on the 2013 statement of comprehensive income.

Solution 3-68
$$\$85,000 + \$3,000 - \$3,400 - \$1,400 + \$1,100 = \$84,300.$$

PROBLEMS

Pr. 3-69 Journal Entries

Jonathan Green owns Green Palms, a gardening centre (as a sole proprietorship). His first year of operations included the following selected events and transactions:

January:

1. He invested \$400,000 in his business.
2. He buys a greenhouse for \$200,000 cash.

May:

3. He hires a greenhouse supervisor at an annual salary of \$40,000.

June:

4. He orders and pays for a shipment of flowers costing \$110,000.
5. He sells flowers for \$50,000. Half of these sales are made on account.

August:

6. He receives a deposit of \$7,000 from a customer to put merchandise "on hold".
7. He pays current month's salaries of \$4,000.

Instructions

Prepare all required journal entries.

Solution 3-69

1. Cash	400,000	
Jonathan Green, Capital		400,000
2. Building	200,000	
Cash		200,000
3. No entry required.		
4. Inventories	110,000	
Cash		110,000
5. Cash	25,000	
Accounts Receivable	25,000	
Sales		50,000
6. Cash	7,000	
Unearned Revenue		7,000
7. Salaries Expense	4,000	
Cash		4,000

Pr. 3-70 Adjusting entries

The information shown below relates to Flower Corporation. At December 31, 2013 Flower's general ledger shows the following balances:

Prepaid lease \$6,000 Debit

Prepaid insurance \$900 Debit
 Unearned revenue \$78,000 Credit

In addition, the following information is available:

1. The entire amount shown as prepaid lease has expired.
2. One third of the amount shown as prepaid insurance has expired.
3. Half of the amount shown as unearned revenue has now been earned.

Instructions

Prepare all adjusting entries that are required at December 31, 2013.

Solution 3-70

1. Lease Expense.....	6,000	
Prepaid Lease		6,000
2. Insurance Expense (900 x 1/3).....	300	
Prepaid Insurance		300
3. Unearned Revenue (78,000 x 1/2).....	39,000	
Revenue.....		39,000

Pr. 3-71 Adjusting entries

Part I – Maison Corp. has reported pre-tax income of \$400,000 for calendar 2013, before considering the five items below. Prepare the adjusting entries needed at December 31, 2013 in order to correctly state the 2013 pre-tax income. If no entry is needed, write NONE.

1. Interest on a \$39,000, 8%, six-year note payable was last paid on September 1, 2013.
2. On May 31, 2013, Maison entered into a contract to provide services to a customer for eighteen months beginning June 1. The customer paid the \$18,000 fee in full on June 1 and Maison credited it to Service Revenue.
3. On August 1, 2013, Maison paid a year's rent in advance on a warehouse, and debited the \$36,000 payment to Prepaid Rent.
4. Depreciation on office equipment for 2013 is \$17,000.
5. On December 18, 2013, Maison paid the local newspaper \$1,000 for an advertisement to be run in January of 2014, debiting it to Prepaid Advertising.

Part II – Show the effect of each adjusting entry in Part I on previously reported pre-tax income, and indicate the correct amount of pre-tax income.

Reported 2013 pre-tax income	\$400,000
Add (deduct) Item (1)	
(2)	
(3)	
(4)	
(5)	
Correct 2013 pre-tax income	<u>\$</u>

Solution 3-71

Part I

1. Interest Expense (39,000 x 8% x 4/12)..... 1,040

Interest Payable		1,040
2. Service Revenue (18,000 x 11/18 unearned)	11,000	
Unearned Service Fees.....		11,000
3. Rent Expense (36,000 x 5/12).....	15,000	
Prepaid Rent		15,000
4. Depreciation Expense	17,000	
Accumulated Depreciation.....		17,000
5. NONE.		

Part II

Reported 2013 pre-tax income	\$400,000
Add (deduct) Item (1)	(1,040)
(2)	(11,000)
(3)	(15,000)
(4)	(17,000)
(5)	
Correct 2013 pre-tax income	<u>\$355,960</u>

Pr. 3-72 Adjusting entries and account classification

Selected amounts from Elderberry Ltd.'s trial balance at December 31, 2013 appear below:

1. Accounts Payable	\$ 180,000
2. Accounts Receivable	160,000
3. Accumulated Depreciation —Equipment	230,000
4. Allowance for Doubtful Accounts	21,000
5. Bonds Payable	550,000
6. Cash	155,000
7. Common Shares	63,000
8. Equipment	850,000
9. Insurance Expense	31,000
10. Interest Expense	12,000
11. Merchandise Inventory	290,000
12. Notes Payable (due June 1, 2014)	230,000
13. Prepaid Rent	130,000
14. Retained Earnings	120,000
15. Salaries and Wages Expense	338,000

(All of the above accounts have normal balances.)

Instructions**Part A**

Prepare adjusting journal entries at year end, December 31, 2013, based on the following additional information:

- a) The equipment has a useful life of ten years with no residual (salvage) value. (Straight-line method being used.)

- b) Interest accrued on the bonds payable is \$16,000.
- c) Unexpired insurance is \$9,000.
- d) The Prepaid Rent of \$130,000 covers the four months from November 30, 2013 through March 31, 2014.
- e) Salaries and wages earned but unpaid, \$24,000.

Part B

Indicate the proper statement of financial position classification of each of the 15 accounts listed, by placing appropriate numbers after each of the following classifications. If the account would appear on the statement of comprehensive income, do not put the number in any of the classifications.

- a) Current assets
- b) Non-current assets
- c) Current liabilities
- d) Non-current liabilities
- e) Shareholders' equity

Solution 3-72**Part A**

a) Depreciation Expense—Equipment (850,000/10)	85,000	
Accumulated Depreciation —Equipment		85,000
b) Interest Expense	16,000	
Interest Payable		16,000
c) Prepaid Insurance	9,000	
Insurance Expense		9,000
d) Rent Expense (130,000/4).....	32,500	
Prepaid Rent.....		32,500
e) Salaries and Wages Expense.....	24,000	
Salaries and Wages Payable		24,000

Part B

- a) Current assets—2, 4, 6, 11, 13
- b) Non-current assets—3, 8
- c) Current liabilities—1, 12
- d) Non-current liabilities—5
- e) Shareholders' equity—7, 14

Pr. 3-73 Adjusting entries

Data relating to the balances of various accounts affected by adjusting or closing entries appear below. (The entries, which caused the changes in the balances, are not given.) You are asked to supply the missing journal entries, which would logically account for the changes in the account

balances.

1. Interest receivable at January 1, 2013 was \$1,000. During 2013, cash received from debtors for interest on outstanding notes receivable was \$5,800. The 2013 statement of comprehensive income showed Interest Revenue of \$4,900. You are to prepare the missing adjusting entry that must have been made, assuming reversing entries are not made.
2. Unearned rent at January 1, 2013 was \$5,300, and at December 31, 2013 was \$6,000. The records indicate cash receipts from rental sources during 2013 were \$45,000, all of which were credited to the Unearned Rent Account. You are to prepare the missing adjusting entry.
3. Accumulated Depreciation—Equipment at January 1, 2013 was \$230,000, and at December 31, 2013 was \$280,000. During 2013, one piece of equipment was sold. The equipment had an original cost of \$40,000 and was 3/4 depreciated when sold. You are to prepare the missing adjusting entry.
4. Allowance for doubtful accounts on January 1, 2013 was \$50,000. The balance in the allowance account on December 31, 2013 after making the annual adjusting entry was \$65,000. During 2013 bad debts of \$30,000 were written off. You are to provide the missing adjusting entry.
5. Prepaid rent at January 1, 2013 was \$10,000. During 2013 rent payments of \$110,000 were made and debited to Rent Expense. The 2013 statement of comprehensive income shows Rent Expense of \$120,000. You are to prepare the missing adjusting entry that must have been made, assuming reversing entries are not made.
6. Retained earnings at January 1, 2013 was \$150,000 and at December 31, 2013 it was \$210,000. During 2013, cash dividends of \$50,000 were paid, which were correctly debited to retained earnings. You are to prepare the missing closing entry to close the Income Summary account.

Solution 3-73

1. Interest Receivable	100	
Interest Revenue		100
Interest revenue per books	\$4,900	
Interest revenue received related to 2013		
(\$5,800 – \$1,000)	<u>4,800</u>	
Interest accrued	<u>\$ 100</u>	
2. Unearned Rent Revenue	44,300	
Rent Revenue		44,300
Cash receipts	\$45,000	
Beginning balance	5,300	
Ending balance	<u>(6,000)</u>	
Rent revenue	<u>\$44,300</u>	
3. Depreciation Expense	80,000	
Accumulated Depreciation —Equipment		80,000
Ending balance	\$280,000	
Beginning balance	<u>230,000</u>	
Difference	50,000	
Write-off at time of sale $3/4 \times \$40,000$	<u>30,000</u>	
	<u>\$ 80,000</u>	
4. Bad Debt Expense	45,000	
Allowance for Doubtful Accounts		45,000
Ending balance	\$65,000	

Beginning balance	50,000	
Difference	15,000	
Written off	30,000	
	<u>\$45,000</u>	
5. Rent Expense	10,000	
Prepaid Rent		10,000
Rent expense	\$120,000	
Less cash paid	<u>110,000</u>	
Reduction in prepaid rent account	<u>\$ 10,000</u>	
6. Income Summary	110,000	
Retained Earnings		110,000
Ending balance	\$210,000	
Beginning balance	<u>150,000</u>	
Difference	60,000	
Cash dividends	<u>50,000</u>	
Net income must be	<u>\$110,000</u>	

Pr. 3-74 Adjusting and closing entries

The following trial balance was taken from the books of Kaslo Corporation at December 31, 2013.

<u>Account</u>	<u>Debit</u>	<u>Credit</u>
Cash	\$ 40,000	
Accounts Receivable	108,000	
Note Receivable	8,000	
Allowance for Doubtful Accounts		\$ 1,800
Merchandise Inventory	54,000	
Unexpired Insurance	4,800	
Furniture and Equipment	138,000	
Accumulated Depreciation		15,000
Accounts Payable		10,800
Common Stock		44,000
Retained Earnings		65,000
Sales		410,000
Cost of Goods Sold	128,000	
Salaries Expense	53,000	
Rent Expense	<u>12,800</u>	
Totals	<u>\$546,600</u>	<u>\$546,600</u>

At year end, the following items have not yet been recorded.

- Insurance expired during the year, \$3,000.
- Estimated bad debts, 1 percent of gross sales.
- Depreciation on furniture and equipment, 10% per year.
- Interest at 9% is receivable on the note for one full year.
- Rent paid in advance at December 31, \$6,800 (originally debited to expense).
- Accrued salaries at December 31, \$6,200.

Instructions

- Prepare the necessary adjusting entries.
- Prepare the necessary closing entries.

Solution 3-74a) Adjusting Entries

1. Insurance Expense	3,000	
Unexpired Insurance		3,000
2. Bad Debt Expense (410,000 x 1%)	4,100	
Allowance for Doubtful Accounts		4,100
3. Depreciation Expense (138,000 x 10%)	13,800	
Accumulated Depreciation.....		13,800
4. Interest Receivable (8,000 x 9%)	720	
Interest Revenue		720
5. Prepaid Rent.....	6,800	
Rent Expense.....		6,800
6. Salaries Expense	6,200	
Salaries Payable		6,200

b) Closing Entries

Sales	410,000	
Interest Revenue.....	720	
Income Summary		410,720
Income Summary.....	214,100	
Salaries Expense		59,200
Rent Expense		6,000
Depreciation Expense		13,800
Bad Debt Expense		4,100
Insurance Expense		3,000
Cost of Goods Sold		128,000
Income Summary.....	196,620	
Retained Earnings.....		196,620

Pr. 3-75 Adjusting and Closing Entries

- Using the Adjusted Trial Balance of Charles Corporation from Pr 3-78, journalize the adjustments that were made.
- Using the adjusted Trial Balance of Charles Corporation from Pr 3-78, journalize the closing entries that are required.

Solution 3-75

1. Store Supplies Expense	4,000	
Store Supplies		4,000
Depr. Expense—Store Equipment.....	18,000	
Accumulated Depreciation— Store Equipment.....		18,000
Depr. Expense—Delivery Equipment.....	14,000	
Accumulated Depreciation—		

	Delivery Equipment.....		14,000
	Interest Expense	22,000	
	Interest Payable.....		22,000
2.	Sales	1,494,400	
	Income Summary.....		1,494,400
	Income Summary.....	1,527,600	
	Sales Returns and Allowances		8,400
	Cost of Goods Sold.....		994,800
	Salaries Expense.....		280,000
	Advertising Expense		52,800
	Utilities Expense		28,000
	Repair Expense		24,200
	Delivery Expense.....		33,400
	Rent Expense		48,000
	Store Supplies Expense.....		4,000
	Depreciation Expense—Store Equipment		18,000
	Depreciation Expense—Delivery Equipment		14,000
	Interest Expense.....		22,000
	Retained Earnings	33,200	
	Income Summary.....		33,200

Pr. 3-76 Closing Entries

Below is a selection of account balances for Mulcair Ltd. at December 31, 2013:

Sales	\$856,000
Sales returns	\$20,000
Cost of goods sold.....	\$456,000
Advertising expense	\$42,000
Salaries expense.....	\$112,000
Depreciation expense.....	\$29,000
Insurance expense	\$9,000
Administrative expense	\$10,000

All accounts have their normal balances.

Instructions

Prepare all necessary closing entries at December 31, 2013.

Solution 3-76

Sales	856,000	
Sales returns.....		20,000
Income summary		836,000

Income summary	658,000	
Administrative expense.....		10,000
Advertising expense		42,000
Depreciation expense		29,000
Cost of goods sold		456,000
Insurance expense		9,000
Salaries expense		112,000
Income summary	178,000	
Retained earnings		178,000

Pr. 3-77 Accrual accounting

Blackbird Corp.'s records provide the following information concerning certain account balances and changes in these account balances during the current year. Transaction information is missing from each item below.

Instructions

Prepare the *entry* to record the missing information for each account. (Consider each independently.)

1. Accounts Receivable: Jan. 1, balance \$40,000, Dec. 31, balance \$45,000, uncollectible accounts written off during the year, \$6,000; accounts receivable collected during the year, \$134,000. Prepare the entry to record sales for the year.
2. Allowance for Doubtful Accounts: Jan. 1, balance \$2,400, Dec. 31 balance \$7,500, uncollectible accounts written off during the year, \$30,000. Prepare the entry to record bad debt expense.
3. Accounts Payable: Jan. 1, balance \$20,000, Dec. 31, balance \$33,000, purchases on account for the year, \$110,000. Prepare the entry to record payments on account.
4. Interest Receivable: Jan. 1 accrued, \$1,000, Dec. 31 accrued, \$2,100, earned for the year, \$20,000. Prepare the entry to record cash interest received.

Solution 3-77

1. Ending balance	\$ 45,000	Ending balance	\$ 45,000
Beginning balance	<u>40,000</u>	Plus: Rec. collected	134,000
Difference	5,000	Write-offs	<u>6,000</u>
Uncollectible accounts	6,000		185,000
Receivables collected	<u>134,000</u>	Less: Beginning balance	<u>40,000</u>
Sales for period	<u>\$145,000</u>	Sales for period	<u>\$145,000</u>
Accounts Receivable.....		145,000	
Sales			145,000
2. Ending balance	\$ 7,500	Ending balance	\$ 7,500
Beginning balance	<u>2,400</u>	Write-off	<u>30,000</u>
Difference	5,100		37,500
Write-off	<u>30,000</u>	Beginning balance	<u>2,400</u>
Adjusting entry	<u>\$35,100</u>	Adjusting entry	<u>\$35,100</u>
Bad Debts Expense		35,100	
Allowance for Doubtful Accounts			35,100

3. Ending balance	\$ 33,000		Beginning balance	\$ 20,000
Beginning balance	<u>20,000</u>		Plus purchases	<u>110,000</u>
Difference	13,000	OR		130,000
Purchases	<u>110,000</u>		Less ending balance	<u>33,000</u>
Payments	<u>\$ 97,000</u>		Payments	<u>\$ 97,000</u>

Accounts Payable.....	97,000	
Cash		97,000

4. Revenue Earned	\$20,000		Beginning balance	\$ 1,000
Less: Dec. 31 accrual	(2,100)		Plus revenue earned	<u>20,000</u>
Plus: Jan. 1 accrual	<u>1,000</u>	OR		21,000
Cash received	<u>\$18,900</u>		Less ending balance	<u>2,100</u>
			Cash received	<u>\$18,900</u>

Cash.....	18,900
Interest Receivable	18,900
(This entry assumes that the \$20,000 interest earned was first recorded as a receivable.)	

Pr. 3-78 Eight-column work sheet

The work sheet and trial balance of Santos Corporation is reproduced on the following page. The information below is relevant to the preparation of adjusting entries needed to both properly match revenues and expenses for the period and reflect the proper balances in the real and nominal accounts.

Instructions

As the accountant for Santos, you are to prepare adjusting entries based on the following data, entering the adjustments on the work sheet and completing the additional columns with respect to the income statement and statement of financial position. Carefully key your adjustments and label all items. (Due to time constraints, an adjusted trial balance is not required.) Round all calculations to the nearest dollar.

- After an aging of accounts receivable, it was determined that three percent of the accounts will become uncollectible.
- Depreciation is calculated using the straight-line method, with an eight-year life and \$1,000 residual (salvage) value.
- Salesmen are paid commissions of 11% of sales. Commissions on sales for the last week of December have not been paid.
- The note was issued on October 1, 2013, with interest at 8%, due Feb. 1, 2014.
- A physical inventory of supplies indicated \$280 of supplies currently on hand.
- Provisions of the company's lease contract specify rent payments must be made one month in advance, with monthly payments of \$900/mo. This provision has been complied with as of Dec. 31, 2013.

Santos Corporation
Work Sheet
Year ended December 31, 2013

Accounts	Trial Balance		Adjustments		Income Statement		State of fin position	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.

Cash	5,400	
Marketable Securities	4,050	
Accounts Receivable	40,000	
Allow. for D. A.		420
Inventory	16,800	
Supplies	1,040	
Equipment	49,000	
Accum. Depr.—Equip.		9,500
Accounts Payable		4,400
Notes Payable		4,250
Common Shares		40,000
Retained Earnings		25,340
Cost of Goods Sold	238,520	
Office Salaries	20,800	
Sales Commissions	29,000	
Rent Expense	7,200	
Misc. Expense	2,200	
Sales		<u>330,100</u>
Totals	<u>414,010</u>	<u>414,010</u>

Solution 3-78

Santos Corporation
Work Sheet
December 31, 2013

Accounts	Trial Balance		Adjustments		Income Statement		State of fin position	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	5,400						5,400	
Marketable Securities	4,050						4,050	
Accounts Receivable	40,000						40,000	
Allow. for D. A.		420	(a)	780				1,200
Mdse. Inventory	16,800						16,800	
Supplies	1,040		(e)	760			280	
Equipment	49,000						49,000	
Accum. Depr.—Equip.		9,500	(b)	6,000				15,500
Accounts Payable		4,400						4,400
Notes Payable		4,250						4,250
Common Stock		40,000						40,000
Retained Earnings		25,340						25,340
Cost of Goods Sold	238,520				238,520			
Office Salaries	20,800				20,800			
Sales Commissions	29,000		(c)	7,311	36,311			
Rent Expense	7,200		(f)	900	6,300			
Misc. Expense	2,200				2,200			
Sales		330,100				330,100		
Totals	<u>414,010</u>	<u>414,010</u>						
Bad Debt Expense			(a)	780	780			
Depr. Expense			(b)	6,000	6,000			
Sales Com. Payable			(c)	7,311				7,311
Interest Expense			(d)	85	85			
Interest Payable			(d)	85				85
Supplies Expense			(e)	760	760			
Prepaid Rent			(f)	900			900	
Totals			<u>15,836</u>	<u>15,836</u>	311,756	330,100	116,430	98,086
Net Income					<u>18,344</u>			<u>18,344</u>
Totals					<u>330,100</u>	<u>330,100</u>	<u>116,430</u>	<u>116,430</u>

Adjusting entries and explanations

- Bad Debt Expense..... 780

 Allowance for Doubtful Accounts 780

 (3% of accounts receivable is $3\% \times \$40,000$, which is \$1,200. Since the allowance account has a credit balance of \$420 before adjustment, \$780 must be added to the allowance account.)
- Depreciation Expense 6,000

 Accumulated Depreciation—Equipment..... 6,000

 (\$49,000 – \$1,000 is \$48,000. One-eighth of \$48,000 is \$6,000.)
- Sales Commissions..... 7,311

 Sales Commissions Payable 7,311

 (11% of sales is $11\% \times \$330,100$, which is \$36,311. The balance in the Sales Commissions account is \$29,000)

before adjustment, indicating that \$7,311 of commissions are accrued but unpaid.)

4.	Interest Expense	85	
	Interest Payable		85
	(\$4,250 × .08 × 3/12 = \$85)		
5.	Supplies Expense	760	
	Supplies		760
	(The balance of \$1,040 in the Supplies account before adjustment less the correct ending balance of \$280 is \$760.)		
6.	Prepaid Rent	900	
	Rent Expense		900
	(Since the trial balance contains no account for prepaid rent, the \$900 lease payment has apparently been debited to Rent Expense. An account must be set up for the Prepaid Rent.)		

Pr. 3-79 Preparation of Financial Statements

Use the following information to prepare a multi-step Statement of Comprehensive Income, a Statement of Changes in Shareholders Equity, and a classified Statement of Financial Position.

Charles Corporation Adjusted Trial Balance December 31, 2013

	<u>Debit</u>	<u>Credit</u>
Cash	\$ 33,400	
Accounts Receivable	87,400	
Merchandise Inventory	90,000	
Store Supplies	7,000	
Store Equipment	170,000	
Accumulated Depreciation—Store Equipment		54,000
Delivery Equipment	96,000	
Accumulated Depreciation--Delivery Equipment		26,000
Notes Payable		82,000
Accounts Payable		117,000
Common Shares		200,000
Retained Earnings		16,000
Sales		1,494,400
Sales Return and Allowances	8,400	
Cost of Goods Sold	994,800	
Salaries Expense	280,000	
Advertising Expense	52,800	
Utilities Expense	28,000	
Repair Expense	24,200	
Delivery Expense	33,400	
Rent Expense	48,000	
Store Supplies Expense	4,000	
Depreciation Expense Store Equipment	18,000	
Depreciation Expense Delivery Equipment	14,000	
Interest Expense	22,000	

Interest Payable		<u>22,000</u>
Totals	<u>2,011,400</u>	<u>2,011,400</u>

Other Data:

- Salaries expense is 70% selling and 30% administrative.
- Rent expense and utilities expense are 80% selling and 20% administrative.
- \$60,000 of notes payable are due for payment next year.
- Repair expense is 100% administrative.

Solution 3-79

CHARLES CORPORATION Statement of Comprehensive Income for year ended December 31, 2013

Sales revenue		
Sales		\$1,494,400
Less: Sales returns and allowances		<u>8,400</u>
Net sales		1,486,000
Cost of goods sold		<u>994,800</u>
Gross profit		491,200
Operating expenses		
Selling expenses		
Salaries expense	\$196,000	
(\$280,000 x 70%)		
Advertising expense	52,800	
Rent expense	38,400	
(\$48,000 x 80%)		
Delivery expense	33,400	
Utilities expense	22,400	
(\$28,000 x 80%)		
Depr. exp.—store equipment	18,000	
Depr. exp.—delivery equipment	14,000	
Stores supplies expense	<u>4,000</u>	
Total selling expenses		\$379,000
Administrative expenses		
Salaries expense	84,000	
(\$280,000 x 30%)		
Repair expense	24,200	
Rent expense	9,600	
(\$48,000 x 20%)		
Utilities expense	<u>5,600</u>	
(\$28,000 x 20%)		
Total admin. expenses		<u>123,400</u>
Total operating. expenses		<u>502,400</u>
Loss from operations		11,200
Other expenses and losses		
Interest expense		<u>22,000</u>
Net loss		<u>\$33,200</u>

CHARLES CORPORATION Statement of Changes in Shareholders' Equity for year ended December 31, 2013

	Total	Common Shares	Comprehensive Income	Retained Earnings
Beginning, Jan 1, 2013	\$ 216,000	\$ 200,000		\$ 16,000
Net loss for 2013	(33,200)		(33,200)	(33,200)
Other comprehensive income	-			
Comprehensive income			(33,200)	
Ending, Dec 31, 2013	182,800	200,000		(17,200)

CHARLES CORPORATION.
Statement of Financial Position
December 31, 2013

Assets				
Current assets				
Cash				\$ 33,400
Accounts receivable				87,400
Merchandise inventory				90,000
Store supplies				<u>7,000</u>
Total current assets.....				217,800
Non-current assets				
Store equipment.....	\$170,000			
Accumulated depreciation—store equipment	<u>54,000</u>	\$116,000		
Delivery equipment	96,000			
Accumulated depreciation—delivery equipment	<u>26,000</u>	<u>70,000</u>		<u>186,000</u>
Total assets.....				<u>\$403,800</u>
Liabilities and Shareholders' Equity				
Current liabilities				
Current portion of notes payable				\$ 60,000
Accounts payable				117,000
Interest payable				<u>22,000</u>
Total current liabilities				199,000
Non-current liabilities				
Notes payable				<u>22,000</u>
Total liabilities.....				221,000
Shareholders' equity				
Common Shares		\$200,000		
Deficit		<u>(17,200)</u>		<u>182,800</u>
Total liabilities and shareholders' equity				<u>\$403,800</u>

Pr. 3-80 Trial balance correction

The Controller of SHD Corporation asks his assistant to correct the company's December 31, 2013 trial balance.

The preliminary trial balance, which does not balance, is reproduced below:

SHD Corporation Trial Balance December 31, 2013		
	<u>Debit</u>	<u>Credit</u>
Cash	10,000	
Accounts Receivable	15,000	
Prepaid Insurance	600	
Equipment	40,000	
Inventories	9,000	
Accounts Payable		11,590
Common Shares		110,000
Sales		17,100
Salaries	64,000	
Office Supplies	2,150	
Depreciation Expense	2,550	
	<u>143,300</u>	<u>138,690</u>

The assistant's review uncovered the following errors:

1. The accounts payable for the purchase of inventories in the amount of \$6,560 was recorded as \$5,650 in error.
2. Depreciation expense was understated by \$450.
3. Office supplies were overstated by \$150.
4. A collection from a customer in the amount of \$4,000 was not posted to the receivable ledger.

Instructions

Prepare a corrected trial balance.

Solution 3-80

SHD Corporation Trial Balance December 31, 2013		
	<u>Debit</u>	<u>Credit</u>
Cash	10,000	
Accounts Receivable (\$15,000 - \$4,000)	11,000	
Prepaid Insurance	600	
Equipment	40,000	
Inventories	9,000	
Accounts Payable		12,500
Common Shares (\$11,590 + \$6,560 - \$5,650)		110,000

Sales		17,100
Salaries	64,000	
Office Supplies (\$2,150 - \$150)	2,000	
Depreciation Expense (\$2,550 + \$450)	3,000	
	<u>139,600</u>	<u>139,600</u>

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CHAPTER 4

REPORTING FINANCIAL PERFORMANCE

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	11.	4	M	21.	6	M	31.	7	H
2.	1	E	12.	4	E	22.	6	H	32.	7	H
3.	1	E	13.	4	M	23.	6	M	33.	7	M
4.	1	E	14.	4	M	24.	6	H	34.	7	H
5.	2	E	15.	4	M	25.	6	M	35.	7	H
6.	3	E	16.	5	M	26.	6	M	36.	8	H
7.	3	M	17.	5	H	27.	6	M	37.	9	H
8.	3	M	18.	5	H	28.	6	H	*38.	10	H
9.	3	M	19.	5	H	29.	6	M	*39.	10	H
10.	4	M	20.	5,6	H	30.	7	H			
Multiple Choice–Computational											
40.	4	M	44.	5	M	48.	7	M	52.	7	H
41.	4	H	45.	6	M	49.	7	H	53.	7	M
42.	4	H	46.	7	M	50.	7	M			
43.	5	M	47.	7	H	51.	7	H			
Multiple Choice–CPA Adapted											
54.	5	M	58.	6	M	62.	6	M	*66.	10	M
55.	6	M	59.	6	M	63.	7	M			
56.	6	M	60.	6	M	*64.	10	M			
57.	6	M	61.	6	M	*65.	10	M			
Exercises											
67.	3	M	71.	4	E	75.	6	M	79.	8	M
68.	3	M	72.	4-7,9	H	76.	6	M	*80.	10	M
69.	4	H	73.	5	M	77.	6,7	M			
70.	4	M	74.	6	M	78.	7	M			
Problems											
81.	5	H	83.	6	M	85.	6	M	87.	6,7	H
82.	5,6	M	84.	6	M	86.	6	M	*88.	10	M

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	2.	MC	3.	MC	4.	MC				
Learning Objective 2											
5.	MC										
Learning Objective 3											
6.	MC	7.	MC	8.	MC	9.	MC	67.	Ex	68.	Ex
Learning Objective 4											
10.	MC	13.	MC	40.	MC	69.	Ex	72.	Ex		
11.	MC	14.	MC	41.	MC	70.	Ex				
12.	MC	15.	MC	42.	MC	71.	Ex				
Learning Objective 5											
16.	MC	18.	MC	20.	MC	44.	MC	72.	Ex	81.	Pr
17.	MC	19.	MC	43.	MC	54.	MC	73.	Ex	82.	Pr
Learning Objective 6											
20.	MC	25.	MC	45.	MC	59.	MC	74.	Ex	83.	Pr
21.	MC	26.	MC	55.	MC	60.	MC	75.	Ex	84.	Pr
22.	MC	27.	MC	56.	MC	61.	MC	76.	Ex	85.	Pr
23.	MC	28.	MC	57.	MC	62.	MC	77.	Ex	86.	Pr
24.	MC	29.	MC	58.	MC	72.	Ex	82.	Pr	87.	Pr
Learning Objective 7											
30.	MC	34.	MC	48.	MC	52.	MC	77.	Ex		
31.	MC	35.	MC	49.	MC	53.	MC	78.	Ex		
32.	MC	46.	MC	50.	MC	63.	MC	87.	Pr		
33.	MC	47.	MC	51.	MC	72.	Ex				
Learning Objective 8											
36.	MC	79.	Ex								
Learning Objective 9											
37.	MC	72.	Ex								
Learning Objective 10											
*38.	MC	*64.	MC	*66.	MC	*88.	Pr				
*39.	MC	*65.	MC	*80.	Ex						

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. ***Appreciate how firms create value and manage performance.*** A business is based on a basic model of obtaining financing, investing in assets, and using those assets to generate profits. Different industries have different business models. Even within an industry, different businesses may have different strategies for generating revenues. Some businesses and industries are riskier than others. Companies must decide how and whether to manage these risks. Managing risks costs money, which reduces profits. Capital markets demand greater returns for riskier businesses.

2. ***Understand how users use information about performance to make decisions.*** Users use information about performance to evaluate past performance and profitability and to provide a basis for predicting future performance. They also use the information to help assess risk and uncertainty regarding future cash flows.

3. ***Understand the concept of and be able to assess quality of earnings/information.*** Information quality is not the same. Some information is better than others. The conceptual framework identifies characteristics of useful information. The limitations of an income statement are that (1) the statement does not include many items that contribute to the general growth and well-being of an enterprise; (2) income numbers are often affected by the accounting methods that are used; (3) income measures are often estimates; and (4) information is sometimes biased and GAAP is not always optimal because it is a product of a political process. The concept of quality of earnings is used by analysts and investors to assess how well the reported income reflects the underlying business and future potential. When assessing quality of earnings, consider all information about a company. High-quality earnings have various attributes, as biased, this degrades the quality.

4. ***Understand the differing perspectives on how to measure income.*** There are various ways to measure income, including operating income, net income, and comprehensive income. IFRS recognizes the concept of comprehensive income but this is not recognized under ASPE. Other comprehensive income consists of a set list of items identified under IFRS essentially dealing with certain unrealized gains/ losses. Under IFRS, some of these items are recycled (reclassified) to net income and some are not.

5. ***Measure and report results of discontinued operations.*** The gain or loss on disposal of a business component involves the sum of: (1) the income or loss from operations to the financial statement date, and (2) the gain or loss on the disposal of the business component. These items are reported net of tax among the irregular items in the income statement. Related assets are identified on the balance sheet where material. Under IFRS, non-current assets are reclassified to current assets.

6. ***Measure income and prepare the income statement and the statement of comprehensive income using various formats.*** There are many ways to present the income statement and the statement of comprehensive income. GAAP lays out certain minimum

requirements but beyond that, a company has some leeway to present the information as it wishes. The goal is to ensure that the statements present information about performance in a transparent manner, including presenting items such that the users can see which are ordinary versus peripheral activities. IFRS allows the statement of comprehensive income to be presented in a combined statement or two separate statements.

By convention, companies use what is known as a single-step method or a multiple-step method (or a variation of the two). In a single-step income statement, there are only two groupings: revenues and expenses. Frequently, income tax is reported separately as the last item before net income to indicate its relationship to income before income tax. A multiple-step income statement shows two additional classifications: (1) a separation of operating results from the results obtained through the subordinate or non-operating activities of the company; and (2) a classification of expenses by functions, such as merchandising or manufacturing, selling, and administration, or by nature (such as salary expense and depreciation).

IFRS requires entities to provide information about either the nature or function of expenses. When information is presented using function, additional disclosures should be made regarding the breakdown of the nature of expenses as the latter has good cash flow predictive value. The entity should choose the method that best reflects the nature of the business and industry.

7. Prepare the statement of retained earnings and the statement of changes in equity. The retained earnings statement should disclose net income (loss), dividends, prior period adjustments, and transfers to and from retained earnings (appropriations). This statement is required under ASPE.

The statement of changes in equity is a required statement under IFRS and takes the place of the statement of changes in retained earnings. It shows all changes in all equity accounts including accumulated other comprehensive income.

8. Understand how disclosures and analysis help users of financial statements assess performance. Disclosures include notes and supplementary information. They provide background and explanatory information necessary to understand the business. Investors and analysts use quality of earnings analysis to help determine a company's value.

9. Identify differences in accounting between IFRS and ASPE and potential changes. The chart in Illustration 4-24 outlines the major differences. The IASB is planning to change the way financial statements are presented. The major statements, including balance sheet, income statement, and statement of cash flows, will be classified according to business and financing activities. The IASB is also working to harmonize the definition of "component" for purposes of discontinued operations.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
b	1.	Business model activities
c	2.	Business model activities and the income statement
b	3.	Risk/return tradeoff
a	4.	Representational faithfulness
d	5.	Usefulness of the income statement
b	6.	Concept of soft numbers
d	7.	Earnings management
b	8.	Limitations of the income statement
d	9.	Quality of earnings
b	10.	Net income definition
a	11.	IFRS view of income
c	12.	Other comprehensive income
a	13.	All-inclusive income
c	14.	Comprehensive income inclusions
a	15.	Accumulated other comprehensive income
c	16.	Reporting discontinued operations
d	17.	Determination of a discontinued operation
b	18.	Classification of assets held for sale
c	19.	Assets held for sale
c	20.	EPS disclosures on income statement
b	21.	Unusual gains and losses
d	22.	Separate presentation under IFRS
b	23.	Single step income statement
a	24.	Income statement presentation
c	25.	IFRS requirement for expense presentation
d	26.	Expenses presented by function
b	27.	Intraperiod tax allocation
d	28.	Intraperiod tax allocation
b	29.	Earnings per share data
c	30.	Retained earnings statement
a	31.	Losses excluded from income statement
b	32.	Change in accounting principle
d	33.	Change in accounting principle
a	34.	Correction of an error
b	35.	Statement of shareholders' equity
c	36.	Notes to financial statements
d	37.	Differences between ASPE and IFRS
b	*38.	Accrual basis of accounting
c	*39.	Modified cash basis

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational

Answer	No.	Description
d	40.	Calculation of net income using retained earnings
a	41.	Calculation of total purchases
d	42.	Calculation of cost of goods sold
c	43.	Disposal of a major business segment
d	44.	Calculation of loss on discontinued operation
b	45.	Calculation of other income on multiple step income statement
c	46.	Effect of accounting errors
a	47.	Effect of accounting errors
d	48.	Effect of accounting errors
a	49.	Effect of accounting errors
d	50.	Effect of accounting errors on current assets
d	51.	Events affecting income from continuing operations
b	52.	Events affecting retained earnings
c	53.	Calculation of retained earnings balance

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
b	54.	Calculation of income from discontinued operations
d	55.	Calculation of selling expenses
a	56.	Calculation of general and administrative expenses
a	57.	Calculation of selling expenses
b	58.	Calculation of general and administrative expenses
d	59.	Calculation of income from continuing operations
a	60.	Calculation of net income
a	61.	Determination of infrequent losses
d	62.	Calculation of cost of goods sold
b	63.	Adjustments to retained earnings
b	*64.	Accrual vs. cash basis
a	*65.	Calculation of cash basis revenue
c	*66.	Conversion of cash to accrual basis

*This topic is dealt with in an Appendix to the chapter.

EXERCISES

Item	Description
E4-67	Income statement limitations
E4-68	Characteristics of high quality earnings
E4-69	Calculation of net income from change in shareholders' equity
E4-70	Calculation of net income from change in shareholders' equity
E4-71	Comprehensive income
E4-72	Definitions
E4-73	Discontinued operations
E4-74	Income statement classifications
E4-75	Classification of income statement and retained earnings statement items
E4-76	Nature versus function of expense presentation
E4-77	Terminology
E4-78	Statement of changes in equity
E4-79	Analyzing financial health and quality of earnings
*E4-80	Cash basis

PROBLEMS

Item	Description
P4-81	Discontinued operations
P4-82	Multiple-step income statement
P4-83	Income statement, including corrections
P4-84	Multiple-step income statement
P4-85	Multiple-step income statement
P4-86	Income statement adjustments
P4-87	Income statement and retained earnings statement
*P4-88	Accrual accounting

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. The business model may be broken down into three activities:
 - a) investing, operating, allocating.
 - b) investing, operating, financing.
 - c) financing, operating and comprehensive income.
 - d) balance sheet, income statement, cash flow statement.

2. The income statement captures an entity's
 - a) financing activities.
 - b) investing activities.
 - c) operating activities.
 - d) interrelationship between activities.

3. The "risk/return tradeoff" means
 - a) using various techniques to manage risks.
 - b) the market demands a greater return when there is greater risk.
 - c) not investing in a risky business.
 - d) monitoring risks.

4. The concept of representational faithfulness requires that the financial statements
 - a) reflect the economic reality of running a business.
 - b) reflect everything no matter how small.
 - c) reflect the biases of management.
 - d) identify all risks that the entity faces.

5. Information in the income statement does NOT help users to
 - a) evaluate the past performance of the enterprise.
 - b) provide a basis for predicting future performance.
 - c) help assess the risk of not achieving future cash flows.
 - d) calculate the exact amount of future dividends.

6. The concept of 'soft numbers' reflects the fact that
 - a) financial statement numbers may be manipulated.
 - b) sometimes significant measurement uncertainty exists.
 - c) sometimes significant errors exist.
 - d) earnings numbers may not be sustainable.

7. Earnings management is
 - a) the process of managing a business.
 - b) the process of profit maximization.
 - c) always fraudulent.
 - d) manipulating income to meet a targeted earnings level.

-
8. Limitations of the income statement include all of the following EXCEPT
- a) items that cannot be measured reliably are not reported.
 - b) only actual amounts are reported in determining net income.
 - c) income measurement involves the use of estimates.
 - d) income numbers are affected by the accounting methods used.
9. Which of the following is INCORRECT regarding "quality of earnings"?
- a) Quality of earnings refers to how solid the earnings numbers are.
 - b) Analysts use quality of earnings to assess how well the reported income reflects the underlying business and future potential.
 - c) If earnings quality is high, numbers are accepted as is.
 - d) If earnings quality is low, numbers are accepted as is.
10. Net income represents
- a) revenues and gains less expenses and losses from continuing operations only.
 - b) revenues and gains less expenses and losses from both continuing and discontinued operations.
 - c) net income plus/minus other comprehensive income.
 - d) ongoing revenues and expenses before gains, losses and discontinued operations.
11. The view of income that IFRS generally supports is referred to as the
- a) all-inclusive approach.
 - b) current operating performance approach.
 - c) other comprehensive income approach.
 - d) operating income approach.
12. At year end, other comprehensive income is closed out to
- a) retained earnings.
 - b) share capital.
 - c) accumulated other comprehensive income.
 - d) net income.
13. All-inclusive income includes all of the following EXCEPT
- a) investments by owners.
 - b) losses on disposal of assets.
 - c) dividend revenue.
 - d) gains on the expropriation of property by the government.
14. Comprehensive income includes all changes in equity during a period EXCEPT
- a) gains and losses from discontinued operations.
 - b) unrealized gains and losses on available for sale securities.
 - c) those resulting from investments by owners and distributions to owners.
 - d) gains and losses from irregular items.
-

15. Accumulated other comprehensive income would be reported in
- shareholders' equity.
 - retained earnings.
 - net income.
 - net income from continuing operations.
16. When a company disposes of a discontinued operation (segment), the transaction should be included in the income statement as a gain or loss on disposal, and reported as
- a prior period adjustment.
 - other comprehensive income.
 - an amount after continuing operations.
 - a bulk sale of plant assets included in income from continuing operations.
17. For purposes of discontinued operations, the key elements in determining that a separate segment exists are that the component is
- a separate business and a separate legal entity.
 - a separate legal entity and generates its own net cash flows.
 - in a separate geographic region and can be sold.
 - a separate business and generates its own cash flow.
18. If an asset is to be classified as held for sale, which of the following conditions does NOT apply?
- The sale has been authorized by the company's management.
 - Changes to the sale plan are likely.
 - It is probable that the asset will be sold within one year.
 - There is an active program to find a buyer.
19. When an asset is held for sale
- it must relate to a discontinued operation.
 - the entity must continue to record depreciation for the asset.
 - the asset is remeasured to the lower of carrying (book) value and fair value less costs to sell.
 - the asset is remeasured to the lower of fair value and carrying (book) value.
20. Which of the following is a required disclosure in the income statement when reporting the disposal of a segment of the business?
- The gain or loss on disposal should be reported as an unusual item.
 - Results of operations of a discontinued segment should be disclosed immediately below other irregular items.
 - Earnings per share from both continuing operations and net income should be disclosed on the face of the statement or in the notes.
 - The gain or loss on disposal should not be segregated, but should be reported together with the results of continuing operations.

-
21. Unusual gains and losses are items on the income statement that
- are typical of everyday activities but do not occur frequently.
 - are not typical of everyday activities or do not occur frequently.
 - include writedown of inventories and writeoff of bad debts.
 - are not usually disclosed separately.
22. Under IFRS, which of the following is NOT required to be presented separately in the statements of income/comprehensive income?
- Revenues.
 - Discontinued operations.
 - Cost of goods sold.
 - Depreciation/depreciation.
23. The single-step income statement emphasizes
- the gross profit figure.
 - total revenues and total expenses.
 - discontinued operations and accounting changes.
 - the various components of income from continuing operations.
24. Which of the following is NOT a generally practiced method of presenting the income statement?
- including corrections of errors made in a prior period
 - the single-step income statement
 - the multiple-step income statement
 - including gains and losses from discontinued operations
25. IFRS requires that expenses be presented in the income statement
- by amount or in alphabetical order.
 - by geographical area or by the single-step method.
 - by nature or by function.
 - by current or non-current.
26. When expenses are presented by function in the income statement,
- they should be presented by type of expense (e.g., depreciation, purchases, salaries).
 - they should be reported as part of other comprehensive income.
 - their cash flow predictive value is increased.
 - more professional judgment is required to allocate expenses between functions.
27. Intraperiod tax allocation
- allocates tax balances between fiscal years.
 - allocates tax balances within a fiscal period.
 - is used for income from continuing operations but not for income from discontinued operations.
 - is used for other comprehensive income but not for income from discontinued
-

operations.

28. Intraperiod tax allocation

- a) arises because certain revenue and expense items appear in the income statement either before or after they are included in the tax return.
- b) is required for the cumulative effect of changes in accounting principles but not for discontinued operations.
- c) allocates income tax expense evenly over a number of accounting periods.
- d) relates income tax expense to the items which affect the amount of tax.

29. Regarding earnings per share (EPS) data

- a) both public and private corporations are required to report EPS on the face of the income statement.
- b) although public corporations are required to report EPS, private corporations are not.
- c) EPS related to comprehensive income is required.
- d) financial analysts do not attach much importance to EPS data.

30. Which of the following items will NOT appear in the retained earnings statement?

- a) net loss
- b) correction of an error
- c) change in accounting estimates
- d) stock dividends

31. Which one of the following types of losses is excluded from the determination of net income in the income statement?

- a) material losses resulting from correction of errors related to prior periods
- b) material losses resulting from sale of assets not originally acquired for resale
- c) material losses resulting from write-off of intangibles
- d) material losses resulting from sale of investments

32. Which of the following is a change in accounting principle?

- a) a change in the estimated service life of machinery
- b) a change from FIFO to weighted average for inventory costing
- c) a change in the estimated allowance for bad debts
- d) a change in estimated future warranty expense

33. When reporting a change in accounting principle, required disclosure(s) on the income statement include

- a) a per share amount for the cumulative effect of the change.
- b) the cumulative effect on prior years, net of tax.
- c) the cumulative effect be disclosed immediately after discontinued operations.
- d) silly question: a change in accounting principle is not reported on the income statement.

34. Unsure Inc. made a very large arithmetical error in the preparation of its year-end financial

statements by incorrect placement of a decimal point in the calculation of depreciation. The error caused the net income to be reported at almost double the correct amount. When Unsure discovered the error in the following year, correction of the error should be treated as a(n)

- a) adjustment to beginning retained earnings, net of tax.
- b) increase in depreciation expense for the year in which the error is discovered.
- c) gain for the year in which the error was made.
- d) component of income for the year in which the error is discovered, but separately listed on the income statement and fully explained in a note to the financial statements.

35. The statement of changes in shareholders' equity

- a) is a required statement under ASPE.
- b) is a required statement under IFRS.
- c) is a required statement under both IFRS and ASPE.
- d) is an optional statement under both IFRS and ASPE.

36. Which of the following is(are) NOT recommended to be included in notes to the financial statements?

- a) accounting policies
- b) information about the capital structure of the company
- c) individual salaries of top management
- d) sources of estimation uncertainty

37. Which of the following is INCORRECT regarding differences between IFRS and ASPE?

- a) Both IFRS and ASPE mandate a list of required items that must be presented.
- b) IFRS requires that held-for-sale assets be reclassified as current assets.
- c) Comprehensive income is not recognized under ASPE.
- d) Both IFRS and ASPE require presentation of both basic and diluted EPS.

*38. The accrual basis of accounting

- a) must be used by all taxpayers.
- b) recognizes revenue when earned and expenses when incurred.
- c) does not record depreciation.
- d) records depreciation but expenses all inventory purchases.

*39. The modified cash basis

- a) is frequently used by manufacturing firms.
- b) does not usually record inventory.
- c) capitalizes and depreciates property, plant and equipment.
- d) is derived from the accrual basis of accounting.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	b	7.	d	13.	a	19.	c	25.	c	31.	a	37.	d
2.	c	8.	b	14.	c	20.	c	26.	d	32.	b	*38.	b
3.	b	9.	d	15.	a	21.	b	27.	b	33.	d	*39.	c
4.	a	10.	b	16.	c	22.	d	28.	d	34.	a		
5.	d	11.	a	17.	d	23.	b	29.	b	35.	b		
6.	b	12.	c	18.	b	24.	a	30.	c	36.	c		

MULTIPLE CHOICE—Computational

40. Mango Inc. Has 100,000 common shares outstanding and has a policy of paying a \$1.20 annual dividend for each of these shares. Mango has an income tax rate of 40%, and its retained earnings statement for 2014 reported a closing balance of \$1,346,000. Assuming an opening retained earnings balance of zero, dividend payments according to its usual policy, and no other adjustments, Mango's 2014 net income was

- a) \$1,394,000.
- b) \$1,418,000.
- c) \$1,451,000.
- d) \$1,466,000.

41. The following information is available for Apple Limited for 2014:

Accounts payable, beginning	\$16,000
Cash payments on account during year	69,000
Purchase discounts taken during year on 2014 purchases	1,400
Accounts payable, ending	9,000

Assuming the company records purchases at gross amounts, the total purchases for 2014 would be

- a) \$63,400.
- b) \$62,000.
- c) \$58,100.
- d) \$57,800.

42. The following information is available for Orange Corp for 2014:

Payment for goods during year	\$64,000
Accounts payable, beginning	8,000
Inventory, beginning	11,000
Accounts payable, ending	7,400
Inventory, ending	9,100

Cost of goods sold for 2014 is

- a) \$59,800.
- b) \$60,150.
- c) \$64,320.
- d) \$65,300.

43. During 2014, Cantaloupe Corp disposed of Raspberry Division, a major segment of its business. Cantaloupe realized a gain of \$1,500,000, net of taxes, on the sale of Raspberry's assets. During 2014, Raspberry's operating losses, net of taxes, were \$1,800,000. How should these facts be reported in Cantaloupe's income statement for 2014?

	Total Amount to be Included in	
	Income from <u>Continuing Operations</u>	Results of <u>Discontinued Operations</u>
a)	\$1,800,000 loss	\$1,500,000 gain
b)	300,000 loss	0

- c) 0 300,000 loss
d) 1,500,000 gain 1,800,000 loss

44. On January 1, 2014, Apricot Ltd. decided to discontinue its plastics making division. The division, considered a reportable segment, was sold on June 1, 2014. Division assets with a carrying value of \$650,000 were sold for \$500,000. Operating income from January 1, to May 31, 2014 for the division was \$50,000. Ignoring taxes, what amount should be reported on Apricot's income statement for the year ended December 31, 2014, under the caption "discontinued operations"?

- a) \$200,000 gain
b) \$150,000 loss
c) \$50,000 gain
d) \$100,000 loss

45. Blueberry Inc. reported the following information for 2014:

Sales revenue.....	\$520,000
Cost of goods sold	350,000
Operating expenses.....	55,000
Gain on the sale of equipment	70,000
Cash dividends received on investment securities.....	3,000

For 2014, on a multiple-step income statement, Blueberry would report other income of

- a) \$185,000.
b) \$ 73,000.
c) \$ 70,000.
d) \$ 3,000.

Use the following information for questions 46 and 47.

The 2014 and 2015 financial statements of Banana Inc. contained the following errors:

	<u>2014</u>	<u>2015</u>
Ending inventory	\$10,000 overstated	\$16,000 understated
Insurance expense	4,800 understated	2,600 overstated

46. Assuming that none of the errors were detected or corrected, by what amount will 2014 income before taxes be overstated or understated?

- a) \$5,200 understated
b) \$5,200 overstated
c) \$14,800 overstated
d) \$14,800 understated

47. Assuming that none of the errors were detected or corrected, by what amount will 2015 income before taxes be overstated or understated?

- a) \$28,600 understated
b) \$23,800 understated

- c) \$13,400 understated
- d) \$13,400 overstated

Use the following information for questions 48 through 50. Ignore taxes.

Peach Inc.'s financial statements for the years 2014 and 2015 contained errors as follows:

	2014	2015
Ending Inventory	\$ 3,000 understated	\$ 5,000 overstated
Depreciation Expense	5,500 overstated	3,500 overstated

48. Assuming that the errors made in 2014 were corrected, but that the errors made in 2015 were not detected, by what amount will 2015 income before taxes be overstated or understated?

- a) \$5,000 overstated
- b) \$8,500 overstated
- c) \$1,500 understated
- d) \$1,500 overstated

49. Assuming that NONE of the errors were detected or corrected, by what amount will retained earnings at December 31, 2015 be overstated or understated?

- a) \$4,000 understated.
- b) \$5,000 overstated.
- c) \$8,500 understated.
- d) \$11,500 understated.

50. Assuming that NONE of the errors were detected or corrected, and that no additional errors were made in 2016, by what amount will current assets at December 31, 2015 be overstated or understated?

- a) \$2,000 overstated
- b) \$10,000 understated
- c) \$10,000 overstated
- d) \$0

Use the following information for questions 51 and 52.

For Pear Limited, events and transactions during 2015 included the following. The tax rate for all items is 30%.

- 1) Depreciation for 2014 was found to be understated by \$30,000.
- 2) A strike by the employees of a supplier resulted in a loss of \$20,000.
- 3) The inventory at December 31, 2013 was overstated by \$40,000.
- 4) A flood destroyed a building that had a book value of \$400,000. Floods are very uncommon in that area.

51. The effect of these events and transactions on 2015 income from continuing operations net

of tax would be

- a) \$14,000.
- b) \$35,000.
- c) \$63,000.
- d) \$294,000.

52. The effect of these events and transactions on the balance of retained earnings at January 1, 2015 would be

- a) \$14,000.
- b) \$21,000.
- c) \$294,000.
- d) \$343,000.

53. The following information was extracted from the accounts of Cherry Corporation at December 31, 2014:

	<u>CR(DR)</u>
Total reported income since incorporation	\$1,500,000
Total cash dividends paid	(800,000)
Cumulative effect of changes in accounting principle	(120,000)
Total stock dividends distributed	(200,000)
Correction of an error, recorded January 1, 2014	66,000

What should be the balance of retained earnings at December 31, 2014?

- a) \$566,000
- b) \$500,000
- c) \$446,000
- d) \$380,000

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
40.	d	43.	C	46.	c	49.	a	52.	b		
41.	a	44.	D	47.	a	50.	d	53.	c		
42.	d	45.	B	48.	d	51.	d				

DERIVATIONS—Computational

No.	Answer	Derivation
40.	d	$\$1,346,000 + (\$1.20 \times 100,000) = \$1,466,000.$
41.	a	$\$69,000 + \$1,400 - \$16,000 + \$9,000 = \$63,400.$
42.	d	$\$64,000 - \$8,000 + \$7,400 = \$63,400$ (purchases). $\$11,000 + \$63,400 - \$9,100 = \$65,300.$
43.	c	$\$1,800,000 - \$1,500,000 = \$300,000.$
44.	d	$\$650,000 - \$500,000 - \$50,000 = \$100,000$ loss.
45.	b	Other income = $\$70,000 + \$3,000 = \$73,000.$
46.	c	$\$10,000 + \$4,800 = \$14,800.$
47.	a	$\$10,000 + \$16,000 + \$2,600 = \$28,600.$
48.	d	$\$5,000 - \$3,500 = \$1,500.$
49.	a	$\$5,000 - \$3,000 + \$5,500 - 3,500 = \$4,000.$
50.	d	\$0.
51.	d	$(\$20,000 + \$400,000) \times (1 - 0.3) = \$294,000.$
52.	b	$\$30,000 \times (1 - 0.3) = \$21,000.$
53.	c	$\$1,500,000 - \$800,000 - \$120,000 - \$200,000 + \$66,000 = \$446,000.$

MULTIPLE CHOICE—CPA Adapted

54. Sesame Corp.'s adjusted trial balance at December 31, 2014 included the following:

	<u>Debit</u>	<u>Credit</u>
Sales		\$170,000
Cost of goods sold	\$ 70,000	
Administrative expenses	28,000	
Loss on sale of equipment	11,000	
Sales commissions	9,000	
Interest revenue		6,000
Loss of warehouse due to flood	15,000	
Loss from operation of discontinued division	24,000	
Bad debt expense	5,000	
Totals	<u>\$162,000</u>	<u>\$176,000</u>

Sesame uses the perpetual system, and their income tax rate is 30%. On Sesame's multiple-step income statement for 2014, income from discontinued operations is

- a) \$10,500.
- b) \$16,800.
- c) \$24,000.
- d) \$24,500.

Use the following information for questions 55 and 56.

Oskar Corp. reports operating expenses in two categories: (1) selling and (2) general and administrative. The adjusted trial balance at December 31, 2014, included the following expense accounts:

Accounting and legal fees	\$120,000
Advertising	150,000
Freight-out	75,000
Interest	60,000
Loss on sale of long-term investments	30,000
Officers' salaries	180,000
Rent for office space	160,000
Sales salaries and commissions	110,000

One-half of the rented premises is occupied by the sales department.

55. How much of the expenses listed above should be included in Oskar's selling expenses for 2014?

- a) \$260,000
- b) \$335,000
- c) \$340,000
- d) \$415,000

56. How much of the expenses listed above should be included in Oskar's general and administrative expenses for 2014?

- a) \$380,000
- b) \$410,000
- c) \$440,000
- d) \$470,000

57. Groucho Corp. reports operating expenses in two categories: (1) selling and (2) general and administrative. The adjusted trial balance at December 31, 2014 included the following accounts:

Accounting and legal fees	\$140,000
Advertising	160,000
Freight-out	80,000
Interest	70,000
Loss on sale of long-term investment	30,000
Officers' salaries	225,000
Rent for office space	220,000
Sales salaries and commissions	170,000

One-half of the rented premises is occupied by the sales department. Groucho's total selling expenses for 2014 are

- a) \$520,000.
- b) \$440,000.
- c) \$410,000.
- d) \$350,000.

58. The following items were among those reported on Ernie Ltd.'s income statement for the year ended December 31, 2014:

Legal and audit fees	\$100,000
Rent for office space	235,000
Interest on inventory floor plan	248,000
Loss on abandoned equipment used in operations	41,000

The office space is used equally by Ernie's sales and accounting departments. What amount should be classified as general and administrative expenses in Ernie's multiple-step income statement for 2014?

- a) \$117,500
- b) \$217,500
- c) \$335,000
- d) \$465,500

Use the following information for questions 59 and 60.

Sesame Corp.'s adjusted trial balance at December 31, 2014 included the following:

	<u>Debit</u>	<u>Credit</u>
Sales		\$170,000
Cost of goods sold	\$ 70,000	

Administrative expenses	28,000	
Loss on sale of equipment	11,000	
Sales commissions	9,000	
Interest revenue		6,000
Loss of warehouse due to flood	15,000	
Loss from operation of discontinued division	24,000	
Bad debt expense	<u>5,000</u>	
Totals	<u>\$162,000</u>	<u>\$176,000</u>

Sesame uses the perpetual system, and their income tax rate is 30%. On Sesame's multiple-step income statement for 2014:

59. Income from continuing operations is

- a) \$17,500.
- b) \$52,800.
- c) \$24,500.
- d) \$26,600.

60. Net income is

- a) \$9,800.
- b) \$15,000.
- c) \$16,800.
- d) \$24,000.

61. King Inc. incurred the following infrequent losses during 2014:

- A \$90,000 write-down of equipment leased to others (net of tax)
- A \$40,000 adjustment of accruals on long-term contracts (net of tax)
- A \$60,000 write-off of obsolete inventory (net of tax)

Of those losses, what amount should be included in King's 2014 income from continuing operations?

- a) \$190,000
- b) \$150,000
- c) \$130,000
- d) \$100,000

62. The following information is available for Rice Inc. for 2014:

Disbursements for purchases	\$650,000
Increase in trade accounts payable	58,000
Decrease in merchandise inventory	28,000

Cost of goods sold for 2014 was

- a) \$650,000.
- b) \$708,000.
- c) \$700,000.
- d) \$736,000.

63. Which of the following should be reported as an adjustment to retained earnings?

	<u>Change in Estimated Lives of Depreciable Assets</u>	<u>Change from Unaccepted Principle to Accepted Principle</u>
a)	Yes	Yes
b)	No	Yes
c)	Yes	No
d)	No	No

*64. Compared to the accrual basis of accounting, the cash basis of accounting overstates income by the net increase during the accounting period of the

	<u>Accounts Receivable</u>	<u>Accrued Expenses Payable</u>
a)	No	No
b)	No	Yes
c)	Yes	No
d)	Yes	Yes

*65. For the year ended June 30, 2014, Harry Corp. reported revenue of \$900,000 in its accrual basis income statement. Additional information was as follows:

Accounts receivable June 30, 2013	\$200,000
Accounts receivable June 30, 2014	490,000
Uncollectible accounts written off during the fiscal year	20,000

Under the cash basis, Harry should report revenue of

- a) \$590,000.
- b) \$610,000.
- c) \$630,000.
- d) \$1,190,000.

*66. Gerald Bone, M.D., keeps his accounting records on the cash basis. During 2014, Dr. Bone collected \$150,000 from his patients. At December 31, 2013, Dr. Bone had accounts receivable of \$45,000. At December 31, 2014, Dr. Bone had accounts receivable of \$35,000 and unearned revenue of \$5,000. On the accrual basis, how much was Dr. Bone's patient service revenue for 2014?

- a) \$145,000
- b) \$140,000
- c) \$135,000
- d) \$105,000

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
54.	b	56.	A	58.	b	60.	a	62.	d	*64.	b	*66.	c
55.	d	57.	A	59.	d	61.	a	63.	b	*65.	a		

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
54.	b	$\$24,000 \times (1 - 0.3) = \$16,800$
55.	d	$\$150,000 + \$75,000 + \$110,000 + (\$160,000/2) = \$415,000.$
56.	a	$\$120,000 + \$180,000 + \$80,000 = \$380,000.$
57.	a	$\$160,000 + \$80,000 + (\$220,000/2) + \$170,000 = \$520,000.$
58.	b	$\$100,000 + (\$235,000/2) = \$217,500.$
59.	d	$\$170,000 + \$6,000 - \$70,000 - \$28,000 - \$11,000 - \$9,000 - \$15,000 - \$5,000 = \$38,000; 38,000 \times (1 - 0.3) = \$26,600.$
60.	a	$(\$176,000 - \$162,000) \times (1 - 0.3) = \$9,800.$
61.	a	$\$90,000 + \$40,000 + \$60,000 = \$190,000.$
62.	d	$\$650,000 + \$58,000 + \$28,000 = \$736,000.$
63.	b	Conceptual
*64.	b	Conceptual
*65.	a	$\$900,000 + \$200,000 - \$490,000 - \$20,000 = \$590,000.$
*66.	c	$\$150,000 - \$45,000 + \$35,000 - \$5,000 = \$135,000.$

EXERCISES

Ex. 4-67 Income statement - limitations

Briefly discuss the limitations of the income statement.

Solution 4-67

The results disclosed in the income statement are based on the use of estimates and assumptions and may also be affected by the accounting methods used. Furthermore, some important items may, for lack of measurability, not be disclosed at all. Financial recording bias can exist and degrade the quality of the financial statements.

Ex. 4-68 Characteristics of high quality earnings

Describe the characteristics of high quality earnings.

Solution 4-68

Information content: unbiased/objectively determined; reflect economic reality; sustainable—reflect primary earnings generated from ongoing core business activities, closely correlated with cash flows from operations, based on a sound business strategy/business model.
Presentation: transparent and understandable.

Ex. 4-69 Calculation of net income from the change in shareholders' equity

Presented below is selected information pertaining to Pullman Enterprises Ltd. for last year:

Assets, January 1.....	\$300,000
Assets, December 31.....	280,000
Liabilities, January 1.....	130,000
Common shares, December 31.....	70,000
Retained earnings, December 31.....	30,000
Common shares issued during the year	8,000
Dividends declared during the year	13,000

Instructions

Calculate the net income for last year.

Solution 4-69

	<u>January 1</u>	<u>December 31</u>
Assets	\$300,000	\$280,000
Liabilities	<u>130,000</u>	<u>180,000</u>
Shareholders' equity.....	<u>\$ 170,000</u>	<u>\$100,000</u> *
Calculation of net income:		
Shareholders' equity, Dec 31.....	\$ 100,000	
Less shareholders' equity, Jan 1	<u>(170,000)</u>	
Decrease.....	(70,000)	
Add back dividend declared	13,000	
Less common shares issued	<u>(8,000)</u>	
Net income (loss).....	<u>\$ (65,000)</u>	

*\$70,000 + \$30,000

Ex. 4-70 Calculation of net income from the change in shareholders' equity

Presented below are changes in selected account balances of Briefcase Inc. during last year, except for retained earnings.

	Increase (Decrease)		Increase (Decrease)
Cash	\$25,000	Accounts payable	\$35,000
Accounts receivable (net)	(13,000)	Bonds payable	(20,000)
Inventory	52,000	Common shares	88,000
Plant Assets (net)	37,000		

The only entries in Retained Earnings were for net income and a dividend declaration of \$10,000.

Instructions

Calculate the net income for last year.

Solution 4-70

Calculation of net income:

Change in assets (\$114,000 – \$13,000)	\$101,000	Increase
Change in liabilities (\$35,000 – \$20,000)	<u>15,000</u>	Increase
Change in shareholders' equity	86,000	Increase
Add back dividend declared	10,000	
Less common shares	<u>(88,000)</u>	
Net income	<u>\$ 8,000</u>	

Ex. 4-71 Comprehensive Income

Valise Corporation completed its first year of operations on December 31, 2014. Results and other information for the year included the following:

Sales	\$900,000
Cost of goods sold	430,000
Operating expenses	80,000
Unrealized holding gain from investments (accounted for under the fair value through comprehensive income model)	25,000

Instructions

Based on the information provided, prepare a combined statement of income and comprehensive income. Ignore income taxes and EPS.

Solution 4-71

VALISE CORPORATION
Statement of Income and Comprehensive Income
For the Year Ended December 31, 2014

Sales	\$900,000
-------------	-----------

Cost of goods sold	430,000
Gross profit	470,000
Operating expenses	80,000
Net income	390,000
Other comprehensive income	
Unrealized holding gain – OCI	25,000
Comprehensive income	<u>\$415,000</u>

Ex. 4-72 Definitions

Provide clear, concise answers for the following:

1. What are revenues?
2. What are expenses?
3. What are gains?
4. What are losses?
5. How should unusual gains and losses be disclosed in the income statement?
6. When does a discontinued segment qualify as discontinued operations?
7. How are earnings per share calculated?
8. State two examples of adjustments to prior year's retained earnings and indicate how they are reported in the financial statements.
9. The IASB is planning significant changes regarding the presentation of financial statements. How did these changes evolve and how will financial statements likely be impacted?

Solution 4-72

1. Revenues are increases in economic resources either by way of inflows or enhancements of assets of an entity or settlements of liabilities, resulting from an entity's ordinary revenue generating activities.
2. Expenses are decreases in economic resources, either by outflows or reductions of assets or incurrence of liabilities, resulting from an entity's ordinary revenue generating activities.
3. Gains are increases in equity (net assets) from peripheral or incidental transactions of an entity from all other transactions and other events and circumstances affecting the entity during a period, except those that result from revenues or investment by owners.
4. Losses are decreases in equity (net assets) from peripheral or incidental transactions, of an entity from all other transactions and other events and circumstances affecting the entity during a period, except those that result from revenues or investment by owners.
5. If they are material, they are disclosed separately but must be shown above "income (loss) before discontinued operations" and above the income tax provision. If they are immaterial, they are combined with other gains and losses of the period. Either way, they are included in the company's income from continuing operations.
6. In order for a segment to be a discontinued operation it must be a distinguishable component of an entity, the activities of which represent a line of business significant to the entity as a whole and/or that are directed to a significant particular class of customer.
7. The calculation of earnings per share is: net income minus preferred dividends divided by

the weighted average of common shares outstanding.

8. Adjustments to a prior year's retained earnings include correction of an error in the financial statements of a prior period and retroactively applied changes in accounting principles. The adjustment should be charged or credited to the opening balance of retained earnings.
9. The project was originally started in 2001 and consists of three phases. These phases are currently at various stages of completion. One of the key principles that underlie the proposed changes is a separation of an entity's financing activities from other activities. Therefore, the changes are expected to result in financial statements that are classified according to financing and business activities.

Ex. 4-73 Discontinued Operations

Coreaba Ltd., a private company based in Vancouver, decided to sell its Industrial Design Division. After two years of losses and heavy competition, a plan to dispose of the division was put in place. At the end of 2014, the plan was finalized and approved by the board of directors. The sale is anticipated to be completed by June 30, 2015.

Other information:

Coreaba's 2014 after-tax net income (excluding the results from the Industrial Design Division) was 230,000.

During the year, the division reported an after-tax loss of \$140,000 (revenues: \$20,000, expenses: \$160,000).

Management estimates that after-tax legal and audit fees of \$40,000 as well as severance payments of \$55,000 will be required to finalize the disposal plan. A portion of these costs is expected to be offset by the after-tax proceeds of \$50,000 from the sale of the division's assets.

Instructions

Assuming the Industrial Design Division qualifies for treatment as a discontinued operation, prepare a partial income statement for Coreaba for 2014. The statement should begin with income from continuing operations and include an appropriate footnote pertaining to the disposal of the Industrial Design Division.

Solution 4-73

Partial income statement:

COREABA LTD		
Partial Income Statement		
For the Year Ended December 31, 2014		
Net income from continuing operations		\$230,000
Discontinued operations*		
Loss from operation of discontinued		
Industrial Design Division (net of tax)	\$140,000	
Loss from disposal of		
Industrial Design Division (net of tax)	<u>45,000</u>	<u>185,000</u>
Net income.....		<u>\$45,000</u>

* Footnote:

On December 31, due to continued losses, the board of directors unanimously approved management's plan to dispose of the Industrial Design Division. The sale is anticipated to be completed by June 30, 2015.

The after-tax operating results for the current year are as follows:

Revenues.....	\$ 20,000
Expenses	<u>160,000</u>
Net loss.....	\$(140,000)

The estimated after-tax loss relating to the disposal of the division is comprised of the following items:

Proceeds from sale of assets	\$50,000
Less legal and audit fees.....	40,000
Less severance payments to staff	<u>55,000</u>
	<u>\$45,000</u>

Ex. 4-74 Income statement classifications

Indicate the major section or subsection of a multiple-step income statement in which each of the following items would normally appear:

- a) Advertising
- b) Depreciation of head office building
- c) Dividend revenue
- d) Freight-in
- e) Loss on disposal of a segment of the business, net of tax
- f) Income taxes on income
- g) Major fire loss
- h) Purchase discounts
- i) Sales discounts
- j) Officers' salaries
- k) Freight-out
- l) Sinking fund income

Solution 4-74

- a) Selling expense
- b) General and administrative expense
- c) Other revenue
- d) Cost of goods sold, as an addition to purchases
- e) Disclosed separately, but must be shown above "income (loss) before discontinued operations" and before the income tax provision
- f) Income taxes; subtracted from income before income taxes in arriving at net income
- g) Disclosed separately but must be shown above "income (loss) before discontinued

operations" and above the income tax provision, i.e., part of income from continuing operations.

- h) Cost of goods sold, as a subtraction from purchases
- i) Subtracted from gross revenues
- j) General and administrative expense
- k) Selling expense
- l) Other revenue

Ex. 4-75 Classification of income statement and retained earnings statement items

For each of the items listed below, indicate how it should be treated in the financial statements. Use the following letter code for your selections:

- a) Ordinary item on the income statement
- b) Discontinued operations
- c) Unusual item on the income statement
- d) Adjustment to prior year's retained earnings

- _____ 1. The bad debt rate was increased from 1% to 2% of sales, thus increasing bad debt expense.
- _____ 2. Obsolete inventory was written off. This was a material amount, and the first loss of this type in the company's history.
- _____ 3. An uninsured earthquake loss was incurred. This was the first loss of this type in the company's history.
- _____ 4. Recognition of revenue earned last year, inadvertently omitted from last year's income statement.
- _____ 5. The company sold one of its warehouses at a loss.
- _____ 6. Settlement of a court case involving the federal government, related to income taxes of three years ago. The company is continually involved in various adjustments with the federal government related to its taxes.
- _____ 7. A loss incurred from expropriation – the company owned resources in South America which were taken over by a dictator unsympathetic to Canadian business interests.
- _____ 8. The company failed to record depreciation in the previous year.
- _____ 9. Discontinuance of all production in Canada. The manufacturing operations were relocated to Mexico.
- _____ 10. Loss on sale of investments. The company last sold some of its investments two

years ago.

_____ 11. Loss on the disposal of a segment of the business.

Solution 4-75

1. a
2. a
3. c
4. d
5. a
6. a
7. c
8. d
9. a
10. a
11. b

Ex. 4-76 Nature versus function of expense presentation

IFRS requires a business to present an analysis of expenses based on either “nature” or “function.” Explain what this means.

Solution 4-76

Nature refers to the type of expense, such as purchases, depreciation, employee benefits, or distribution costs.

Function refers to the business function or activity, such as production or cost of sales, selling and administrative (head office). Thus expenses would be grouped by these activities.

Presenting expenses by nature is usually quite straightforward as no allocation of costs is required between functions. On the other hand, presenting expenses by function requires more judgment, as many costs would be allocated between functions, such as payroll, depreciation, and occupancy costs. However, it does give more insight into the various phases of the business.

Ex. 4-77 Terminology

In the space provided, write the word or phrase that is defined or indicated.

- | | |
|---|----------|
| 1. Net income minus preferred dividends divided by the weighted average of common shares outstanding. | 1. _____ |
|---|----------|

- | | |
|---|----------|
| 2. A correction of an error is reported as a(n) | 2. _____ |
| 3. An income statement that includes only two groupings (revenues and expenses) is prepared using the | 3. _____ |
| 4. The income statement category for a disposal of a segment of a business. | 4. _____ |
| 5. Relating tax expense to specific items on the income statement. | 5. _____ |

Solution 4-77

1. Earnings per share
2. Adjustment to beginning retained earnings
3. Single-step method
4. Discontinued operations
5. Intraproduct tax allocation

Ex. 4-78 Statement of changes in equity

Tote Ltd. reported the following balances at January 1, 2014:

Common shares.....	\$420,000
Retained earnings.....	30,000
Accumulated other comprehensive income.....	58,000

During the year Tote earned net income of \$200,000 and generated other comprehensive income of \$70,000.

Instructions

Prepare a statement of shareholders' equity for the year ended December 31, 2014.

Solution 4-78

TOTE LTD.
Statement of Shareholders' Equity
For the Year Ended December 31, 2014

	Total	Common Shares	Comprehensive Income	Retained Earnings	Accumulated Other Comprehensive Income
Beginning balance	\$508,000	\$420,000		\$ 30,000	\$58,000
Net income	200,000		\$200,000	200,000	
Other comprehensive income	70,000		70,000		70,000

Comprehensive income			<u>\$270,000</u>		
Ending balance	<u>\$778,000</u>	<u>\$420,000</u>		<u>\$230,000</u>	<u>\$128,000</u>

Ex. 4-79 Analyzing financial health and quality of earnings

List some items that you should be looking for when analyzing the health and quality of earnings of a company.

Solution 4-79

1. Accounting policies
2. Notes to financial statements
3. Measurement uncertainty
4. Financial statements as a whole
5. Income statement: percentage of net income from continuing operations
6. Statement of financial position (balance sheet): how is the company financed? revenue generating assets?
7. Cash flow statement: compare cash from operations to net income
8. Environmental factors (industry, economy, competition)

***Ex. 4-80** Cash basis

Money Inc. reported the following information for their 2014 fiscal year:

Revenue on the income statement.....	\$125,800
Accounts receivable, Jan 1	4,500
Accounts receivable, Dec 31	5,540
Unearned revenue, Jan 1.....	1,050
Unearned revenue, Dec 31	1,670

Instructions

Calculate the revenue for the year on a cash basis.

Solution 4-80

$$\$125,800 + \$4,500 - \$5,540 - \$1,050 + \$1,670 = \$125,380.$$

PROBLEMS

Pr. 4-81—Discontinued operations

Doberman Corporation operates several stores in British Columbia (Vancouver, Victoria, Kamloops, Penticton and Prince George). The restructuring of its organization on November 20, 2014 has led to the decision to sell its Prince George store. In preparing financial statements at December 31, 2014, the following information was made available:

1. The Prince George operation incurred a loss of \$283,500 for the 2014 calendar year, including \$225,000 for the period January 1 to November 20, 2014.
2. Estimated costs to sell are \$300,000.
3. At December 31, 2014, the fair value of the Prince George assets is estimated at \$7 million and the carrying (book) value is \$7.3 million.
4. The combined provincial and federal income tax rate is 30%.
5. It is estimated that the operation will lose an additional \$250,000 before it is sold.

Instructions

- a) The Prince George operation qualifies for reporting as a discontinued operation. What amount should be reported in the discontinued operations section of Doberman's 2014 income statement?
- b) In early 2015, the Prince George operation is sold for \$8.5 million, with actual costs to sell of \$400,000. Additional income tax expense related to the sale is \$500,000. The operation lost an additional \$150,000 before it was sold. What amount should be reported in the discontinued operations section of Doberman's 2015 income statement?

Solution 4-81

a)	
Loss from operations for 2014, before tax	\$(283,500)
Reduction in carrying value of assets to estimated to be fair value less costs to sell (\$7,300,000 – [7,000,000 – 300,000])	(600,000)
Estimated pre-tax loss.....	(883,500)
Recovery of 30% tax of above amount.....	<u>(265,050)</u>
Loss on discontinued operations	<u><u>\$(618,450)</u></u>
b)	
Sale price	\$8,500,000
Minus assets sold at fair value	(6,700,000)
Additional costs to sell (\$400,000-\$300,000).....	(400,000)
Less additional loss from operations	(150,000)
Income tax expenses not previously recorded.....	<u>(500,000)</u>
Estimated pre tax amount	750,000
Applicable income tax at 30%	<u>(225,000)</u>
Gain on discontinued operations	<u><u>\$ 525,000</u></u>

Pr. 4-82 Multiple-step income statement

Presented below is information which relates to Labrador Limited for 2014:

Collections of credit sales..... \$1,100,000

Retained earnings, January 1, 2014.....	800,000
Sales.....	1,900,000
Selling and administrative expenses	290,000
Casualty loss (pre-tax)	350,000
Cash dividends declared on common stock	34,000
Cost of goods sold	1,100,000
Loss resulting from calculation error on depreciation charge in 2012 (pre-tax)	460,000
Other revenues	180,000
Other expenses.....	120,000
Loss from early extinguishment of debt (pre-tax).....	340,000
Gain from transactions in foreign currencies (pre-tax)	220,000
Proceeds from sale of Strathroy common shares	60,000

Additional information:

1. Early in 2014, Labrador changed depreciation methods for its plant assets from the double declining-balance to the straight-line method. The affected assets were purchased at the beginning of 2012 for \$200,000, had no residual value, and had useful lives of 10 years. Depreciation expense of \$20,000 is included in the "Selling and Administrative Expenses" of \$290,000.
2. On September 1, 2014, Labrador sold one of its segments (product line) to Best Industries for a gain (pre-tax) of \$550,000. During the period January 1 to August 31, the discontinued segment incurred an operating loss (pre-tax) of \$480,000. This loss is not included in any of the numbers shown above.
3. Included in "Selling and Administrative Expenses" is "Bad Debts Expense" of \$19,000. Labrador bases its bad debts expense upon a percentage of sales. In 2012 and 2013, the percentage was 0.5 %. In 2014, the percentage was changed to 1%.

Instructions

In good form, prepare a multiple-step income statement for 2014. Assume a 20% income tax rate and that 20,000 common shares were outstanding during the year.

Solution 4-82

LABRADOR LIMITED
Income Statement
For the Year Ended December 31, 2014

Sales.....		\$1,900,000
Cost of goods sold		<u>1,100,000</u>
Gross profit		800,000
Selling and administrative expenses		<u>290,000</u>
Operating income.....		510,000
Other revenues and gains		
Other revenues	180,000	
Gain from transactions in foreign currency	<u>220,000</u>	<u>400,000</u>
		910,000
Other expenses and losses		
Other expenses.....	\$120,000	
Early extinguishment of debt	340,000	
Casualty loss.....	<u>350,000</u>	<u>810,000</u>
Income from continuing operations before tax.....		100,000

Income tax		<u>20,000</u>
Income from continuing operations		80,000
Discontinued operations:		
Loss from operations (net of taxes of \$96,000)	(384,000)	
Gain from sale of assets (net of taxes of \$110,000)	<u>440,000</u>	<u>56,000</u>
Net income.....		<u>\$ 136,000</u>
Earnings per share:		
Income from continuing operations.....	\$4.00	
Discontinued operations.....	<u>2.80</u>	
Net income.....	<u>\$6.80</u>	

Pr. 4-83 Income statement, including corrections

During calendar 2014, Shepherd Corporation reported income from continuing operations of \$800,000 (after taxes). In addition, the following information, which has not yet been considered or included in the above figure, has been revealed:

1. In 2014, Shepherd adopted the average cost method of inventory valuation. Prior to 2014, the company had used the FIFO method. The change decreases income for 2014 by \$50,000 (pre-tax) and the cumulative effect of the change on prior years' income was a \$200,000 (pre-tax) decrease.
2. A machine was sold for \$140,000 cash during the year at a time when its book value was \$100,000. (Depreciation has been correctly recorded.)
3. Shepherd decided to discontinue its stereo division in 2014. During the current year, the loss on the disposal of this segment was \$150,000 (before applicable taxes).

Instructions

Present in good form the income statement of Shepherd Corporation for 2014 starting with "income from continuing operations." Assume that Shepherd's tax rate is 20% and that 100,000 common shares were outstanding during the year.

Solution 4-83

SHEPHERD CORPORATION
Partial Income Statement
For the Year Ended December 31, 2014

Income from continuing operations	\$792,000*
Discontinued operations	
Loss on disposal of a segment of a business, \$150,000, less applicable income taxes, \$30,000	<u>(120,000)</u>
Net income.....	<u>\$672,000</u>
Earnings per share	
Income from continuing operations.....	\$7.92
Discontinued operations, net of tax	<u>(1.20)</u>
Net income.....	<u>\$6.72</u>

*Income from cont. operations (unadjusted)	\$800,000
Gain on sale of machinery (after tax)	32,000

Current effect of change in accounting principle (after tax).....	(40,000)
Adjusted income from continuing operations.....	<u>\$792,000</u>

Pr. 4-84 Multiple-step income statement

Presented below is information related to Mastiff Inc.

Retained earnings, December 31, 2013	\$ 650,000
Sales.....	1,400,000
Selling and administrative expenses	240,000
Hurricane loss (pre-tax) on plant	250,000
Cash dividends declared on common shares	33,600
Cost of goods sold	820,000
Gain resulting from calculation error on depreciation charge in 2013 (pre-tax)	520,000
Other revenue	60,000
Other expenses.....	50,000

Instructions

In good form, prepare a multiple-step income statement for the year 2014. Assume a 20% tax rate and that 50,000 common shares were outstanding during the year. Mastiff is a private corporation following ASPE.

Solution 4-84

MASTIFF INC
Income Statement
For the Year Ended December 31, 2014

Sales.....	\$1,400,000
Cost of goods sold	<u>820,000</u>
Gross profit	580,000
Selling and administrative expenses	<u>240,000</u>
Income from operations	340,000
Other revenue	60,000
Other expenses.....	(50,000)
Loss from hurricane	<u>(250,000)</u>
Income before taxes	100,000
Income taxes	<u>(20,000)</u>
Net income.....	<u>\$ 80,000</u>

Pr. 4-85 Multiple-step income statement

Shown below is an income statement for 2014 that was prepared by a junior accountant at Poodle Corporation.

POODLE CORPORATION
Income Statement
December 31, 2014

Sales revenue	\$975,000
---------------------	-----------

Investment revenue.....	19,500
Cost of merchandise sold.....	(408,500)
Selling expenses.....	(155,000)
Administrative expense.....	(215,000)
Interest expense.....	<u>(13,000)</u>
Income before special items.....	203,000
Special items	
Loss on disposal of a segment of the business.....	(30,000)
Major fire loss.....	(80,000)
Net income tax liability.....	<u>(27,900)</u>
Net income.....	<u>\$ 65,100</u>

Instructions

In good form, prepare a multiple-step income statement for 2014 for Poodle Corporation that is presented in accordance with generally accepted accounting principles (including format and terminology). Poodle Corporation has 50,000 common shares outstanding and has a 20% income tax rate on all tax related items. As a private corporation, Poodle does not disclose earnings per share information.

Solution 4-85

POODLE CORPORATION
Income Statement
For the Year Ended December 31, 2014

Sales.....		\$975,000
Cost of goods sold		<u>408,500</u>
Gross profit		566,500
Selling expenses.....	\$155,000	
Administrative expenses	<u>215,000</u>	<u>370,000</u>
Income from operations		196,500
Other revenue – Interest revenue.....		<u>19,500</u>
		216,000
Other expenses – Interest expense.....		13,000
Fire loss		<u>80,000</u>
Income from continuing operations before taxes		123,000
Income taxes		<u>24,600</u>
Income from continuing operations		98,400
Discontinued operations:		
Loss from discontinued operations, net of applicable income tax of \$6,000		<u>24,000</u>
Net income.....		<u>\$ 74,400</u>

Pr. 4-86 Income statement adjustments

You have been hired by the CFO of Dalmatian Corporation, a public company. As the new senior accountant, you have been asked to help with the preparation of the 2014 income statement.

For 2014, Dalmatian reported pre-tax income from continuing operations of \$3,150,000.

However, you have been advised that the following transactions have not yet been considered.

1. A review of the company's depreciation policies for its computer equipment revealed that

- depreciation expense relating to 2013 was overstated by \$19,000.
- During the year, the company wrote off \$62,500 in accounts receivable for which no allowance for doubtful accounts had been set up.
 - In 2014, the company sold old equipment for \$160,000. The equipment had a net book value of \$120,000.
 - During the year, Dalmatian disposed of one its subsidiaries. The CFO tells you that the transaction meets the criteria for discontinued operations. The after-tax losses on the subsidiary's operations and from disposal were \$120,000 and \$290,000 respectively.
 - The company made a payment of \$400,000 to settle a lawsuit. The lawsuit related to a 2012 event which the company lawyers had been working on since that time. Based on the lawyers' advice, no contingent liability had been set up.

Instructions

In good form, prepare a partial 2014 income statement for Dalmatian, taking into account the effects (if any) of the above items. The statement should start with income from continuing operations before income taxes. Unless otherwise indicated, you may assume an income tax rate of 40% for all items. Earnings per share calculations are not required.

Solution 4-86

DALMATIAN CORPORATION
Partial Income Statement
For the Year Ended December 31, 2014

Income from continuing operations*	\$2,727,500
Income taxes	<u>(1,091,000)</u>
Income before discontinued operations	\$1,636,500
Discontinued operations	
Loss from operations (net of tax)	(\$120,000)
Loss from disposal (net of tax)	<u>(290,000)</u> <u>(410,000)</u>
Net Income	<u><u>\$1,226,500</u></u>

*Calculations

Income from continuing operations (before adjustments)	\$3,150,000
1. Would be credited directly to retained earnings	0
2. Expense	(62,500)
3. Gain \$160,000 – \$120,000	40,000
4. To be shown in discontinued operations section	0
5. Loss	<u>(400,000)</u>
Adjusted income from continuing operations	\$2,727,500

Pr. 4-87 Income statement and retained earnings statement

Spaniel Corporation's capital structure consists of 20,000 common shares. At December 31, 2014 an analysis of the accounts and discussions with company officials revealed the following information:

Sales	\$1,200,000
Purchase discounts	18,000
Purchases	720,000
Earthquake loss (net of \$18,000 tax)	42,000
Selling expenses	128,000

Cash	60,000
Accounts receivable	90,000
Common shares.....	200,000
Accumulated depreciation	180,000
Dividend revenue	18,000
Inventory, January 1, 2014.....	152,000
Inventory, December 31, 2014	125,000
Unearned service revenue	4,400
Accrued interest payable.....	1,000
Land.....	370,000
Patents.....	100,000
Retained earnings, January 1, 2014.....	270,000
Interest expense.....	17,000
Cumulative effect of change from straight-line to accelerated depreciation (net of \$15,000 tax).....	35,000
General and administrative expenses	160,000
Dividends declared.....	29,000
Allowance for doubtful accounts.....	5,000
Notes payable (maturity July 1, 2017)	200,000
Machinery and equipment	450,000
Materials and supplies.....	40,000
Accounts payable.....	60,000

Unless indicated otherwise, you may assume a 30% income tax rate.

Instructions

- Prepare, in good form, a multiple-step income statement.
- Prepare, in good form, a retained earnings statement.

Solution 4-87

SPANIEL CORPORATION
Income Statement
For the Year Ended December 31, 2014

Sales.....		\$1,200,000
Cost of goods sold		
Merchandise inventory, Jan. 1.....	\$152,000	
Purchases	\$720,000	
Less purchase discounts	<u>18,000</u>	
Net purchases		<u>702,000</u>
Merchandise available for sale		854,000
Less merchandise inventory, Dec. 31.....		<u>125,000</u>
Cost of goods sold.....		<u>729,000</u>
Gross profit on sales		471,000
Operating expenses		
Selling expenses.....	128,000	
General and administrative expenses	<u>160,000</u>	
Total operating expenses		<u>288,000</u>
Operating income.....		183,000
Other revenue and gains		

Dividend revenue		18,000
Other expenses and losses		
Interest expense.....	(17,000)	
Loss from earthquake	<u>(60,000)</u>	<u>(77,000)</u>
Income before taxes		124,000
Income taxes.....		<u>37,200</u>
Net income.....		<u>\$ 86,800</u>
Earnings per share.....		<u>\$4.34</u>

SPANIEL CORPORATION
Retained Earnings Statement
For the Year Ended December 31, 2014

Retained earnings, January 1, 2014.....		\$270,000
Cumulative effect of change in depreciation methods, net of applicable taxes of \$15,000		<u>(35,000)</u>
Adjusted beginning retained earnings		235,000
Add: Net income	\$86,800	
Deduct: Dividends declared	<u>29,000</u>	<u>57,800</u>
Retained earnings, December 31, 2014.....		<u>\$292,800</u>

***Pr. 4-88** Cash to accrual accounting

Bloodhound Corporation maintains its records on the cash basis. You have been engaged to convert its cash basis income statement to the accrual basis. The cash basis income statement, along with additional information, follows:

BLOODHOUND CORPORATION
Income Statement (Cash Basis)
For the Year Ended December 31, 2014

Cash receipts from customers.....		\$380,000
Cash payments:		
Wages.....	\$150,000	
Taxes	65,000	
Insurance	40,000	
Interest.....	<u>25,000</u>	<u>280,000</u>
Net income.....		<u>\$100,000</u>

Additional information:

	<u>Balances at Dec 31</u>	
	<u>2014</u>	<u>2013</u>
Accounts receivable	\$50,000	\$30,000
Wages payable	15,000	25,000
Taxes payable.....	14,000	19,000
Prepaid insurance	8,000	4,000
Accumulated depreciation	95,000	80,000
Interest payable.....	3,000	9,000

No assets were sold during 2014.

Solution 4-88

BLOODHOUND CORPORATION
Income Statement (Accrual Basis)
For the Year Ended December 31, 2014

Revenue (\$380,000 + \$50,000 – \$30,000)		\$400,000
Expenses		
Wages (\$150,000 + \$15,000 – \$25,000)	\$140,000	
Taxes (\$65,000 + \$14,000 – \$19,000)	60,000	
Insurance (\$40,000 + \$4,000 – \$8,000)	36,000	
Depreciation (\$95,000 – \$80,000)	15,000	
Interest (\$25,000 + \$3,000 – \$9,000)	<u>19,000</u>	
Total expenses		<u>270,000</u>
Net Income		<u><u>\$130,000</u></u>

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CHAPTER 5

FINANCIAL POSITION AND CASH FLOWS

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	12.	4	M	23.	7	E	34.	9	M
2.	2	E	13.	4	E	24.	7	E	35.	9	M
3.	2	M	14.	4	M	25.	7	E	36.	10	M
4.	2	E	15.	4	M	26.	7	E	37.	10	M
5.	2	M	16.	4	E	27.	7	M	38.	10	M
6.	3	E	17.	4	E	28.	8	M	39.	10	H
7.	3	M	18.	4	E	29.	8	M	40.	11	H
8.	3	M	19.	4	M	30.	8	M	*41.	12	M
9.	4	M	20.	4	E	31.	8	E	*42.	12	M
10.	4	M	21.	4	E	32.	9	M	*43.	12	M
11.	4	M	22.	6	E	33.	9	M			
Multiple Choice–CPA Adapted											
44.	4	E	47.	4	M	50.	7	M	53.	7	E
45.	4	M	48.	4	M	51.	7	E	*54.	12	M
46.	4	M	49.	5	M	52.	7	E			
Exercises											
55.	2-5,7,9	M	58.	4	M	61.	4	M	64.	9	M
56.	2-4	E	59.	4	M	62.	4	M	*65.	12	E
57.	4	E	60.	4	M	63.	7	M	*66.	12	E
Problems											
67.	3	M	69.	4	M	71.	8	H			
68.	4	H	70.	8	H	*72.	12	H			

Note: E = Easy M = Medium H = Hard

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC										
Learning Objective 2											
2.	MC	3.	MC	4.	MC	5.	MC	55.	Ex	56.	Ex
Learning Objective 3											
6.	MC	7.	MC	8.	MC	55.	Ex	56.	Ex	67.	Pr
Learning Objective 4											
9.	MC	14.	MC	19.	MC	46.	MC	57.	Ex	62.	Ex
10.	MC	15.	MC	20.	MC	47.	MC	58.	Ex	68.	Pr
11.	MC	16.	MC	21.	MC	48.	MC	59.	Ex	69.	Pr
12.	MC	17.	MC	44.	MC	55.	Ex	60.	Ex		
13.	MC	18.	MC	45.	MC	56.	Ex	61.	Ex		
Learning Objective 5											
49.	MC	55.	Ex								
Learning Objective 6											
22.	MC										
Learning Objective 7											
23.	MC	25.	MC	27.	MC	51.	MC	53.	MC	63.	Ex
24.	MC	26.	MC	50.	MC	52.	MC	55.	Ex		
Learning Objective 8											
28.	MC	29.	MC	30.	MC	31.	MC	70.	Pr	71.	Pr
Learning Objective 9											
32.	MC	33.	MC	34.	MC	35.	MC	55.	Ex	64.	Ex
Learning Objective 10											
36.	MC	37.	MC	38.	MC	39.	MC				
Learning Objective 11											
40.	MC										
Learning Objective 12											
*41.	MC	*43.	MC	*65.	Ex	*72.	Pr				
*42.	MC	*54.	MC	*66.	Ex						

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

CHAPTER STUDY OBJECTIVES

1. Understand the statement of financial position and statement of cash flows from a business perspective. It is important to understand how users of financial statements use the statement of financial position and the cash flow statement. For example, potential investors in a company may use the statement of financial position to analyze a company's liquidity and solvency in order to assess risk of investing. In addition, the statement of financial position provides details about the company's financial structure. Users may use a company's statement of cash flows to assess its earnings quality and obtain information about its operating, investing, and financing activities.

2. Identify the uses and limitations of a statement of financial position. The statement of financial position provides information about the nature and amounts of investments in enterprise resources, obligations to creditors, and the owners' equity in net resources. The statement of financial position contributes to financial reporting by providing a basis for (1) calculating rates of return, (2) evaluating the enterprise's capital structure, and (3) assessing the enterprise's liquidity, solvency, and financial flexibility. The limitations of a statement of financial position are as follows: (1) The statement of financial position often does not reflect current value, because accountants have adopted a historical cost basis in valuing and reporting many assets and liabilities. (2) Judgements and estimates must be used in preparing a statement of financial position. The collectibility of receivables, the saleability of inventory, and the useful life of long-term tangible and intangible assets are difficult to determine. (3) The statement of financial position leaves out many items that are of financial value to the business but cannot be recorded objectively, such as its human resources, customer base, and reputation.

3. Identify the major classifications of a statement of financial position. The statement of financial position's general elements are assets, liabilities, and equity. The major classifications within the statement of financial position on the asset side are current assets; investments; property, plant, and equipment; intangible assets; and other assets. The major classifications of liabilities are current and long-term liabilities. In a corporation, owners' equity is generally classified as shares, contributed surplus, retained earnings, and accumulated other comprehensive income.

4. Prepare a classified statement of financial position. The most common format lists liabilities and shareholders' equity directly below assets on the same page.

5. Identify statement of financial position information that requires supplemental disclosure. Five types of information are normally supplemental to account titles and amounts presented in the statement of financial position. (1) Contingencies: Material events that have an uncertain outcome. (2) Accounting policies: Explanations of the valuation methods that are used or the basic assumptions that are made for inventory valuation, amortization methods, investments in subsidiaries, and so on. (3) Contractual situations: Explanations of certain restrictions or covenants that are attached to specific assets or, more likely, to liabilities. (4) Additional information: Clarification by giving more detail about the composition of statement of

financial position items. (5) Subsequent events: Events that happen after the date of the statement of financial position.

6. Identify major disclosure techniques for the statement of financial position. There are four methods of disclosing pertinent information in the statement of financial position: (1) Parenthetical explanations: Additional information or description is often provided by giving explanations in parentheses that follow the item. (2) Notes: Notes are used if additional explanations or descriptions cannot be shown conveniently as parenthetical explanations. (3) Cross-reference and contra items: A direct relationship between an asset and a liability is cross-referenced on the statement of financial position. (4) Supporting schedules: Often a separate schedule is needed to present more detailed information about certain assets or liabilities because the statement of financial position provides just a single summary item.

7. Indicate the purpose and identify the content of the statement of cash flows. The main purpose of a statement of cash flows is to provide relevant information about an enterprise's cash receipts and cash payments during a period. Reporting the sources, uses, and net increase or decrease in cash lets investors, creditors, and others know what is happening to a company's most liquid resource. Cash receipts and cash payments during a period are classified in the statement of cash flows into three different activities: (1) Operating activities: Involve the cash effects of transactions that enter into the determination of net income. (2) Investing activities: Include making and collecting loans and acquiring and disposing of investments (both debt and equity) and property, plant, and equipment. (3) Financing activities: Involve liability and owners' equity items and include (a) obtaining capital from owners and providing them with a return on their investment and (b) borrowing money from creditors and repaying the amounts borrowed.

8. Prepare a statement of cash flows using the indirect method. This involves determining cash flows from operations by starting with net income and adjusting it for noncash activities, such as changes in accounts receivable (and other current asset/liability) balances, depreciation, and gains/losses. It is important to look carefully at prior years' operating activities that might affect cash this year, such as cash collected this year from last year's credit sales and cash spent this year for last year's accrued expenses. The cash flows from investing and financing activities can then be determined by analyzing changes in statement of financial position accounts and the cash account.

9. Understand the usefulness of the statement of cash flows. Creditors examine the statement of cash flows carefully because they are concerned about being paid. The amount of net cash flow provided by operating activities in relation to the company's liabilities is helpful in making this assessment. In addition, measures such as a free cash flow analysis provide creditors and shareholders with a better picture of the company's financial flexibility.

10. Identify differences in accounting between ASPE and IFRS. Illustration 5-24 outlines the major differences in how both sets of standards account for and present items on the statement of financial position and statement of cash flows. Both sets of standards largely require that the same statement of financial position elements be presented. In addition, IFRS requires

presentation of biological assets, investment properties, and provisions. The statement of cash flow presentation requirements are similar.

11. *Identify the significant changes planned by the IASB regarding financial statement presentation.* The IASB has been planning to change the way financial statements are presented by issuing a new standard. However, the project was paused in 2011 “until the IASB concludes its ongoing deliberations about its future work plan.” The major statements, including statement of financial position, income statement, and statement of cash flows, are expected to be classified according to business and financing activities.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
b	1.	Earnings quality
c	2.	Uses of the statement of financial position
d	3.	Definition of solvency
a	4.	Definition of financial flexibility
d	5.	Limitations of the statement of financial position
d	6.	Monetary assets
c	7.	Monetary assets
b	8.	Financial instruments
c	9.	Basis of classifying assets
d	10.	Definition of operating cycle
a	11.	Identification of current asset
d	12.	Identification of non-current asset
c	13.	Classification of securities
b	14.	Intangible assets
c	15.	Identification of current liabilities
d	16.	Definition of working capital
b	17.	Identification of working capital items
b	18.	Definition of liabilities
a	19.	Identification of long-term liabilities
d	20.	Classification of equity section accounts
c	21.	Classification of shareholders' equity
d	22.	Methods of disclosure
c	23.	Definition of statement of cash flows
a	24.	Disclosure of revenue-producing activities on the statement of cash flows
b	25.	Identify an investing activity
c	26.	Identify a financing activity
a	27.	Identify an investing activity
a	28.	Preparation of statement of cash flows under indirect method
c	29.	Cash flows from operating activities
d	30.	Preparation of statement of cash flows under indirect method
c	31.	Preparation of statement of cash flows under direct method
b	32.	Cash debt coverage ratio
c	33.	Current cash debt coverage ratio
d	34.	Financial flexibility measure
c	35.	Calculation of free cash flow
a	36.	Disclosures under ASPE
c	37.	Disclosures under IFRS
c	38.	Reclassification of current debt
d	39.	Special disclosure under IFRS

Answer	No.	Description
c	40.	Upcoming IABS and FASB changes to financial statement presentation
b	*41.	Definition of activity ratios
c	*42.	Definition of solvency ratios
d	*43.	Definition of asset turnover

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
c	44.	Calculate total current assets
b	45.	Calculate total current assets
d	46.	Calculate total current liabilities
b	47.	Calculate retained earnings balance
b	48.	Calculate current and long-term liabilities
c	49.	Summary of significant accounting policies
c	50.	Classification of investing activity
a	51.	Classification of operating activity
d	52.	Classification of financing activity
b	53.	Classification of investing activity
c	*54.	Financial or capital market risks

EXERCISES

Item	Description
5-55	Definitions
5-56	Terminology
5-57	Current liabilities
5-58	Account classification
5-59	Valuation of statement of financial position items
5-60	Statement of financial position classifications
5-61	Statement of financial position classifications
5-62	Statement of financial position classifications
5-63	Statement of cash flows
5-64	Statement of cash flows ratios
*5-65	Calculation of ratios
*5-66	Calculation of ratios

PROBLEMS

Item	Description
5-67	Statement of financial position format
5-68	Statement of financial position presentation
5-69	Calculation of ending retained earnings
5-70	Statement of cash flows – direct method
5-71	Statement of cash flows – indirect method
*5-72	Calculation of ratios

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. When assessing earnings quality, financial analysts are concerned that management may attempt to manipulate information to make earnings appear better or worse than they really are. Which of the following would NOT suggest poor earnings quality?
 - a) reduction of the allowance for doubtful accounts
 - b) consistent application of GAAP
 - c) significantly higher net income than cash flows from operations
 - d. reliance on share issuances to offset repeated negative cash flow from operations

2. The statement of financial position is useful for analyzing all of the following EXCEPT
 - a) liquidity.
 - b) solvency.
 - c) profitability.
 - d. financial flexibility.

3. An enterprise's ability to pay its debts and related interest is called
 - a) liquidity.
 - b) financial flexibility.
 - c) the amount of time expected to pass until an asset is realized.
 - d. solvency.

4. An enterprise's ability to take effective actions to alter the amounts and timing of cash flows so it can respond to unexpected needs and opportunities is called
 - a) financial flexibility.
 - b) liquidity.
 - c) the quick ratio.
 - d. solvency.

5. Which of the following is NOT a limitation of the statement of financial position?
 - a) Many assets are reported at historical cost.
 - b) Judgements and estimates are used.
 - c) Only "hard" numbers are reported.
 - d. Disclosure of all pertinent information in the notes.

6. Monetary assets represent
 - a) only cash.
 - b) contractual rights to receive cash.
 - c) equity investments in other companies.
 - d. cash or claims to future cash flows that are fixed and determinable in amounts and timing.

7. Monetary assets include

- a) Cash, accounts receivable and inventory.
 - b) Accounts and notes receivable and inventory.
 - c) Cash, accounts and notes receivable.
 - d. Accounts receivable and property, plant and equipment.
8. Financial instruments do NOT include
- a) cash.
 - b) inventory.
 - c) derivatives.
 - d. accounts payable.
9. The basis for classifying assets as current or noncurrent is conversion to cash within
- a) the accounting cycle or one year, whichever is shorter.
 - b) the accounting cycle or one year, whichever is longer.
 - c) the operating cycle or one year, whichever is longer.
 - d. the operating cycle or one year, whichever is shorter.
10. The operating cycle is the time between
- a) selling products to customers and the realization of cash.
 - b) purchase of inventory and selling to customers.
 - c) manufacture of products and receiving cash from customers.
 - d) acquisition of assets for processing and the realization in cash or cash equivalents.
11. Which of the following is a current asset?
- a) trade instalment receivables normally collectible in eighteen months
 - b) intangible assets
 - c) investment in associates (significant influence investments)
 - d) cash designated for the purchase of property, plant and equipment
12. Which of the following should NOT be considered current assets in the statement of financial position?
- a) instalment notes receivable due over eighteen months, in accordance with normal trade practice
 - b) prepaid taxes, which cover assessments for the current year
 - c) equity or debt securities purchased with cash available for current operations
 - d) franchises and copyrights
13. Equity or debt securities held to finance future construction of additional plants should be classified on a statement of financial position as
- a) current assets.
 - b) property, plant, and equipment.
 - c) non-current investments.
 - d) intangible assets.

14. Which of the following statements about intangible assets is INCORRECT?
- a) They are capital assets that have no physical substance.
 - b) Intangibles with finite lives are amortized but not tested for impairment.
 - c) Intangibles with infinite lives are not amortized but are tested for impairment.
 - d) Internally recognized intangibles are never recognized on the statement of financial position.
15. Which of the following is NOT a current liability?
- a) unearned revenue
 - b) derivatives
 - c) stock dividends distributable
 - d) trade accounts payable
16. Working capital is
- a) capital which has been reinvested in the business.
 - b) cash invested by owners.
 - c) cash and receivables less current liabilities.
 - d) current assets less current liabilities.
17. An example of an item which is NOT an element of working capital is
- a) accrued interest on notes receivable.
 - b) goodwill.
 - c) inventory.
 - d) short-term investments.
18. Which of the following statements best describes a liability?
- a) Any obligation, whether enforceable or not, is a liability.
 - b) A liability is an enforceable economic burden or obligation.
 - c) A liability is a legal economic benefit.
 - d) Deferred income taxes are always shown as liabilities.
19. Which of the following should be EXCLUDED from long-term liabilities?
- a) derivatives
 - b) employee future benefits obligations
 - c) long-term liabilities maturing within the operating cycle, but will be paid from a sinking fund
 - d) bonds payable maturing in five years
20. Which of the following would NOT appear in the equity section of a statement of financial position?
- a) preferred shares
 - b) accumulated other comprehensive income
 - c) stock dividend distributable
 - d) investment in affiliate

21. The shareholders' equity section is usually divided into which four parts?
- a) preferred shares, common shares, retained earnings, contributed surplus
 - b) preferred shares, common shares, retained earnings, other comprehensive income
 - c) capital shares, contributed surplus, retained earnings, accumulated other comprehensive income
 - d) capital shares, appropriated retained earnings, unappropriated retained earnings, contributed surplus
22. Which of the following is NOT a method of disclosing additional information in the financial statements?
- a) supporting schedules
 - b) parenthetical explanations
 - c) cross reference and contra items
 - d) press releases
23. The financial statement which summarizes operating, investing, and financing activities of an entity for a period of time is the
- a) retained earnings statement.
 - b) income statement.
 - c) statement of cash flows.
 - d) statement of financial position.
24. On a statement of cash flows, the enterprise's main revenue-producing activities are disclosed in the
- a) operating activities.
 - b) investing activities.
 - c) financing activities.
 - d) both operating and investing activities.
25. Making and collecting loans and disposing of property, plant, and equipment are
- a) operating activities.
 - b) investing activities.
 - c) financing activities.
 - d) liquidity activities.
26. In preparing a statement of cash flows, repurchase of a company's own shares at an amount greater than cost would be classified as a(n)
- a) operating activity.
 - b) extraordinary activity.
 - c) financing activity.
 - d) investing activity.
27. In preparing a statement of cash flows, which of the following transactions would be considered an investing activity?

- a) sale of equipment at book value
- b) sale of merchandise on credit
- c) declaration of a cash dividend
- d) issuance of bonds payable at a discount

28. A statement of cash flows prepared under the INDIRECT method adds and subtracts certain items to the base number. Decreases in unearned revenues would be shown as

- a) a deduction from net income.
- b) an addition to net income.
- c) a deduction from sales.
- d) an addition to sales.

29. In preparing a statement of cash flows under the INDIRECT method, cash flows from operating activities

- a) are always equal to accrual accounting income.
- b) are calculated as the difference between revenues and expenses.
- c) can be calculated by appropriately adding to or deducting from net income those items in the income statement that do not affect cash.
- d) can be calculated by appropriately adding to or deducting from net income those items in the income statement that do affect cash.

30. Preparing a statement of cash flows under the INDIRECT method involves all of the following EXCEPT determining the

- a) cash provided by operations.
- b) cash provided by or used in investing and financing activities.
- c) change in cash during the period.
- d) cash collections from customers during the period.

31. A statement of cash flows prepared under the DIRECT method starts with

- a) net income.
- b) gross profit.
- c) cash received from customers.
- d) income from operations.

32. The cash debt coverage ratio is calculated by dividing net cash provided by operating activities by

- a) average long-term liabilities.
- b) average total liabilities.
- c) ending long-term liabilities.
- d) ending total liabilities.

33. The current cash debt coverage ratio is often used to assess

- a) financial flexibility.
- b) solvency.
- c) liquidity.

- d) profitability.
34. A measure of a company's financial flexibility is the
- cash debt coverage ratio.
 - current cash debt coverage ratio.
 - free cash flow.
 - cash debt coverage ratio and free cash flow.
35. Free cash flow is calculated as net cash provided by operating activities less
- capital expenditures.
 - dividends.
 - capital expenditures and dividends.
 - capital expenditures and depreciation.
36. A company that follows ASPE
- must not disclose cash flow per share.
 - may disclose cash flow per share.
 - may disclose cash flow per share if it makes a special election to do so.
 - must disclose cash flow per share.
37. A company that follows IFRS
- may disclose cash flow per share if it makes a special election to do so.
 - must not disclose cash flow per share.
 - is generally allowed to disclose cash flow per share.
 - only discloses cash flow per share if there are more than two shareholders.
38. When current debt is refinanced by the issue date of financial statements, it may generally be presented as NONCURRENT
- if the company follows IFRS.
 - under either ASPE or IFRS.
 - if the company follows ASPE.
 - only if the company is a subsidiary.
39. Which of the following items would require special disclosure under IFRS?
- investment property only
 - biological assets and investment property only
 - provisions and biological assets
 - biological assets, investment property and provisions
40. Significant changes to the presentation of financial statements are currently being developed by the IASB and FASB. Which of the following best describes the focus of these changes?
- to better highlight the company's assets, liabilities and equity.
 - to segregate the company's operating, financing and investing activities.

- c) to highlight the company's major business and financing activities.
- d) to increase the number of notes to be attached to financial statements.

*41. Ratios that measure how effectively an entity is using its assets are called

- a) liquidity ratios.
- b) activity ratios.
- c) solvency ratios.
- d) profitability ratios.

*42. Ratios that measure the degree of protection for long-term creditors and investors or the ability to meet long-term obligations are called

- a) liquidity ratios.
- b) activity ratios.
- c) solvency ratios.
- d) profitability ratios.

*43. Net sales divided by average total assets is called

- a) inventory turnover.
- b) receivables turnover.
- c) rate of return on assets.
- d) asset turnover.

MULTIPLE CHOICE ANSWERS—CONCEPTUAL

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	b	8.	b	15.	c	22.	d	29.	c	36.	a	*43.	d
2.	c	9.	c	16.	d	23.	c	30.	d	37.	c		
3.	d	10.	d	17.	b	24.	a	31.	c	38.	c		
4.	a	11.	a	18.	b	25.	b	32.	b	39.	d		
5.	d	12.	d	19.	a	26.	c	33.	c	40.	c		
6.	d	13.	c	20.	d	27.	a	34.	d	*41.	b		
7.	c	14.	b	21.	c	28.	a	35.	c	*42.	c		

MULTIPLE CHOICE—CPA Adapted

44. Pluto Corp.'s trial balance included the following account balances at December 31, 2014:

Accounts receivable (net)	\$41,000
Trading securities	7,000
Accumulated depreciation on equipment and furniture	15,000
Cash	10,000
Inventory	27,000
Equipment	25,000
Patent	4,000
Prepaid expenses	1,500
Land held for future business site	18,000

In Pluto's December 31, 2014 statement of financial position, the current assets total is

- a) \$104,500.
- b) \$90,500.
- c) \$86,500.
- d) \$73,500.

Use the following information for questions 45—47.

Venus Corp.'s trial balance at December 31, 2014 is properly adjusted except for the income tax expense adjustment.

Venus Corp.
Trial Balance
December 31, 2014

	Dr.	Cr.
Cash	\$ 675,000	
Accounts receivable (net)	2,895,000	
Inventory	2,385,000	
Property, plant, and equipment (net)	8,366,000	
Accounts payable and accrued liabilities		\$ 1,981,000
Income taxes payable		684,000
Future income tax liability		75,000
Common stock		3,350,000
Contributed surplus		2,680,000
Retained earnings, Jan 1, 2014		4,650,000
Net sales and other revenues		12,360,000
Costs and expenses	10,080,000	
Income tax expenses	1,379,000	
	<u>\$25,780,000</u>	<u>\$25,780,000</u>

Other financial data for the year ended December 31, 2014:

- Included in accounts receivable is \$720,000 due from a customer and payable in quarterly instalments of \$90,000. The last payment is due December 29, 2016.
- The balance in the future income tax liability account relates to a temporary difference that arose in a prior year, of which \$30,000 is classified as a current liability.
- During the year, estimated tax payments of \$465,000 were charged to income tax expense. The current and future tax rate on all types of income is 35 percent.

45. In Venus's December 31, 2014 statement of financial position, the current assets total is

- a) \$5,955,000.
- b) \$5,595,000.
- c) \$3,060,000.
- d) \$4,495,000.

46. In Venus's December 31, 2014 statement of financial position, the current liabilities total is

- a) \$2,435,000.
- b) \$2,695,000.
- c) \$2,200,000.
- d) \$2,114,000.

47. In Venus's December 31, 2014 statement of financial position, the final retained earnings balance is

- a) \$5,551,000.
- b) \$6,132,000.
- c) \$5,135,000.
- d) \$6,016,000.

48. On January 1, 2014, Mars Inc. leased a building to Vulcan Corp. for a ten-year term at an annual rental of \$160,000. At inception of the lease, Mars received \$640,000, which covered the first two years rent of \$320,000 and a security deposit of \$320,000. This deposit will not be returned to Vulcan upon expiration of the lease, but will be applied to payment of rent for the last two years of the lease. What portion of the \$640,000 should be shown as a current and long-term liability in Mars's December 31, 2014 statement of financial position?

<u>Current Liability</u>	<u>Long-term Liability</u>
a) \$0	\$640,000
b) \$160,000	\$320,000
c) \$320,000	\$320,000
d) \$320,000	\$160,000

49. Which of the following facts concerning depreciable assets should be included in the summary of significant accounting policies?

<u>Depreciation Method</u>	<u>Composition</u>
a) No	Yes
b) Yes	Yes
c) Yes	No

d) No No

50. In a statement of cash flows, receipts from sales of property, plant, and equipment and other productive assets should be classified as cash inflows from

- a) operating activities.
- b) financing activities.
- c) investing activities.
- d) selling activities.

51. In a statement of cash flows, interest payments to lenders and other creditors should be classified as cash outflows for

- a) operating activities.
- b) borrowing activities.
- c) lending activities.
- d) financing activities.

52. In a statement of cash flows, proceeds from issuing equity instruments should be classified as cash inflows from

- a) lending activities.
- b) operating activities.
- c) investing activities.
- d) financing activities.

53. In a statement of cash flows, payments to acquire debt instruments of other entities (other than cash equivalents) should be classified as cash outflows for

- a) operating activities.
- b) investing activities.
- c) financing activities.
- d) lending activities.

*54. Financial or capital market risks are related to

- a) financing activities only.
- b) investing activities only.
- c) both financing and investing activities.
- d) operating and financing activities.

MULTIPLE CHOICE ANSWERS—CPA ADAPTED

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
44.	c	46.	d	48.	b	50.	c	52.	d	*54.	c
45.	b	47.	b	49.	c	51.	a	53.	b		

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
44.	c	$\$41,000 + \$7,000 + \$10,000 + \$27,000 + \$1,500 = \$86,500$
45.	b	$\$675,000 + [\$2,895,000 - (\$90,000 \times 4)] + \$2,385,000 = \$5,595,000$
46.	d	Note the adjusted income tax expense will be $\$798,000 [(\$12,360,000 - \$10,080,000) \times 35\%] = \$798,000$. When the expense is reduced by $\$581,000 (\$1,379,000 - \$798,000 = \$581,000)$ the liability will also be reduced by the same amount to $\$103,000$ $\$1,981,000 + \$103,000 + \$30,000 = \$2,114,000$
47.	b	$\$4,650,000 + \$12,360,000 - \$10,080,000 - \$798,000$ (income tax exp) $= \$6,132,000$
48.	b	Conceptual
49.	c	Conceptual
50.	c	Conceptual
51.	a	Conceptual
52.	d	Conceptual
53.	b	Conceptual
*54.	c	Conceptual

EXERCISES

Ex. 5-55 Definitions

Provide clear, concise answers for the following:

1. Explain the merits of classified financial statements.
2. What are financial instruments?
3. What are inventories?
4. What are other assets?
5. What statement of financial position information requires supplemental disclosure?
6. Explain the purpose of the statement of cash flows.
7. Explain the concept of free cash flow.

Solution 5-55

1. Classification of financial statements increases their information content. This is accomplished through the grouping of items with similar characteristics and separating items with different characteristics.
2. Financial instruments are contracts between two or more parties that create financial assets for one party and a financial liability or equity instrument for the other and include cash, the right to receive cash or another financial instrument, and investments in other companies.
3. Inventories are assets that are held for sale in the ordinary course of business, in the process of production for such sale, or in the form of materials or supplies to be consumed in the production process or in the rendering of service.
4. "Other assets" includes assets that are not included anywhere else. They commonly include items such as noncurrent receivables and assets in special funds and require the disclosure of sufficient detail.
5. Supplemental disclosure is required for contingencies, accounting policies, contractual situations, and subsequent events. Additional information is also required for many individual statement of financial position items.
6. The purpose of the statement of cash flows is to allow users to assess an entity's capacity to generate cash and cash equivalents and its needs for cash resources. The statement identifies the sources of cash inflows and uses of cash during the period.
7. Free cash flow can be defined as a measure of a company's level of financial flexibility and is calculated as cash flow from operating activities less capital expenditures and dividends.

Ex. 5-56 Terminology

In the space provided at the right, write the word or phrase that is defined or indicated.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. A company's ability to take effective actions to alter the amounts and timing of cash flows so it can respond to unexpected needs and opportunities. | <ol style="list-style-type: none"> 1. _____ |
|---|--|

- | | |
|---|----------|
| 2. Claims to future cash flows that are fixed and determinable. | 2. _____ |
| 3. Short-term, highly liquid investments that are readily convertible into known amounts of cash. | 3. _____ |
| 4. Assets that are held for sale in the ordinary course of business. | 4. _____ |
| 5. Expenditures already made for benefits that will be received within one year or the operating cycle. | 5. _____ |
| 6. Assets of physical substance that are used in ongoing business operations. | 6. _____ |
| 7. Assets that have no physical substance. | 7. _____ |
| 8. The excess of total current assets over total current liabilities. | 8. _____ |
| 9. Unrealized gains and losses included as part of equity. | 9. _____ |

Solution 5-56

1. Financial flexibility
2. Monetary assets
3. Cash equivalents
4. Inventories
5. Prepaid expenses
6. Property, plant, and equipment
7. Intangible assets
8. Working capital
9. Accumulated other comprehensive income

Ex. 5-57 Current liabilities

Define current liabilities without using the word "liability."

Solution 5-57

Current liabilities are legally enforceable obligations that are due within one year from the date of the statement of financial position or the operating cycle, whichever is longer.

Ex. 5-58 Account classification

ASSETS

LIABILITIES AND CAPITAL

- | | |
|----------------------------------|--|
| a) Current assets | f) Current liabilities |
| b) Investments | g) Long-term liabilities |
| c) Property, plant and equipment | h) Preferred shares |
| d) Intangibles | i) Common shares |
| e) Other assets | j) Contributed surplus |
| | k) Retained earnings |
| | l) Items excluded from statement of financial position |

Using the letters above, classify the following accounts according to the preferred statement of financial position presentation.

- ___ 1. Bond sinking fund
- ___ 2. Common stock dividend distributable
- ___ 3. Appropriation for plant expansion
- ___ 4. Bank overdraft
- ___ 5. Bonds payable (due 2024)
- ___ 6. Premium on common shares
- ___ 7. Securities owned by another company which are collateral for that company's note
- ___ 8. Trading securities
- ___ 9. Inventory
- ___ 10. Unamortized discount on bonds payable (due 2024)
- ___ 11. Patents
- ___ 12. Unearned revenue

Solution 5-58

- 1. b
- 2. i
- 3. k
- 4. f
- 5. g
- 6. j
- 7. l
- 8. a
- 9. a
- 10. g
- 11. d
- 12. f

Ex. 5-59 Valuation of statement of financial position items

Use the code letters listed below (a – k) to indicate, for each statement of financial position item (1 – 13) listed below, the usual valuation reported on the statement of financial position.

_____ 1. Common shares	_____ 8. Long-term bonds payable
_____ 2. Prepaid expenses	_____ 9. Land (in use)
_____ 3. Natural resources	_____ 10. Land (future plant site)
_____ 4. Property, plant, and equipment	_____ 11. Patents
_____ 5. Trade accounts receivable	_____ 12. Trading securities
_____ 6. Copyrights	_____ 13. Trade accounts payable
_____ 7. Merchandise inventory	

- a) No par value
- b) Current cost of replacement
- c) Amount payable when due, less unamortized discount or plus unamortized premium
- d) Amount payable when due
- e) Fair value at statement of financial position date
- f) Net realizable value
- g) Lower of cost or net realizable value
- h) Original cost less accumulated depreciation/amortization
- i) Original cost less accumulated depletion
- j) Historical cost
- k) Unexpired or unconsumed cost

Solution 5-59

- 1. a
- 2. k
- 3. i
- 4. h
- 5. f
- 6. h
- 7. g
- 8. c
- 9. j
- 10. j
- 11. h
- 12. e

13. d

Ex. 5-60 Statement of financial position classifications

Typical statement of financial position (SFP) classifications are as follows:

- | | |
|------------------------|----------------------------------|
| a) Current Assets | g) Long-Term Liabilities |
| b) Investments | h) Capital Shares |
| c) Plant Assets | i) Contributed Surplus |
| d) Intangible Assets | j) Retained Earnings |
| e) Other Assets | k) Notes to Financial Statements |
| f) Current Liabilities | l) Not Reported on SFP |

Indicate by use of the above letters how each of the following items would be classified on a statement of financial position prepared at December 31, 2014. If a contra account, or any amount that is negative or opposite the normal balance, place parentheses around the letter selected. A letter may be used more than once or not at all.

_____ 1. Accrued salaries and wages	_____ 16. Natural resources—timberlands
_____ 2. Rental revenues for three months collected in advance	_____ 17. Deficit (no income earned since beginning of company)
_____ 3. Land used as plant site	_____ 18. Goodwill
_____ 4. Equity securities classified as short-term	_____ 19. Ninety-day notes payable
_____ 5. Cash	_____ 20. Investment in bonds in another company; that will be held to 2018 maturity
_____ 6. Accrued interest payable due in thirty days	_____ 21. Land held for speculation
_____ 7. Premium on preferred shares issued	_____ 22. Death of company president
_____ 8. Dividends in arrears on preferred shares	_____ 23. Current maturity of bonds payable
_____ 9. Petty cash fund	_____ 24. Investment in subsidiary; no plans to sell in the near future
_____ 10. Unamortized discount on bonds payable due in 2020	_____ 25. Trade accounts payable
_____ 11. Common shares at no par value	_____ 26. Preferred shares, no par value
_____ 12. Bond indenture covenants	_____ 27. Prepaid expenses for next twelve months
_____ 13. Unamortized premium on bonds payable due in 2020	_____ 28. Copyright
_____ 14. Allowance for doubtful accounts	_____ 29. Accumulated depreciation, equipment
_____ 15. Accumulated depletion, oil well	_____ 30. Earnings, not distributed to shareholders

Solution 5-60

- | | |
|---------|---------|
| 1. f | 16. c |
| 2. f | 17. (j) |
| 3. c | 18. d |
| 4. a | 19. f |
| 5. a | 20. b |
| 6. f | 21. b |
| 7. l | 22. l |
| 8. k | 23. f |
| 9. a | 24. b |
| 10. (g) | 25. f |
| 11. h | 26. h |
| 12. k | 27. a |
| 13. g | 28. d |
| 14. (a) | 29. (c) |
| 15. (c) | 30. j |

Ex. 5-61 Statement of financial position classifications

The various classifications listed below have been used in the past by Mercury Ltd. in its statement of financial position. The corporation asks your professional opinion concerning the appropriate classification of each of the items 1–14 below.

- | | |
|----------------------------------|--------------------------|
| a) Current Assets | f) Current Liabilities |
| b) Investments | g) Long-Term Liabilities |
| c) Property, Plant and Equipment | h) Capital Shares |
| d) Intangible Assets | i) Retained Earnings |
| e) Other Assets | |

Indicate by letter how each of the following items should be classified. If an item need not be reported on the statement of financial position, use the letter "X." A letter may be used more than once or not at all. If an item can be classified in more than one category, choose the category most favoured by the authors of your textbook.

- _____ 1. Employees' payroll deductions
_____ 2. Cash in sinking fund
_____ 3. Rent revenue collected in advance

- ___ 4. Factory building retired from use and held for sale
- ___ 5. Patents
- ___ 6. Payroll cash fund
- ___ 7. Goods held on consignment
- ___ 8. Accrued revenue on short-term investments
- ___ 9. Advances to salespersons
- ___ 10. Premium on bonds payable due two years from date
- ___ 11. Bank overdraft
- ___ 12. Salaries which company budget shows will be paid to employees within the next year
- ___ 13. Work in process
- ___ 14. Appropriation of retained earnings for bonded indebtedness

Solution 5-61

- 1. f
- 2. b
- 3. f
- 4. a or e
- 5. d
- 6. a
- 7. x
- 8. a
- 9. a
- 10. g
- 11. f
- 12. x
- 13. a
- 14. i

Ex. 5-62 Statement of financial position classifications

The various classifications listed below have been used in the past by Droid Inc. in its statement of financial position.

- | | |
|------------------------|--------------------------|
| a) Current Assets | e) Current Liabilities |
| b) Investments | f) Long-term Liabilities |
| c) Plant and Equipment | g) Common Shares |

d) Intangible Assets

h) Retained Earnings

Instructions

Indicate by letter how each of the items below should be classified at December 31, 2014. If an item is not reported on the December 31, 2014 statement of financial position, use the letter "X" for your answer. If the item is a contra account within the particular classification, place parentheses around the letter. A letter may be used more than once or not at all.

Sample question and answer:

(a) Allowance for doubtful accounts

- ☐ 1. Customers' accounts with credit balances
- ☐ 2. Bond sinking fund
- ☐ 3. Salaries which the company's cash budget shows will be paid to employees in 2015
- ☐ 4. Accumulated depreciation
- ☐ 5. Appropriation of retained earnings for plant expansion
- ☐ 6. Impairment of goodwill for 2014
- ☐ 7. On December 31, 2014, Droid signed a purchase commitment to buy all of its raw materials from Jupiter Inc for the next two years
- ☐ 8. Discount on bonds payable due March 31, 2017
- ☐ 9. Launching of Droid's internet retailing division in February, 2014
- ☐ 10. Cash dividends declared on December 15, 2014, payable on January 15, 2015

Solution 5-62

- 1. e
- 2. b
- 3. x
- 4. (c)
- 5. h
- 6. x
- 7. x
- 8. (f)
- 9. x

10. e

Ex. 5-63 Statement of cash flows

For each event listed below, select the appropriate category, which describes its effect on a statement of cash flows:

- a) Cash provided/used by operating activities
- b) Cash provided/used by investing activities
- c) Cash provided/used by financing activities
- d. Not a cash flow

- _____ 1. Payment on long-term debt
- _____ 2. Issuance of bonds at a premium
- _____ 3. Collection of accounts receivable
- _____ 4. Cash dividends declared
- _____ 5. Issuance of shares to acquire land
- _____ 6. Sale of marketable securities (long-term)
- _____ 7. Payment of employees' wages
- _____ 8. Issuance of common shares for cash
- _____ 9. Payment of income taxes payable
- _____ 10. Purchase of equipment
- _____ 11. Purchase of treasury stock (common)
- _____ 12. Sale of real estate held as a long-term investment

Solution 5-63

- 1. c
- 2. c
- 3. a
- 4. d
- 5. d
- 6. b

- 7. a
- 8. c
- 9. a
- 10. b
- 11. c
- 12. b

Ex. 5-64 Statement of cash flows ratios

Financial statements for Asteroid Ltd. are presented below:

Asteroid Ltd. Statement of Financial Position December 31, 2014			
<u>Assets</u>		<u>Liabilities & Shareholders' Equity</u>	
Cash	\$ 44,000	Accounts payable	\$ 28,000
Accounts receivable	39,000	Bonds payable	54,000
Buildings and equipment	154,000		
Accumulated depreciation— buildings and equipment	(46,000)	Common shares	69,000
Patents	24,000	Retained earnings	64,000
	<u>\$215,000</u>		<u>\$215,000</u>

Asteroid Ltd. Statement of Cash Flows For the Year Ended December 31, 2014		
Cash flows from operating activities		
Net income		\$ 60,000
Adjustments to reconcile net income to net cash provided by operating activities:		
Increase in accounts receivable	\$(19,000)	
Increase in accounts payable	7,000	
Depreciation—buildings and equipment	12,000	
Gain on sale of equipment	(7,000)	
Amortization of patents	3,000	(4,000)
Net cash provided by operating activities		56,000
Cash flows from investing activities		
Sale of equipment	14,000	
Purchase of land	(27,000)	
Purchase of buildings and equipment	(52,000)	
Net cash used by investing activities		(65,000)
Cash flows from financing activities		
Payment of cash dividend	(25,000)	

Sale of bonds	<u>45,000</u>	
Net cash provided by financing activities.....		<u>20,000</u>
Net increase in cash		11,000
Cash, January 1, 2014.....		<u>33,000</u>
Cash, December 31, 2014		<u>\$ 44,000</u>

At the beginning of 2014, the accounts payable balance was \$21,000, and the bonds payable balance was \$9,000. All Asteroid's bonds have been issued at par.

Instructions

Calculate the following for Asteroid Ltd.:

- Current cash debt coverage ratio
- Cash debt coverage ratio
- Free cash flow

Solution 5-64

$$\begin{aligned} \text{a) Current cash debt coverage ratio} &= \frac{\text{Net cash provided by operating activities}}{\text{Average current liabilities}} \\ &= \frac{\$56,000}{(\$21,000 + \$28,000) \div 2} = \frac{\$56,000}{\$24,500} = \underline{\underline{2.29:1}} \end{aligned}$$

$$\begin{aligned} \text{b) Cash debt coverage ratio} &= \frac{\text{Net cash provided by operating activities}}{\text{Average total liabilities}} \\ &= \frac{\$56,000}{(\$30,000 + \$82,000) \div 2} = \frac{\$56,000}{\$56,000} = \underline{\underline{1:1}} \end{aligned}$$

$$\text{c) Free cash flow} = \text{Net cash provided by operating activities} - \text{capital expenditures and dividends}$$

$$= \$56,000 - *\$79,000 - \$25,000 = \underline{\underline{\$(48,000)}}$$

$$*\$27,000 + \$52,000$$

*Ex. 5-65 Calculation of ratios

A company reported current assets of \$120,000 and current liabilities of \$150,000.

Instructions

Calculate the following:

- Working capital
- Current ratio

Solution 5-65

$$\text{(a) Working capital: } \$120,000 - \$150,000 = \$30,000 \text{ negative}$$

(b) Current ratio: $\$120,000 / \$150,000 = 0.80$

***Ex. 5-66—Calculation of ratios**

A company reported current assets of \$450,000, current liabilities of \$250,000 and total assets of \$1 million.

Instructions

Calculate the following:

- a) Working capital
- b) Current ratio

Solution 5-66

(a) Working capital: $\$450,000 - \$250,000 = \$200,000$

(b) Working capital ratio: $\$450,000 / \$250,000 = 1.80$

PROBLEMS

Pr. 5-67 Statement of financial position format

The following statement of financial position has been submitted to you by an inexperienced bookkeeper. List your suggestions for improvements in the format of the statement of financial position. Consider both terminology deficiencies as well as classification inaccuracies.

Hathaway Industries Inc.			
Statement of Financial Position			
For the Period Ended December 31, 2014			
	<u>Assets</u>		
Fixed Assets—Tangible			
Equipment.....	\$110,000		
Less: reserve for depreciation	<u>(40,000)</u>	\$ 70,000	
Factory supplies		22,000	
Land and buildings	400,000		
Less: reserve for depreciation	<u>(150,000)</u>	250,000	
Plant site held for future use.....		<u>90,000</u>	\$ 432,000
Current Assets			
Accounts receivable		175,000	
Cash		80,000	
Inventory		220,000	
Treasury stock (at cost).....		<u>20,000</u>	495,000
Fixed Assets—Intangible			
Goodwill		80,000	
Notes receivable		40,000	
Patents.....		<u>26,000</u>	146,000
Deferred Charges			
Advances to salespersons		60,000	
Prepaid rent		27,000	
Returnable containers		<u>75,000</u>	<u>162,000</u>
TOTAL ASSETS.....			<u>\$1,235,000</u>
	<u>Liabilities</u>		
Current Liabilities			
Accounts payable.....	\$140,000		
Allowance for doubtful accounts.....	8,000		
Common stock dividend distributable	35,000		
Income taxes payable	42,000		
Sales taxes payable	<u>17,000</u>	\$ 242,000	
Long-Term Liabilities, 5% debenture bonds, due 2020	500,000		
Reserve for contingencies.....	<u>150,000</u>	<u>650,000</u>	
TOTAL LIABILITIES		<u>892,000</u>	

<u>Equity</u>		
Common shares, no par value, issued 12,000 shares with 60 shares held as treasury stock	\$240,000	
Dividends paid	(20,000)	
Earned surplus	23,000	
Other accumulated past earnings	<u>100,000</u>	
TOTAL EQUITY		<u>343,000</u>
TOTAL LIABILITIES AND EQUITY		<u>\$1,235,000</u>

Note 1. The reserve for contingencies has been created by charges to earned surplus and has been established to provide a cushion for future uncertainties.

Note 2. The inventory account includes only items physically present at the main plant and warehouse. Items located at the company's branch sales office, amounting to \$30,000, are excluded since the company has consistently followed this procedure for many years.

Solution 5-67

1. The heading should be at a specific date rather than for a period of time.
2. "Fixed Assets – Tangible" and "Reserve for Depreciation" is poor terminology; should be Property, Plant and Equipment and Accumulated Depreciation.
3. Land and buildings should be segregated into two accounts. The Accumulated Depreciation account should only be reported for the buildings.
4. Plant site held for future use should be shown in the Investments section.
5. Popular practice lists current assets first; as well, current assets are usually listed in order of liquidity. Factory supplies should be shown as a current asset.
6. Treasury stock is not an asset, but a deduction from shareholders' equity.
7. Notes receivable should be reported as a current asset or an investment.
8. The deferred charge items should be reclassified as follows:
 Advances to salespersons—current asset
 Prepaid rent—current asset
 Returnable containers—current asset
9. Allowance for doubtful accounts should be shown as a contra account to accounts receivable.
10. Common stock dividend distributable should be shown in shareholders' equity.
11. The debenture bonds should be shown on a separate line.
12. Earned surplus is poor terminology. The term "retained earnings" is more appropriate.
13. Other Accumulated Past Earnings is poor terminology. Accumulated Other Comprehensive Income is the term required by IFRS.

14. "Dividends paid" title is a misnomer. It probably is a "dividends declared" item that should be close to retained earnings.
15. No reference in the body of the statement is made to the notes. The order of the notes is wrong.
16. Note 2 indicates that the inventory account is understated by \$30,000.
17. Specific identification and description of all significant accounting principles and methods that involve selection from among alternatives and/or those that are peculiar to a given industry should be disclosed in the annual report.

Pr. 5-68 Statement of financial position presentation

The following statement of financial position was prepared by the bookkeeper for Badger Corp. at December 31, 2014.

Badger Corp. Statement of Financial Position December 31, 2014			
Cash	\$ 90,000	Accounts payable	\$ 75,000
Accounts receivable (net).....	52,200	Long-term liabilities	110,000
Inventories	57,000	Shareholders' equity	208,500
Investments	76,300		
Equipment (net)	86,000		
Patents	32,000		
.....	<u>\$393,500</u>		<u>\$393,500</u>

The following additional information is provided:

1. "Cash" includes prepaid insurance of \$9,400; as well, a bank overdraft of \$1,500 has been deducted.
2. The net accounts receivable balance includes:
 - (a) accounts receivable—debit balances \$62,000;
 - (b) accounts receivable—credit balances \$5,000;
 - (c) allowance for doubtful accounts \$4,800.
3. Inventories do not include goods costing \$5,000 shipped out on consignment. Receivables of \$5,000 were recorded on these goods.
4. Investments include investments in common shares, trading \$24,000 and long-term \$43,300, and franchises \$9,000.
5. Equipment costing \$8,000 with accumulated depreciation \$6,000 is no longer used and is held for sale. Accumulated depreciation on the other equipment is \$40,000.

Instructions

Prepare a statement of financial position in good form (shareholders' equity details can be omitted.)

Solution 5-68

Badger Corp.
Statement of Financial Position

December 31, 2014

AssetsCurrent assets

Cash		\$ 82,100 (1)
Trading securities.....		24,000
Accounts receivable	\$ 57,000 (2)	
Less allowance for doubtful accounts.....	<u>4,800</u>	52,200
Inventories		62,000 (3)
Prepaid insurance		9,400
*Equipment held for sale		<u>2,000 (4)</u>
Total current assets		231,700

Investments

Long-term securities.....		43,300
---------------------------	--	--------

Property, plant, and equipment

Equipment.....1	124,000 (5)	
Less accumulated depreciation	<u>40,000</u>	84,000

Intangible assets

Patents.....	32,000	
Franchises	<u>9,000</u>	41,000
Total assets		<u>\$400,000</u>

Liabilities and Shareholders' EquityCurrent liabilities

Accounts payable.....	\$ 80,000 (6)	
Bank overdraft.....	<u>1,500</u>	
Total current liabilities		81,500

Long-term liabilities

.....		<u>110,000</u>
Total liabilities		191,500

Shareholders' equity

.....		<u>208,500</u>
Total liabilities and shareholders' equity		<u>\$400,000</u>

(1) (\$90,000 – \$9,400 + \$1,500)

(2) (\$62,000 – \$5,000)

(3) (\$57,000 + \$5,000)

(4) (\$8,000 – \$6,000)

(5) (\$86,000 + \$40,000 – \$8,000 + \$6,000)

(6) (\$75,000 + \$5,000)

*An alternative is to show this as an “other asset.”

Pr. 5-69 Calculation of ending retained earnings

The records of Biloxi Corp. for calendar 2014 reflected the following correct pretax amounts: gain from discontinued operations, \$50,000; cash dividends declared and paid, \$45,000; retained earnings, January 1, 2014, \$275,000, correction of accounting error, \$35,000 debit; income before income taxes and before discontinued operations, \$165,000. The average

income tax rate of 40 % applies to all items except the dividends.

Instructions

Calculate the December 31, 2014 ending balance of retained earnings.

Solution 5-69

Beginning balance.....	\$275,000
Correction of error (\$35,000 x 60%).....	(21,000)
Income (\$165,000 x 60%).....	99,000
Gain from discontinued operations (\$50,000 x 60%).....	30,000
Dividends.....	<u>(45,000)</u>
Ending balance.....	<u>\$338,000</u>

Use the following information for questions 70—71.

Pr. 5-70—Statement of Cash Flows – direct method

The controller of Nebula Corporation has provided you with the following information:

Nebula Corporation Income Statement For the Year Ended December 31, 2014

Net sales.....	620,000
Operating expenses.....	<u>410,000</u>
Income from operations	210,000
Other revenues and expenses	
Gain on sale of equipment	30,000
Interest expense.....	8,000
	<u>22,000</u>
Income before income taxes	232,000
Income taxes	<u>92,800</u>
Net income.....	<u>139,200</u>

Nebula Corporation Comparative Account Information Relating to Operations For the Year Ended December 31, 2014

	<u>2014</u>	<u>2013</u>
Accounts receivable	56,000	40,000
Prepaid insurance	5,000	6,000
Accounts payable	59,000	47,000
Interest payable	600	1,500
Income taxes payable	4,200	6,000
Unearned revenue	20,000	14,000

Instructions

Prepare a Statement of Cash Flows (for operating activities only) for the year ended December 31, 2014, using the *direct* method.

Solution 5-70

Nebula Corporation
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash received from customers.....		\$610,000
Cash paid		
For operating expenses.....	\$397,000	
For interest.....	\$8,900	
For income taxes.....	\$94,600	<u>\$500,500</u>
Net cash provided by operating activities		<u>\$109,500</u>

Calculations:

Cash received from customers:

Net sales.....	\$ 620,000
– Increase in accounts receivable	(16,000)
+ Increase in unearned revenue.....	<u>6,000</u>
	\$ 610,000

Cash paid for operating expenses:

Operating expenses.....	\$ 410,000
– Decrease in prepaid insurance.....	(1,000)
– Increase in accounts payable	<u>(12,000)</u>
	\$ 397,000

Cash paid for interest:

Interest expense	\$ 8,000
+ Decrease in interest payable.....	<u>900</u>
	\$ 8,900

Cash paid for income tax:

Income tax expense.....	\$ 92,800
+ Decrease in income tax payable	<u>1,800</u>
	\$ 94,600

Pr. 5-71 Statement of Cash Flows – indirect method

Use the information provided in Pr. 5-70. Prepare a Statement of Cash Flows (for operating activities only) for the year ended December 31, 2014 using the *indirect* method.

Solution 5-71

Nebula Corporation
Partial Statement of Cash Flows
For the Year Ended December 31, 2014

Cash flows from operating activities	
Net income.....	\$139,200
Adjustments:	
Gain on sale of equipment	(30,000)
Increase in accounts receivable	(16,000)
Decrease in prepaid insurance.....	1,000
Increase in accounts payable	12,000

Decrease in interest payable.....	(900)
Decrease in income taxes payable.....	(1,800)
Increase in unearned revenue.....	<u>6,000</u>
Net cash provided by operating activities	<u>\$109,500</u>

***Pr. 5-72** Calculation of ratios

Brandon Systems Inc. has provided you with the following information:

	<u>2014</u>	<u>2013</u>
Cash	\$ 21,000	\$ 47,000
Short-term (trading) investments	28,000	—
Accounts receivable	102,000	116,000
Inventory	86,000	64,000
Prepaid expenses	11,000	9,000
Total assets	1,503,000	1,489,000
Total current liabilities	205,000	241,000
Net sales, all on credit.....	877,000	850,000
Cost of goods sold	570,000	555,000
Operating income.....	165,000	158,000
Income tax expense	20,000	18,000
Net income.....	109,000	100,000
Interest expense	36,000	40,000
Common shares (no preferred)	420,000	420,000
Retained earnings.....	153,000	74,000

Instructions

Calculate the following ratios for 2014. Round all values to two decimals, including percentages, e.g. 12.34, 34.56%. Show all calculations for full marks.

- Profit margin on sales
- Quick (acid-test) ratio
- Receivables turnover
- Debt to total assets
- Times interest earned
- Rate of return on assets
- Rate of return on common share equity

Solution 5-72

- Profit margin on sales = Net income/net sales x 100 =

$$\frac{109,000}{877,000} \times 100 = 12.43\%$$
- Quick (acid-test) ratio = Quick assets/current liabilities

$$= \frac{21,000 + 28,000 + 102,000}{205,000} = .74 \text{ to } 1$$
- Receivables turnover = Net sales/average A/R

$$= \frac{877,000}{(102,000 + 116,000)/2} = 8.05 \text{ (times)}$$

d) Debt to total assets = Total liabilities/total assets x 100
= $\frac{930,000}{1,503,000} \times 100 = 61.88\%$

Total liabilities = 1,503,000 – 420,000 – 153,000 = 930,000

e) Times-interest-earned = Net income before interest and income taxes/interest exp
= $\frac{109,000 + 36,000 + 20,000 \text{ (i.e. operating income)}}{36,000} = 4.58 \text{ (times)}$

f) Rate of return on assets = Net income/average total assets
= $\frac{109,000}{1,496,000} \times 100 = 7.29\%$

average total assets = (1,503,000 + 1,489,000)/2 = 1,496,000

g) Rate of return on common share equity = NI/average comm S/H equity x 100
= $\frac{109,000}{533,500} \times 100 = 20.43\%$

average equity = (420,000 + 420,000 + 153,000 + 74,000)/2 = 533,500

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CHAPTER 6

REVENUE RECOGNITION

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	11.	1	E	21.	3	E	31.	5	E
2.	1	E	12.	2	M	22.	3	M	32.	5	E
3.	1	E	13.	2	M	23.	3	M	33.	5	M
4.	1	M	14.	2	M	24.	5	E	34.	5	H
5.	1	E	15.	2	M	25.	5	M	35.	5,7	E
6.	1	M	16.	2	M	26.	5	M	36.	7	E
7.	1	M	17.	2	E	27.	5	E	37.	7	H
8.	1	E	18.	2	M	28.	5	M	38.	8	H
9.	1	M	19.	3	H	29.	5	M			
10.	1	M	20.	3	M	30.	5	H			
Multiple Choice–Computational											
39.	3	E	45.	5	M	52.	5	M	57.	5	M
40.	3	E	46.	5	H	52.	5	M	58.	5	E
41.	3	M	47.	5	M	53.	5	M	59.	5	H
42.	3	E	48.	5	M	54.	5	H	60.	5	H
43.	5	M	49.	5	M	55.	5	H	61.	7	E
44.	5	M	50.	5	M	56.	5	E			
Multiple Choice–CPA Adapted											
62.	1	E	64.	5	M	66.	5	M			
63.	5	H	65.	5	M						
Exercises											
67.	1	M	70.	2	M	73.	5	M	76.	5	M
68.	1-5,7	M	71.	3	M	74.	5	M	77.	6	M
69.	1-3,5	M	72.	5	E	75.	5	M	78.	7	H
Problems											
79.	2	M	82.	5	M	85.	5	M			
80.	2	M	83.	5	H	86.	5	E			
81.	5	H	84.	5	M	87.	7	H			

Note: E = Easy M = Medium H = Hard

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1. MC		4. MC		7. MC		10. MC		67. Ex			
2. MC		5. MC		8. MC		11. MC		68. Ex			
3. MC		6. MC		9. MC		62. MC		69. Ex			
Learning Objective 2											
12. MC		14. MC		16. MC		18. MC		69. Ex		79. Pr	
13. MC		15. MC		17. MC		68. Ex		70. Ex		80. Pr	
Learning Objective 3											
19. MC		21. MC		23. MC		40. MC		42. MC		69. Ex	
20. MC		22. MC		39. MC		41. MC		68. Ex		71. Ex	
Learning Objective 4											
68. Ex											
Learning Objective 5											
24. MC		32. MC		47. MC		55. MC		65. MC		76. Ex	
25. MC		33. MC		48. MC		56. MC		66. MC		81. Pr	
26. MC		34. MC		49. MC		57. MC		68. Ex		82. Pr	
27. MC		35. MC		50. MC		58. MC		69. Ex		83. Pr	
28. MC		43. MC		51. MC		59. MC		72. Ex		84. Pr	
29. MC		44. MC		52. MC		60. MC		73. Ex		85. Pr	
30. MC		45. MC		53. MC		63. MC		74. Ex		86. Pr	
31. MC		46. MC		54. MC		64. MC		75. Ex			
Learning Objective 6											
77. Ex											
Learning Objective 7											
35. MC		37. MC		68. Ex		87. Pr					
36. MC		61. MC		78. Ex							
Learning Objective 8											
38. MC											

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

CHAPTER STUDY OBJECTIVES

1. Understand the economics and legalities of selling transactions from a business perspective. It is critical to understand a transaction from a business perspective before attempting to account for it. The analysis should begin with what is being sold to the customer (goods or services) and note also the nature and amount of the consideration. When one party is in a better bargaining position than the other, it may be able to negotiate concessions such as more lenient payment terms. These concessions often complicate the accounting as they introduce measurement uncertainty in many cases.

Selling transactions are based on contractual arrangements between a buyer and a seller. Contracts create rights and obligations under law that must be considered when accounting for the transactions. In addition to contractual law, rights and obligations may exist under other forms of the law, such as common law or contract law. These should also be considered.

2. Analyze and determine whether a company has earned revenues. Under current accounting standards, the revenues are earned when the risks and rewards of ownership are passed or when the company has done what it said it would do to be entitled to the revenues. Where sale of goods are involved, legal title and possession provide evidence of this. The accounting is more complex when the contract is a long-term contract and when it involves both goods and services. The percentage-of-completion method is commonly used for long-term contracts. The completed contract method is used under ASPE and although IFRS does not mention this method, it is acceptable to recognize revenues at the end of a contract if there is one significant event. IFRS requires the zero-profit method where the outcome is not determinable.

3. Discuss issues relating to measurement and measurement uncertainty. Under accrual accounting, revenue may only be recognized when reliably measurable. There are many reasons that measurement uncertainty exists including inability to reliably measure the revenue itself (for example, barter transactions or price protection clauses) and inability to measure costs or uncertainty relating to the outcome of the contract itself (contingencies). In the latter case, extreme uncertainty may indicate that the contract or business deal has not yet been completed. Where the sale involves more than one element (such as goods and services), then the selling price must be allocated to the respective parts of the sale using an allocation method such as the relative fair value method or residual method.

4. Understand how to account for sales where there is collection uncertainty. Collectibility issues also create measurement uncertainty and must be considered when recognizing and measuring sales transactions. When collectibility cannot be assured and/or the related revenue is not measurable in terms of collection or credit risk, then no sale is booked.

5. Prepare journal entries for consignment sales and long-term contracts. Under consignment sales, the risks and rewards remain with the seller and, therefore, revenues are not recognized until the goods are sold to a third party. Special accounts separate inventory on consignment.

To apply the percentage-of-completion method to long-term contracts, a basis is needed for measuring the progress toward completion at particular interim dates. One of the most popular input measures that is used to determine the progress toward completion is the cost-to-cost basis. Using this basis, the percentage of completion is measured by comparing costs incurred to date with the most recent estimate of the total costs to complete the contract. The percentage of the total estimated costs that the costs incurred amount to is applied to the total revenue or the estimated total gross profit on the contract to arrive at the revenue or the gross profit amounts to be recognized to date. Under the completed contract method, revenue and gross profit are recognized only when the contract is completed. Costs of long-term contracts in process and current billings are accumulated, but there are no interim charges or credits to income statement accounts for revenues, costs, and gross profit. The annual entries to record costs of construction, progress billings, and collections from customers would be identical to those for the percentage-of-completion method, with one significant exception: revenue and gross profit are not recognized until the end of the contract. The zero profit method (IFRS) is used when the outcome of the contract is not determinable. Recoverable revenues equal to cost are recognized.

6. Understand how to present sales transactions in the income statement and prepare basic disclosures. Transactions where the seller is acting as a principal in the sale should be accounted for on a gross basis. Where the seller is acting as an agent (putting buyers and sellers together), the transaction should be booked on a net basis. Consideration should be given to whether the seller has the risks and rewards of ownership of the product being sold. Transactions are treated as revenues when they relate to the entity's ordinary activities. They are treated as gains when they deal with ancillary activities. In general, revenues and gains are booked to net income except in very limited circumstances.

7. Discuss current trends in standard setting for revenue recognition including the contract-based approach. IASB and FASB are currently studying a new model for revenue recognition: the contract-based model, which is felt to be conceptually superior.

8. Identify differences in accounting between ASPE and IFRS. The main differences are identified in the chart in Illustration 6-25.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Control of an asset
a	2.	Definition of "acquired"
b	3.	Definition of credit risk.
c	4.	Concept of commercial substance
d	5.	Definition of concessionary terms
c	6.	Definition of constructive obligation
b	7.	Allocation of selling price in bundled sales
b	8.	Reasons to recognize revenue
d	9.	Problems with the earnings approach
c	10.	Definition of earnings process
b	11.	Definition of revenue
b	12.	Definition of critical event
c	13.	Definition of discrete earnings process
a	14.	ASPE requirements
c	15.	ASPE requirements
b	16.	Accounting for long-term contracts – principal factors
b	17.	Preferred method under ASPE
c	18.	Classification of progress billings and construction in process
d	19.	Measurement uncertainty
b	20.	Accounting for a volume rebate
c	21.	Definition of onerous contract
d	22.	Recording sales when right of return exists
c	23.	Recording sales when right of return exists
b	24.	Consignment sales—consignor vs. consignee
d	25.	Consignment sales—revenue recognition
a	26.	Disclosure of earned but unbilled revenues
d	27.	Revenue, cost, and gross profit under completed-contract method
b	28.	Disadvantage of using percentage-of-completion method
a	29.	Recognition of loss on long-term contract
c	30.	Recognition of loss on long-term contract
a	31.	Completed-contract method
b	32.	Completed-contract method
d	33.	Recognition of loss on long-term contract
a	34.	Revenue recognition in consignment sales
c	35.	Principal-agent relationship
a	36.	Proposed new model of revenue recognition
c	37.	Proposed new model of revenue recognition
d	38.	ASPE vs IFRS treatment of long-term contracts

MULTIPLE CHOICE—Computational

Answer	No.	Description
b	39.	Bundled sales – application of the relative fair value method
c	40.	Bundled sales – application of the residual value method
b	41.	Dealing with collection uncertainty
a	42.	Revenue to be recognized under collection uncertainty
c	43.	Gross profit to be recognized using percentage-of-completion
b	44.	Gross profit to be recognized using percentage-of-completion
b	45.	Calculate cash collected on long-term construction contract
d	46.	Calculate gross profit using percentage-of-completion
c	47.	Gross profit to be recognized using percentage-of-completion
b	48.	Gross profit to be recognized using percentage-of-completion
c	49.	Gross profit to be recognized using completed-contract method
b	50.	Gross profit to be recognized using percentage-of-completion
a	51.	Gross profit to be recognized using completed-contract method
c	52.	Gross profit or loss to be recognized using completed-contract method
d	53.	Gross profit to be recognized using completed-contract method
c	54.	Reporting a current liability with completed-contract-method
a	55.	Reporting assets under completed-contract method
c	56.	Revenue to be recognized from consignment sales
c	57.	Calculate total construction costs
a	58.	Application of the percentage of completion method
d	59.	Sales on consignment
b	69.	Reporting inventory on consignment
d	61.	Calculation of the net contract position – contract based approach

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
a	62.	Definition of "recognition."
b	63.	Calculate contract costs incurred during year.
d	64.	Calculate gross profit using percentage-of-completion method.
a	65.	Calculate gross profit using completed-contract method.
d	66.	Calculate gross profit using completed-contract method.

EXERCISES

Item	Description
6-67	Concessionary terms
6-68	Definitions
6-69	Terminology
6-70	Comparison of accounting methods for long-term contracts
6-71	Bundled sales
6-72	Percentage-of-completion method
6-73	Percentage-of-completion method
6-74	Percentage-of-completion method
6-75	Percentage-of-completion and completed-contract methods
6-76	Consignment sale
6-77	Reporting of gross or net revenues
6-78	Contract-based approach

PROBLEMS

Item	Description
6-79	Revenue recognition
6-80	Revenue recognition
6-81	Completed contract method
6-82	Long-term construction project accounting
6-83	Accounting for long-term construction contracts
6-84	Consignment sales
6-85	Percentage-of-completion and completed-contract methods
6-86	Percentage-of-completion and completed-contract methods
6-87	Long-term contract (contract-based approach)

MULTIPLE CHOICE—Conceptual

1. Control of an asset normally coincides with
 - a) transfer of possession to the buyer.
 - b) transfer of legal title to the buyer.
 - c) transfer of both possession and legal title to the buyer.
 - d. the receipt of payment from the buyer.

2. When dealing with sales agreements, “acquired” means
 - a) consideration or rights to consideration.
 - b) goods to be delivered in the future.
 - c) dealing at arm’s length.
 - d. measurement of the transaction.

3. If an entity sells on credit, the risk that the customer will not pay is called
 - a) price risk.
 - b) credit risk.
 - c) commercial substance.
 - d. credit policy.

4. The concept of commercial substance in purchase and sales transactions means that
 - a) the transaction is a bona fide purchase and sale.
 - b) the entity's cash flows are expected to change.
 - c) the transaction is a bona fide purchase and sale, and the entity's cash flows are expected to change.
 - d. the transaction must involve tangible assets.

5. Terms negotiated by a party to the contract that are more favourable than normal are called
 - a) credit terms.
 - b) barter transactions.
 - c) arm’s length terms.
 - d. concessionary terms.

6. In many cases, an entity may have an implicit obligation even if it is not explicitly noted in a sales contract. This is called a(n)
 - a) onerous obligation.
 - b) legal obligation.
 - c) constructive obligation.
 - d. earnings obligation.

7. When a sale involves goods *and* services, the selling price should NOT be
 - a) allocated to each of these parts.
 - b) allocated only to the part with the higher value.

- c) allocated using the relative fair value method.
 - d. allocated using the residual method.
8. Under the earnings approach for the sale of goods, which of the following would NOT be a reason to recognize revenue?
- a) The risks and rewards are transferred to the buyer.
 - b) The vendor continues to have control over the goods sold.
 - c) Collectibility is reasonably assured.
 - d. Costs and revenues can be reliably measured.
9. Which of the following would NOT normally be considered as a problem associated with the earnings approach to revenue recognition?
- a) This approach may be subject to a considerable degree of subjective judgement.
 - b) the existence of multiple and sometimes conflicting guidelines
 - c) the difficulties arising from the split of risks and rewards between buyer and seller
 - d. Revenue can be reliably measured and collectability is probable.
10. The actions a company takes to add value are referred to as the
- a) critical event.
 - b) earnings approach.
 - c) earnings process.
 - d. risks and rewards of ownership.
11. A credit that is realized through an entity's ordinary activities would be treated as
- a) a gain.
 - b) revenue.
 - c) other income.
 - d) other comprehensive income.
12. When a company sells goods, there is often one main act in the earnings process that signals substantial completion or performance. This is called the
- a) point of delivery.
 - b) critical event.
 - c) significant event.
 - d. earnings process.
13. If the earnings process has a critical event, it is often referred to as a
- a) point of delivery.
 - b) constructive obligation.
 - c) discrete earnings process.
 - d. transfer of risks and rewards of ownership.
14. When there is a continuous earnings process, but the progress towards completion is not measurable, ASPE requires the use of the

- a) completed-contract method.
 - b) percentage-of-completion method.
 - c) zero-profit method.
 - d. discrete earnings method.
15. Under ASPE, the profession requires that the percentage-of-completion method be used when certain conditions exist. Which of the following is NOT one of those necessary conditions?
- a) Estimates of progress toward completion, revenues, and costs are reasonably dependable.
 - b) The contractor can be expected to perform the contractual obligation.
 - c) The buyer can be expected to satisfy some of the obligations under the contract.
 - d. The contract clearly specifies the enforceable rights of the parties, the consideration to be exchanged, and the manner and terms of settlement.
16. Under ASPE, when selecting an accounting method for a newly contracted long-term construction project, the principal factor to be considered should be
- a) the terms of payment in the contract.
 - b) the degree to which a reliable estimate of the costs to complete and extent of progress toward completion can be made.
 - c) the method commonly used by the contractor to account for other long-term construction contracts.
 - d) the inherent nature of the contractor's technical facilities used in construction.
17. Under ASPE, when work to be done and costs to be incurred on a long-term contract can be estimated reliably, which of the following methods of revenue recognition is preferable?
- a) Instalment method
 - b) Percentage-of-completion method
 - c) Completed-contract method
 - d) Zero-profit method
18. Under the percentage-of-completion method, how should the balances of progress billings and construction in process be disclosed in the financial statements prior to the completion of the contract?
- a) Progress billings as deferred income, construction in progress as a deferred expense.
 - b) Progress billings as income, construction in process as inventory.
 - c) Net, as a current asset if a debit balance, and a current liability if a credit balance.
 - d) Net, as income from construction if a credit balance, and loss from construction if a debit balance.
19. Measurement uncertainty does NOT arise from
- a) the inability to reasonably estimate related costs of the transaction.
 - b) the inability to reasonably estimate the consideration of the transaction.
 - c) the ability to measure the outcome of the transaction.
 - d) the inability to allocate costs already recorded to the correct account.

20. Under IFRS, when a vendor gives a volume rebate to a customer, the vendor should account for it as a(n)
- a) expense.
 - b) reduction of revenue.
 - c) reduction of inventory.
 - d) other gain or loss.
21. When a contract becomes unprofitable to an entity, this is called a(n)
- a) uncompleted contract.
 - b) zero-profit contract.
 - c) onerous contract.
 - d) unenforceable contract.
22. When a vendor is exposed to continued risks of ownership because of potential return of the product, which of the following accounting procedures should NOT be used?
- a) Recording the sale, and accounting for returns as they occur in future periods.
 - b) Not recording the sale until all return privileges have expired.
 - c) Recording the sale, but reducing revenue by an estimate of future returns.
 - d) Recording the sale, but ignoring future returns.
23. Under the earnings approach, if a company sells its product but gives the buyer the right to return the product, revenue from the sales transaction should be recognized at the time of sale if
- a) the market for returnable goods is untested.
 - b) there is a transfer of the risks and rewards of ownership.
 - c) the amount of future returns can be reasonably estimated.
 - d) the amount of goods returned is likely to be high.
24. Under a consignment sales arrangement,
- a) the consignor receives the merchandise to sell.
 - b) the consignor retains legal title.
 - c) the consignee ships the merchandise to the consignor.
 - d) the consignee retains legal title.
25. Under a consignment sales arrangement, revenue is recognized under the earnings approach
- a) upon shipment of the merchandise to the consignee.
 - b) upon receipt of the merchandise by the consignee.
 - c) upon sale by the consignee.
 - d) upon receipt by the consignor of notification of the sale.
26. Under the percentage-of-completion method, how should earned but unbilled revenues on a long-term contract be disclosed on the statement of financial position?
- a) as construction in process in the current asset section
 - b) as construction in process in the noncurrent asset section
 - c) as a receivable in the noncurrent asset section

- d) in a note to the financial statements until the customer is formally billed for the portion of work completed
27. Under the completed-contract method,
- revenue, costs, and gross profit are recognized during the contract.
 - revenue and costs are recognized during the contract, but gross profit recognition is deferred until the contract is completed.
 - costs are recognized during the contract, but revenue and gross profit are not.
 - revenue, costs and gross profit are not recognized until the contract is finished.
28. The principal disadvantage of using the percentage-of-completion method of recognizing revenue from long-term contracts is that it
- is unacceptable for income tax purposes.
 - gives results based upon estimates which may be subject to considerable uncertainty.
 - is likely to assign a small amount of revenue to a period during which a large amount of revenue was actually earned.
 - no revenue is recognized during the contract.
29. Cost estimates on a long-term contract may indicate that a loss will result on completion of the entire contract. In this case, the entire expected loss should be
- recognized in the current period, regardless of whether the percentage-of-completion or completed-contract method is used.
 - recognized in the current period under the percentage-of-completion method, but the completed-contract method should defer recognition of the loss to the time when the contract is completed.
 - recognized in the current period under the completed-contract method, but the percentage-of-completion method should defer the loss until the contract is completed.
 - deferred and recognized when the contract is completed, regardless of whether the percentage-of-completion or completed-contract method is used.
30. Cost estimates at the end of the second year indicate a loss will result on completion of the entire contract. Which of the following statements is correct?
- Under the completed-contract method, the loss is not recognized until the year the construction is completed.
 - Under the percentage-of-completion method, the gross profit recognized in the first year must not be changed.
 - Under the completed-contract method, when the billings exceed the accumulated costs, the amount of the estimated loss is reported as a current liability.
 - Under the completed-contract method, when the Construction in Process balance exceeds the billings, the estimated loss is added to the accumulated costs.
31. The completed contract method for accounting for long-term construction projects requires that
- no revenue is recognized until the project is completed.
 - costs are accumulated and revenue is recognized in proportion to cash collected.
 - gross profit is calculated each period, but deferred until the end of the contract.

- d) revenue is calculated each period, but deferred until the end of the contract.
32. Which of the following statements does NOT describe a long-term construction project that is accounted for under the completed contract method?
- a) Revenues are recognized at the end of the contract.
 - b) Revenues are recognized evenly throughout the contract.
 - c) Gross profit is recognized at the end of the contract.
 - d) Losses are recognized immediately.
33. Losses in long-term construction projects
- a) are generally deferred until the contract is complete.
 - b) are only recognized immediately under the completed-contract method.
 - c) are only recognized immediately under the percentage-of-completion method.
 - d) are recognized immediately under both the completed-contract method and the percentage-of-completion method.
34. The journal entries to recognize the revenue from a consignment sale would likely be identical under the earnings and the contract-based approaches assuming
- a) the contract is entered into at the same time as when control over the goods is passed to the customer.
 - b) the underlying goods or services are valued under the residual value method.
 - c) the completed contract method is used.
 - d) the percentage-of-completion method is used.
35. When a realtor sells a house for a client, he/she
- a) takes temporary title to the property until the client moves in.
 - b) has the risks and rewards of ownership until the client moves in.
 - c) receives a commission on the sale but does not hold title to the property.
 - d) does hold title to the property but has the risks and rewards of ownership until the client moves in.
36. The proposed new revenue recognition model currently being studied by the IASB and FASB is the
- a) contract-based approach.
 - b) earnings approach.
 - c) percentage of completion method.
 - d) completed contract method.
37. Which of the following is NOT one of the five steps under the proposed new revenue recognition standard currently being studied by the IASB and FASB?
- a) Identify the contract(s) with the customer.
 - b) Determine the transaction price.
 - c) Determine the collectability of the contract.
 - d) Recognize revenue when a performance obligation is satisfied.

38. Which of the following statements is correct regarding long-term construction contracts?
- a) ASPE only allows the use of the completed-contract method.
 - b) ASPE only allows the use of the percentage-of-completion method.
 - c) IFRS only allows the use of the percentage-of-completion and the zero-profit method.
 - d) IFRS allows the use of the percentage-of-completion and the zero-profit method, but does not preclude the use of the completed-contract method.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	7.	b	13.	c	19.	d	25.	d	31.	a	37.	c
2.	a	8.	b	14.	a	20.	b	26.	a	32.	b	38.	d
3.	b	9.	d	15.	c	21.	c	27.	d	33.	d		
4.	c	10.	c	16.	b	22.	d	28.	b	34.	a		
5.	d	11.	b	17.	b	23.	c	29.	a	35.	c		
6.	c	12.	b	18.	c	24.	b	30.	c	36.	a		

MULTIPLE CHOICE—Computational

Use the following information for questions 39–40.

A product and service are bundled together and sold to customers for \$350. The fair values of the product and service are \$300 and \$100 respectively.

39. Under the relative fair value method, how much would be allocated to the product?

- a) \$300.00
- b) \$262.50
- c) \$200.00
- d) \$175.00

40. Under the residual method, how much would be allocated to the product?

- a) \$300.00
- b) \$262.50
- c) \$250.00
- d) \$200.00

41. Cello Corp. has made a sale to a customer valued at \$1,500,000. The associated expenses are \$300,000. Some aspects of this sale have created an element of measurement uncertainty. Assuming that this element of uncertainty can be reasonably estimated at \$450,000, Cello should

- a) Increase revenues by \$450,000.
- b) Increase expenses by \$450,000.
- c) Decrease expenses by \$450,000.
- d) Increase expenses by \$300,000.

42. On January 1, 2014, Trumpet Ltd. sold land that cost \$180,000 for \$240,000, receiving a note bearing interest at 10 percent. The note will be paid in three annual instalments of \$96,510 starting December 31, 2014. Assuming that collection of the note is very uncertain, how much revenue from this sale should Trumpet recognize in 2014?

- a) \$0
- b) \$18,000
- c) \$24,000
- d) \$96,510

43. Guitar Construction Corp. contracted to construct a building for \$1,500,000. Construction began in 2014 and was completed in 2015. Data relating to the contract follow:

	Year ended December 31,	
	2014	2015
Costs incurred	\$600,000	\$460,000
Estimated costs to complete	400,000	—

Guitar uses the percentage-of-completion method. For the calendar years 2014 and 2015, respectively, Guitar should report gross profit of

- a) \$270,000 and \$170,000.
- b) \$900,000 and \$600,000.
- c) \$300,000 and \$140,000.
- d) \$0 and \$440,000.

44. In 2014, Banjo Construction Corp. began work on a contract for \$3,700,000. Other details follow:

	<u>2014</u>
Costs incurred during the year	\$1,800,000
Estimated costs to complete as of December 31	1,200,000
Billings during the year	1,650,000
Collections during the year	975,000

Banjo uses the percentage-of-completion method. For calendar 2014, Banjo should report gross profit of

- a) \$150,000.
- b) \$420,000.
- c) \$700,000.
- d) \$2,220,000.

Use the following information for questions 45–46.

In 2014, Violin Inc. began a three year construction contract for \$7,000,000. Violin uses the percentage-of-completion method. The income to be recognized each year is based on the proportion of costs incurred to total estimated costs for completing the contract. The financial statement presentation relating to this contract for calendar 2014 follow:

Statement of Financial Position

Accounts receivable—construction contract billings		\$300,000
Construction in progress	\$850,000	
Less contract billings	<u>640,000</u>	
Costs and recognized profit in excess of billings		210,000

Income Statement

Income (before tax) on the contract recognized in 2014	\$210,000
--	-----------

45. How much cash was collected in 2014 on this contract?

- a) \$50,000
- b) \$340,000
- c) \$400,000
- d) \$600,000

46. What was the initial estimated gross profit on this contract?

- a) \$762,860
- b) \$810,462
- c) \$1,300,408
- d) \$1,729,412

47. Cornet Construction Corp. uses the percentage-of-completion method. In 2014, Cornet began work on a contract for \$1,650,000 which was completed in 2015. Data on the costs are:

	<u>Year Ended December 31</u>	
	<u>2014</u>	<u>2015</u>
Costs incurred	\$585,000	\$420,000
Estimated costs to complete	390,000	—

For the calendar years 2014 and 2015, Cornet should recognize gross profit of

	<u>2014</u>	<u>2015</u>
a) \$0		\$645,000
b) \$387,000		\$258,000
c) \$405,000		\$240,000
d) \$405,000		\$645,000

Use the following information for questions 48–49.

Clarinet Ltd. began work in 2014 on a contract for \$1,200,000. Other details follow:

	<u>2014</u>	<u>2015</u>
Costs incurred during the year	\$ 200,000	\$612,500
Estimated costs to complete as of December 31	600,000	0
Billings during the year	225,000	900,000
Collections during the year	150,000	975,000

48. Assume that Clarinet uses the percentage-of-completion method of accounting. The portion of the total gross profit to be recognized in 2014 is

- a) \$75,000.
- b) \$100,000.
- c) \$300,000.
- d) \$400,000.

49. Assume that Clarinet uses the completed-contract method of accounting. The portion of the total gross profit to be recognized in 2015 is

- a) \$150,000.
- b) \$225,000.
- c) \$387,500.
- d) \$1,200,000.

Use the following information for questions 50–51.

Tuba Ltd. began work in 2014 on a contract for \$1,250,000. Other data are:

	<u>2014</u>	<u>2015</u>
Costs incurred to date	\$540,000	\$335,000
Estimated costs to complete as of December 31	360,000	—
Billings to date	420,000	1,250,000
Collections to date	300,000	1,000,000

50. If Tuba uses the percentage-of-completion method, the gross profit to be recognized in 2014 is

- a) \$450,000.
- b) \$210,000.
- c) \$200,000.
- d) \$100,000.

51. If Tuba uses the completed-contract method, the gross profit to be recognized in 2015 is

- a) \$375,000.
- b) \$400,000.
- c) \$850,000.
- d) \$1,000,000.

52. Beaver Builders Ltd. is using the completed-contract method for a \$2,000,000 contract that will take two years to complete. Data at December 31, 2014, the end of the first year, are:

Costs incurred to date	\$925,000
Estimated costs to complete	1,100,000
Billings to date	850,000
Collections to date	700,000

The gross profit or loss that should be recognized for 2014 is

- a) \$50,000 gross profit.
- b) \$25,000 gross profit.
- c) \$25,000 loss.
- d) \$ 0.

Use the following information for questions 53–55.

Piano Construction Corp. began operations in 2014. Construction activity for 2014 is shown below. Piano uses the completed-contract method.

<u>Contract</u>	<u>Contract Price</u>	<u>Billings Through 12/31/14</u>	<u>Collections Through 12/31/14</u>	<u>Costs to 12/31/14</u>	<u>Estimated Costs to Complete</u>
1	\$1,280,000	\$1,260,000	\$1,040,000	\$860,000	—
2	1,440,000	600,000	400,000	328,000	\$752,000
3	1,320,000	760,000	700,000	900,000	480,000

53. Which of the following should be shown on the income statement for 2014 related to Contract 1?

- a) Gross profit, \$180,000
- b) Gross profit, \$240,000
- c) Gross profit, \$400,000
- d) Gross profit, \$420,000

54. Which of the following should be shown on the statement of financial position at December 31, 2014 related to Contract 2?

- a) Inventory, \$272,000

- b) Inventory, \$328,000
- c) Liability, \$272,000
- d) Liability, \$600,000

55. Which of the following should be shown on the statement of financial position at December 31, 2014 related to Contract 3?

- a) Unbilled contract costs, \$140,000
- b) Unbilled contract costs, \$60,000
- c) Accounts receivable, \$760,000
- d) Construction in process, \$480,000

56. On June 1, Electronics Distribution (ED) shipped 100 TVs to TV World (TVW) on consignment. ED buys these TVs from their supplier for \$600 each and sells them to TVW for \$800. TVW then retails them for \$1,200 each. By the end of June, TV World reported that they had sold 60 of these TVs, and remitted the appropriate amount to ED. How much revenue should be recorded by ED in connection with this transaction?

- a) \$72,000
- b) \$60,000
- c) \$48,000
- d) \$36,000

57. A project was correctly accounted for under the percentage-of-completion method. At the end of the project, the Construction-in-Process account includes total debits and credits of \$3,500,000. Assuming that total gross profit of \$1,200,000 was recognized throughout the contract, total construction costs were

- a) \$4,600,000.
- b) \$3,500,000.
- c) \$2,300,000.
- d) \$2,100,000.

58. At the end of year 2, the accounting records for a multi-year construction project indicate actual costs incurred to date of \$3,200,000, and the most recent estimate of total costs of \$9,500,000. Assuming the percentage-of completion method is used, to one decimal, at the end of year 2 the project is

- a) 33.7% complete.
- b) 31.2% complete.
- c) 26.1% complete.
- d) 25.2% complete.

Use the following information for questions 59–60.

On April 1, Harmonica Corp. consigned 50 handcrafted benches to Organ Co. Harmonica's cost was \$350 per bench. Total freight costs were \$700, which were paid by Organ. On August 1, Harmonica received a cheque for \$14,100 from Organ which included the following information:

Number of units sold:	20
Expenses deducted:	

Freight:	\$700
Commission (20% of sales price)	?
Advertising	\$450
Delivery	\$290

59. Under the earnings approach, total sales were

- a) \$15,540.
- b) \$18,550.
- c) \$19,060.
- d) \$19,425.

60. The inventory of benches will be reported on whose statement of financial position and at what amount?

- a) Harmonica's statement of financial position, \$10,500
- b) Harmonica's statement of financial position, \$10,920
- c) Organ's statement of financial position \$10,500
- d) Organ's statement of financial position, \$10,920

61. Trombone Inc. entered into a contract with Bassoon Corporation, in which Trombone agreed to provide Bassoon with building supplies. Bassoon agreed to pay a total of \$18,000 at delivery. Under the contract-based view, Trombone's *net contract position* can be assumed to be

- a) \$18,000.
- b) \$9,000.
- c) \$4,500.
- d) \$ 0.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
39.	b	43.	c	47.	c	51.	a	55.	a	59.	d
40.	c	44.	b	48.	b	52.	c	56.	c	60.	b
41.	b	45.	b	49.	c	53.	d	57.	c	61.	d
42.	a	46.	d	50.	b	54.	c	58.	a		

DERIVATIONS—Computational**No. Answer Derivation**

39. b $\$300 \times [\$350 \div (\$300 + \$100)] = \$262.50$

40. c $\$350 - \$100 = \$250$

41. b Conceptual

42. a \$0

43. c
$$\frac{\$600,000}{\$600,000 + \$400,000} \times (\$1,500,000 - \$1,000,000) = \$300,000$$

$$(\$1,500,000 - \$1,060,000) - \$300,000 = \$140,000$$

44. b
$$\frac{\$1,800,000}{\$1,800,000 + \$1,200,000} \times (\$3,700,000 - \$3,000,000) = \$420,000$$

45. b $\$640,000 - \$300,000 = \$340,000$

46. d $\$850,000 - \$210,000 = \$640,000$

$$\frac{\$640,000}{\text{Total estimated cost}} \times (\$7,000,000 - \text{Total estimated cost}) = \$210,000$$

Total estimated cost = \$5,270,588
 $\$7,000,000 - \$5,270,588 = \$1,729,412$

47. c
$$\frac{\$585,000}{\$975,000} \times (\$1,650,000 - \$975,000) = \$405,000$$

$$(\$1,650,000 - \$1,005,000) - \$405,000 = \$240,000$$

No.	Answer	Derivation
48.	b	$\frac{\$200,000}{\$800,000} \times (\$1,200,000 - \$800,000) = \$100,000$
49.	c	$\$1,200,000 - \$812,500 = \$387,500$
50.	b	$\frac{\$540,000}{\$900,000} \times (\$1,250,000 - \$900,000) = \$210,000$
51.	a	$\$1,250,000 - \$875,000 = \$375,000$
52.	c	$\$2,000,000 - (\$925,000 + \$1,100,000) = (\$25,000) \text{ loss, must be recognized in current year}$
53.	d	$\$1,280,000 - \$860,000 = \$420,000$
54.	c	$\$600,000 - \$328,000 = \$272,000$
55.	a	$\$900,000 - \$760,000 = \$140,000$
56.	c	$60 \times \$800 = \$48,000$
57.	c	$\$3,500,000 - \$1,200,000 = \$2,300,000$
58.	a	$\$3,200,000 \div \$9,500,000 = 33.7\%$
59.	d	$\begin{aligned} 80\% \text{ Sales} - \$700 - \$450 - \$290 &= \$14,100 \text{ (cheque received)} \\ 80\% \text{ Sales} &= \$15,540 \\ \text{Sales} &= \$19,425 \end{aligned}$
60.	b	$(\$350 \times 30) + (\$700 \times 30 \div 50) = \$10,920$
61.	d	$\$0$

MULTIPLE CHOICE—CPA Adapted

62. According to the AcSB guidelines, the process of reporting an item in the financial statements of an entity is

- a) recognition.
- b) realization.
- c) allocation.
- d) matching.

63. Flute Construction Corp. has consistently used the percentage-of-completion method. During 2014, Flute entered into a fixed-price contract to construct an office building for \$6,000,000. Information relating to the contract is as follows:

	At December 31	
	2014	2015
Percentage of completion	15%	45%
Estimated total cost at completion	\$4,500,000	\$4,800,000
Gross profit recognized (cumulative)	300,000	720,000

Under the earnings approach, contract costs incurred during 2015 were

- a) \$1,440,000.
- b) \$1,485,000.
- c) \$1,575,000.
- d) \$2,160,000.

64. Cymbal Construction Corp. has consistently used the percentage-of-completion method. In 2014, Cymbal started work on a \$7,000,000 construction contract that was completed in 2015. The following information was taken from Cymbal's 2014 accounting records:

Billings to date	\$2,200,000
Costs incurred	2,100,000
Collections to date	1,400,000
Estimated costs to complete	4,200,000

Under the earnings approach, what amount of gross profit should Cymbal recognize in 2014 on this contract?

- a) \$700,000
- b) \$466,667
- c) \$350,000
- d) \$233,333

Use the following information to answers questions 65–66.

During 2014, Horn Corp. started a construction job with a total contract price of \$700,000. Horn has consistently used the completed contract method. The job was completed on December 15, 2015. Additional data are as follows:

	2014	2015
Actual costs incurred	\$270,000	\$305,000
Estimated remaining costs	270,000	—
Billings to date	240,000	460,000

Collections to date	200,000	480,000
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65. For 2014, what amount should Horn recognize as gross profit?

- a) \$ 0
- b) \$80,000
- c) \$95,000
- d) \$125,000

66. For 2015, what amount should Horn recognize as gross profit?

- a) \$ 0
- b) \$80,000
- c) \$95,000
- d) \$125,000

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
62.	a	63.	b	64.	d	65.	a	66.	d

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
62.	a	Conceptual
63.	b	$(\$4,800,000 \times 45\%) - (\$4,500,000 \times 15\%) = \$1,485,000$
64.	d	$\frac{\$2,100,000}{\$6,300,000} \times (\$7,000,000 - \$6,300,000) = \$233,333$
65.	a	\$0
66.	d	$\$700,000 - \$270,000 - \$305,000 = \$125,000$

EXERCISES

Ex. 6-67 Concessionary terms

Explain what concessionary terms are, and give four examples.

Solution 6-67

Concessionary terms are terms that are more favourable than normal. This is often seen when supply exceeds demand, and the buyer can negotiate a better deal than usual.

Examples include:

1. Deep discounts on selling price
2. Looser credit policy (e.g. giving the customer a longer period to pay)
3. Extended trial periods, with the sale subject to customer acceptance after the trial period
4. Seller provides ongoing or additional services that are beyond normal practice
5. Extended warranties or free warranties
6. More lenient (looser) return policies than normal

Ex. 6-68 Definitions

Provide clear, concise answers for the following:

1. Explain the conceptual difference between the earnings approach and the contract-based approach to accounting for revenues.
2. How is revenue recognized under the earnings approach?
3. How is revenue recognized under the contract-based approach?
4. How are sales accounted for in the presence of collection and measurement uncertainty?
5. What are the two main methods to account for long-term construction projects allowed under ASPE?
6. Why is it important to understand the business perspective of selling transactions?
7. Explain the term *onerous contracts* and its implications.

Solution 6-68

1. The earnings approach focuses on the earnings process itself and how value is added. The contract-based approach focuses on the creation of contractual rights and obligations that are created by sales contracts.
2. Under the earnings approach, revenue is recognized when performance is substantially complete, the transaction can be measured, and collection is reasonably assured.
3. Under the contract-based approach, the net contract position is initially recognized (through assets and corresponding liabilities) when the contract has been entered into. Revenue is subsequently recognized as the contract obligations are fulfilled.
4. In the absence of reasonable expectation of collection and/or ability to measure the related revenue, sales should not be booked.
5. The two main methods allowed under ASPE are the percentage-of-completion and the completed-contract methods.

6. The business perspective includes the physical and reciprocal nature as well as any concessionary terms of the transaction. This may impact the timing, measurement and recognition of those sales.
7. Onerous contracts are contracts that are no longer profitable to the company. These contracts should be re-measured and a loss should be recognized.

Ex. 6-69 Terminology

In the space provided at right, write the word or phrase that is defined or indicated.

- | | |
|---|----------|
| 1. A contract that is no longer profitable to the company. | 1. _____ |
| 2. An entity may have an implicit obligation even if it is not explicitly noted in the sales contract. | 2. _____ |
| 3. Sales that are comprised of several individual components. | 3. _____ |
| 4. The party acting as an agent for the seller. | 4. _____ |
| 5. The method to allocate sales prices to individual components of a sales bundle where the fair value of the undelivered item is subtracted from the overall purchase price. | 5. _____ |
| 6. The method used to account for long-term contracts that do not recognize profits before the completion of the project. | 6. _____ |
| 7. The account used in the percentage-of completion and completed contract methods to accumulate costs and recognize profits. | 7. _____ |
| 8. Cash or other assets an entity receives in return for the provision of goods or services. | 8. _____ |
| 9. The actions a company takes to add value. | 9. _____ |

Solution 6-69

1. Onerous

2. Constructive obligation
3. Bundled sales
4. Consignee
5. Residual value method
6. Completed-contract method
7. Construction in Process account
8. Consideration
9. Earnings process

Ex. 6-70 Comparison of accounting methods for long-term contracts
Compare the percentage-of-completion and completed-contract methods.

Solution 6-70

The percentage-of-completion method recognizes revenue before completion of the project. A major advantage of this method is that the contractors' revenue stream is not distorted. However, the reliance on estimates, rather than on actual numbers, is a disadvantage. This method conforms to the earnings-based view of revenue recognition.

Under the completed contract method, revenue recognition is deferred until the completion of the project. A major advantage of this method is the use of actual numbers, rather than estimates. A major disadvantage is the distortion of income, as no revenue is recognized during the contract. This method does *not* conform to the earnings-based view of revenue recognition.

Ex. 6-71 Bundled sales

Loon Inc., a software company sells new accounting software and user support bundled together. The fair value of the software is \$1,500 and the fair value of the user support is \$500. The user support is valid for a period of 12 months from the date of software purchase. To be able to compete with a competitor's offering, Loon decided to sell the bundle at a discount for \$1,800.

During its first month of sales, 100 units of this software bundle were sold at the discounted price, and expenses were \$50,000.

Instructions

- a) Calculate the sale price that should be allocated to each component of the bundle using the relative fair value method.
- b) Calculate the sale price that should be allocated to each component of the bundle using the residual value method.
- c) Assuming that the relative fair value method is used and income tax rate is 30%, calculate the net income applicable to Loon's first month of sales.

Solution 6-71

a) Relative fair value method:

Software: $\$1,500 \times [\$1,800 / (\$1,500 + \$500)] =$	\$1,350
User Support: $\$500 \times [\$1,800 / (\$1,500 + \$500)] =$	<u>450</u>
	\$1,800

b) Residual value method:

Software: $\$1,800 - \500	\$1,300
User Support: $\$1,800 - \$1,300$	<u>500</u>
	\$1,800

c) Net income calculation:

Sales ($\$1,800 \times 100$)	\$180,000
Less: Expenses	(50,000)
User Support Unearned Portion	<u>(41,250)</u>
$[(\$450 \times 100) \times 11 \div 12]$	
Income before tax	88,750
Less income tax (30%)	<u>(26,625)</u>
Net Income	<u>\$62,125</u>

Ex. 6-72 Percentage-of-completion method

Chickadee Construction was awarded a contract to construct an interchange at the junction of two major freeways in a Canadian city at a total contract price of \$10,000,000. The estimated total costs to complete the project were \$8,000,000, and it is expected to take two years.

Instructions

Using the percentage-of-completion method and the cost-to-cost basis,

- Prepare the journal entry to record construction costs of \$4,400,000 for the first year.
- Prepare the journal entry to record progress billings of \$5,000,000 for the first year.
- Prepare the journal entry to recognize the revenue and gross profit for the first year.

Solution 6-72

% complete = $4,400,000 \div 8,000,000 = 55\%$

a) Construction in Process	4,400,000	
Materials, Cash, A/P, etc.		4,400,000
b) Accounts Receivable	5,000,000	
Billings on Construction in Process		5,000,000
c) Construction Expenses	4,400,000	
Construction in Process (gross profit)	1,100,000	
Revenue from Long-term Contract ($55\% \times \$10,000,000$)		5,500,000

Ex. 6-73 Percentage-of-completion method

Finch Construction Corp. contracted to build a bridge for \$5,000,000. Construction began in 2014 and was completed in 2015. Data relating to the construction are:

	<u>2014</u>	<u>2015</u>
Costs incurred	\$1,620,000	\$1,400,000

Estimated costs to complete	1,380,000	—
-----------------------------	-----------	---

Instructions

Using the percentage-of-completion method and the cost-to-cost basis,

- How much revenue should be reported for 2014? Show your calculation.
- Prepare the journal entry to record progress billings of \$1,700,000 during 2014.
- Prepare the journal entry to record the revenue and gross profit for 2014.
- How much gross profit should be reported for 2015? Show your calculation.

Solution 6-73

- a) $\frac{\$1,620,000}{\$3,000,000} \times \$5,000,000 = \$2,700,000$
- b) Accounts Receivable..... 1,700,000
 Billings on Construction in Process 1,700,000
- c) Construction Expenses 1,620,000
 Construction in Process 1,080,000
 Revenue from Long-term Contracts..... 2,700,000
- d) Revenue \$5,000,000
 Less actual costs..... (3,020,000)
 Total gross profit 1,980,000
 Recognized in 2014 (1,080,000)
 Recognized in 2015 \$ 900,000
 OR
 Total revenue \$5,000,000
 Recognized in 2014 (2,700,000)
 Recognized in 2015 2,300,000
 Actual costs in 2015 (1,400,000)
 Gross profit in 2015 \$ 900,000

Ex. 6-74 Percentage-of-completion method

Robin Builders Ltd. contracted to build a high-rise for \$6,000,000. Construction began in 2014 and is expected to be completed in 2017. Data for 2014 and 2015 are:

	2014	2015
Costs incurred	\$900,000	\$1,700,000
Estimated costs to complete	3,600,000	2,400,000

Instructions

Using the percentage-of-completion method and the cost-to-cost basis,

- How much gross profit should be reported for 2014? Show your calculation.
- How much gross profit should be reported for 2015? Show your calculation.
- Prepare the journal entry to record the revenue and gross profit for 2015.

Solution 6-74

- a) \$900,000

$$\frac{\text{_____}}{\$4,500,000} \times (\$6,000,000 - \$4,500,000) = \$300,000$$

b) $\frac{\$2,700,000}{\$5,000,000} \times (\$6,000,000 - \$5,000,000) = \$520,000$

Less 2014 gross profit	<u>(300,000)</u>
Gross profit in 2015	\$220,000

c) Construction in Process (gross profit).....	220,000	
Construction Expenses	1,700,000	
Revenue from Long-term Contracts.....		1,920,000

Ex. 6-75 Percentage-of-completion and completed-contract methods

On February 1, 2014, Owl Contractors agreed to construct a building at a total contract price of \$3,000,000. Owl estimated total construction costs would be \$2,000,000 and the project would be finished in 2016. Information relating to the costs and billings for this contract is as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total costs incurred to date	\$ 750,000	\$1,320,000	\$2,300,000
Estimated costs to complete	1,250,000	880,000	-0-
Customer billings to date	1,100,000	2,000,000	3,000,000
Collections to date	1,000,000	1,750,000	2,950,000

Instructions

Using the percentage-of-completion the completed-contract methods, calculate the gross profit that should be reported for 2014, 2015, and 2016. Fill in the correct amounts on the following schedule:

	<u>Percentage-of-Completion</u>		<u>Completed-Contract</u>
	<u>Gross Profit</u>		<u>Gross Profit</u>
2014	_____	2014	_____
2015	_____	2015	_____
2016	_____	2016	_____

Solution 6-75

	<u>Percentage-of-Completion</u>		<u>Completed-Contract</u>
	<u>Gross Profit</u>		<u>Gross Profit</u>
2014	\$375,000 ^a	2014	—
2015	\$105,000 ^b	2015	—
2016	\$220,000 ^c	2016	\$700,000 ^d

a $\frac{\$750,000}{\$2,000,000} \times \$1,000,000 = \$375,000$

b $\frac{\$1,320,000}{\$2,200,000} \times \$800,000 = \$480,000$

	Less 2014 gross profit	(375,000)
	2015 gross profit	\$105,000
^c	Total revenue	\$3,000,000
	Total costs	<u>2,300,000</u>
	Total gross profit	700,000
	Recognized to date	<u>(480,000)</u>
	2016 gross profit	\$ 220,000
^d	Total revenue	\$3,000,000
	Total costs	<u>2,300,000</u>
	Total gross profit	\$ 700,000

Ex. 6-76 Consignment sale

In 2014, the following transaction occurred between Seagull Wholesale Corp. (consignor) and Bobolink Stores (consignee):

On March 2, 2014 Seagull shipped merchandise costing \$52,000 to Bobolink. Seagull paid \$4,000 for freight and Bobolink paid \$3,000 for advertising (to be reimbursed by Seagull). By the end of the third quarter of 2014 (September 30, 2014), Bobolink advised Seagull that all the merchandise has been sold for \$70,000, and forwarded the proceeds (net of a 15% commission and the outlay for advertising) to Seagull.

Instructions

- Prepare all entries for Bobolink to account for this transaction.
- Prepare all entries for Seagull to account for this transaction.

Solution 6-76a) Bobolink

Receivable from Consignor	3,000	
Cash		3,000
To set up receivable for advertising		
Cash	70,000	
Payable to Consignor		70,000
To record sale		
Payable to Consignor	70,000	
Receivable from Consignor		3,000
Commission Revenue*		10,500
*\$70,000 x 15% = \$10,500		
Cash		56,500
Remittance to consignor		

b) Seagull

Inventory on Consignment	52,000	
Merchandise Inventory		52,000
Shipment of consigned merchandise		

Inventory on Consignment	4,000	
Cash		4,000
Payment of freight costs		
Cash	56,500	
Advertising Expense	3,000	
Commission Expense	10,500	
Revenue from Consignment Sales.....		70,000
Remittance from consignee		
Cost of Goods Sold (52,000 + 4,000)	56,000	
Inventory on Consignment		56,000
Cost of sales for consignment sales		

Ex. 6-77 Reporting of gross or net revenues

Discuss three factors to consider in determining whether gross or net revenues should be reported on the income statement.

Solution 6-77

Factors to consider:

1. Is the company acting as principal or are they acting as agent or broker? If as principal, this would support reporting gross revenue; if as agent/broker, this would support reporting net revenue.
2. Is the company taking title to the goods being sold? Taking title supports reporting gross revenue.
3. Who has the risks and rewards of ownership of the goods being sold? Having the risks and rewards supports reporting gross revenue.

Ex. 6-78 Contract-based approach

In January 2014, McKay Construction Corp. contracted to construct a building for \$6,000,000. Construction started in early 2014 and was completed in 2015. The following additional information is available:

	<u>2014</u>	<u>2015</u>
Costs incurred	\$2,430,000	\$2,700,000
Estimated costs to complete	2,600,000	—
Collections during the year	2,400,000	3,600,000

McKay uses the percentage-of-completion method.

Instructions

Under the *contract-based* approach,

- a) How much revenue should McKay report for 2014 and 2015?
- b) Prepare all journal entries for 2014 and 2015 for this contract.

Solution 6-78

a)

2014: $[\$2,430,000 \div (\$2,430,000 + \$2,600,000)] \times \$6,000,000 = \underline{\underline{\$2,898,608}}$

2015: $[(\$2,430,000 + \$2,700,000) \div (\$2,430,000 + 2,700,000 + \$0) \times \$6,000,000] - \$2,898,608$
 $= \underline{\underline{\$3,101,392}}$

b)

2014:

Contract asset.....	6,000,000	
Contract liability.....		6,000,000
To record contract rights and obligations – January 2014		

Contract liability.....	2,430,000	
Materials, Cash, Payables etc.....		2,430,000
To record construction cost – 2014		

Cash	2,400,000	
Contract asset.....		2,400,000
To record collections – 2014		

Construction expenses.....	2,430,000	
Contract liability.....		2,430,000
To recognize revenue and gross profit – 2014		

Contract asset.....	2,898,608	
Revenue from long-term contract.....		2,898,608

2015:

Contract liability.....	2,700,000	
Materials, Cash, Payables etc.....		2,700,000
To record construction cost – 2015		

Cash	3,600,000	
Contract asset.....		3,600,000
To record collections – 2015		

Construction expenses.....	2,700,000	
Contract liability		2,700,000
To recognize revenue and gross profit – 2015		

Contract asset.....	3,101,392	
Revenue from long-term contract.....		3,101,392

PROBLEMS

Pr. 6-79 Revenue recognition

In October 2014, Blackbird Inc. signed a contract for \$30,000 with the BH Law office to provide legal services for Blackbird Inc. for the remainder of 2014 and all of 2015. Assume that BH can reliably estimate future direct costs associated with the contract. The following services were performed based on the estimate by BH:

	<u>Direct Costs</u>	<u>Date Completed</u>
Research potential lawsuit	\$2,500	December, 2014
Prepare and file documents	7,500	March, 2015
Serve as Blackbird counsel during legal proceedings	7,500	October 2015

Instructions

Under the earnings approach,

- When should BH recognize revenue in this situation? Explain.
- Prepare journal entries to recognize revenues related to this contract on BH's books.

Solution 6-79

- BH could use a method of proportional revenue recognition, where some revenue is recognized when each service is rendered. This is appropriate because more than one performance act is required. Service revenue should be recognized in proportion to the costs for each act.

b)		
Cash	30,000	
Unearned service revenue		30,000
October 2014, to record the lump sum advance for services		
Unearned service revenue	4,286	
Service revenue		4,286*
December 2014, to recognize earned revenue for research completed		
*Total estimated direct costs:		
\$2,500 + \$7,500 + \$7,500 = \$17,500		
Service revenue recognized: $(\$2,500 \div \$17,500) \times \$30,000 = \$4,286$ (rounded)		
Unearned service revenue	12,857	
Service revenue		12,857*
March 2015, to recognize earned revenue for preparation and filing of documents		
*Service revenue recognized: $(\$7,500 \div \$17,500) \times \$30,000 = \$12,857$		
Unearned service revenue	12,857	
Service revenue		12,857*
October 2015, to recognize earned revenue for serving as counsel		
*Service revenue recognized: $(\$7,500 \div \$17,500) \times \$30,000 = \$12,857$		

In each case above, when revenues are recognized, direct costs associated with revenue recognized are expensed as incurred.

Pr. 6-80 Revenue recognition

Below are several independent situations that occurred during 2014 for Lark Corporation:

Situation 1:

Lark entered into a consignment arrangement with Sorel Corporation. Sorel will sell the goods and retain a commission.

Situation 2:

Lark agreed to provide consulting services to Dodo Company, a small company with a questionable credit rating. The term of the contract is 3 years.

Situation 3:

Lark sold equipment that includes a one-year warranty. The individual fair values of the equipment and warranty components are readily available.

Instructions

For each situation, explain how revenue should be recognized under the earnings approach. Be sure to include your reasoning.

Solution 6-80Situation 1:

As the risks and rewards presumably remain with the seller (Lark), and this appears to be a consignment situation, an actual sale does not occur until the goods are sold to a third party. As a result, revenue should not be recognized before that time. The commission, as well as any other related expenses, would also be recognized at that time.

Situation 2:

Assuming Lark can ascertain any direct costs relating to the contract, measurement does not appear to be at issue. However, the customer's credit-worthiness is a concern, and may require that revenue recognition be delayed until payment is received.

Situation 3:

Assuming collectibility and measurement are not an issue, Lark should recognize all revenues that are attributable to the equipment components. The recognition of revenues related to the warranty components would be delayed until earned (as the service is provided).

Pr. 6-81 Completed-contract method

Mockingbird Construction Ltd. reported the following construction activity in 2014, their first year of operations.

Contract	Total Contract Price	Billings through 12/31/14	Cash collections through 12/31/14	Costs Incurred through 12/31/14	Estimated Additional Costs to Complete
X	\$260,000	\$170,000	\$155,000	\$182,000	\$ 63,000
Y	325,000	130,000	130,000	100,000	247,000
Z	388,000	388,000	316,000	252,000	-0-
	<u>\$973,000</u>	<u>\$688,000</u>	<u>\$601,000</u>	<u>\$534,000</u>	<u>\$310,000</u>

Each of the above contracts is with a different customer, and any work remaining at December 31, 2014 is expected to be completed in 2015.

Instructions

Prepare a partial income statement and a partial statement of financial position to indicate how the above contract information would be reported. Mockingbird uses the completed-contract method.

Solution 6-81

Mockingbird Construction Ltd.
Income Statement
For the Year ended December 31, 2014

Revenue from long-term contracts (contract Z)	\$388,000
Cost of construction (contract Z)	<u>252,000</u>
Gross profit	\$136,000
Provision for loss (contract Y)*	22,000
*Contract costs through 12/31/10	\$100,000
Estimated costs to complete.....	<u>247,000</u>
Total estimated costs	347,000
Total contract price.....	<u>325,000</u>
Loss recognized in 2014	<u>\$ 22,000</u>

Mockingbird Construction Ltd.
Statement of Financial Position
December 31, 2014

Current assets:	
Accounts receivable (\$688,000 – \$601,000)	\$ 87,000
Inventories	
Construction in process (contract X).....	\$182,000
Less: Billings	<u>170,000</u>
Unbilled contract costs	12,000
Current liabilities:	
Billings (\$130,000) in excess of contract costs (\$100,000)	30,000
Estimated loss from long-term contracts	22,000

Pr. 6-82 Long-term construction project accounting

Plover Construction Inc. specializes in the construction of commercial and industrial buildings. The company is experienced in bidding on long-term construction projects of this type, with the typical project lasting from fifteen to twenty-four months. Plover uses the percentage-of-completion method. Progress toward completion is measured on a cost to cost basis. Plover began work on a contract at the beginning of 2014. Data for 2014 follow:

Contract price	\$2,000,000
Estimated costs	
Labour	\$425,000
Materials and subcontracts.....	875,000
Indirect costs	<u>200,000</u>
Estimated gross profit	<u>\$ 500,000</u>

At the end of 2014, the following was the actual status of the contract:

Billings to date.....		\$1,115,000
Costs incurred to date		
Labour	\$207,000	
Materials and subcontracts.....	519,000	
Indirect costs	<u>75,000</u>	801,000
Latest forecast of total costs.....		\$1,500,000

It should be noted that included in the above costs incurred to date were standard electrical and mechanical materials stored on the job site, but not yet installed, costing \$51,000. These costs should not be considered in the costs incurred to date.

Instructions

- Calculate the percentage of completion on the contract at the end of 2014.
- Calculate the gross profit that would be reported on this contract for 2014.
- Prepare the journal entry to record the revenue and gross profit for 2014 on Plover's books.
- Indicate the account(s) and the amount(s) that would be shown on Plover's statement of financial position at the end of 2014 related to its construction accounts. Also show how these items would be classified on the statement of financial position. Billings collected during the year were \$980,000.
- Assume, instead of \$1,500,000, the latest forecast of total costs at the end of 2014 was \$2,050,000. How much income (loss) would Plover then report for the year 2014?

Solution 6-82

a) Costs to date	\$801,000
Less materials on job site	<u>(51,000)</u>
	<u>\$750,000</u>

Costs Incurred to Date
 _____ = Percentage of Completion

Total Estimated Costs

\$750,000
 _____ = 50%
 \$1,500,000

b) $50\% \times \$2,000,000 =$	\$1,000,000
Costs incurred	<u>750,000</u>
Gross profit	<u>\$ 250,000</u>

c) Construction Expense	750,000	
Construction in Process (gross profit).....	250,000	
Revenue from Long-term Project.....		1,000,000

d) <u>Current Asset</u>		
Accounts receivable	\$135,000	(\$1,115,000 – \$980,000)
<u>Current Liability</u>		
Billings in excess of contract costs and recognized profit	\$115,000	(\$1,115,000 – \$1,000,000)

- Total loss reported in 2014

Contract price	\$2,000,000
Estimated cost to complete	<u>2,050,000</u>
Amount of loss to be reported	<u>\$ (50,000)</u>

Pr. 6-83 Accounting for long-term construction contracts

The board of directors of Snowbird Construction Corp. is meeting to choose between the completed-contract method and the percentage-of-completion method of accounting for long-term contracts in the company's financial statements. You have been engaged to assist Snowbird's controller in the preparation of a presentation to be given at the board meeting. The controller provides you with the following information:

1. Snowbird commenced doing business on January 1, 2014.
2. Construction activities for the year ended December 31, 2014, were as follows:

<u>Project</u>	<u>Total contract price</u>	<u>Billings through 12/31/14</u>	<u>Cash collections through 12/31/14</u>
A	\$ 615,000	\$ 340,000	\$ 310,000
B	450,000	135,000	135,000
C	475,000	475,000	390,000
D	600,000	240,000	160,000
E	<u>480,000</u>	<u>400,000</u>	<u>400,000</u>
	<u>\$2,620,000</u>	<u>\$1,590,000</u>	<u>\$1,395,000</u>

<u>Project</u>	<u>Contract costs incurred through 12/31/14</u>	<u>Estimated additional costs to complete contracts</u>
A	\$ 510,000	\$120,000
B	130,000	260,000
C	350,000	-0-
D	370,000	290,000
E	<u>320,000</u>	<u>80,000</u>
	<u>\$1,680,000</u>	<u>\$750,000</u>

3. Each contract is with a different customer.
4. Any work remaining to be done on the contracts is expected to be completed in 2015.

Instructions

- a) Prepare a schedule by project, calculating the amount of gross profit (or loss) for the 2014 calendar year, which would be reported under:
 - (1) The completed-contract method.
 - (2) The percentage-of-completion method (based on estimated costs).
- b) Prepare the general journal entry to record revenue and gross profit on project B for 2014, assuming that the percentage-of-completion method is used.
- c) Indicate the balances that would appear in the statement of financial position at December 31, 2014 for the following accounts for Project D, assuming that the percentage-of-completion method is used.

Accounts Receivable

Billings on Construction in Process

Construction in Process

- d) How would the balances in the accounts discussed in part c) change (if at all) for Project D, if the completed-contract method is used?

Solution 6-83

- a) (1) and (2)

Projects	A	B	C	D	E
Contract price	<u>\$615,000</u>	<u>\$450,000</u>	<u>\$475,000</u>	<u>\$600,000</u>	<u>\$480,000</u>
Contract costs incurred	510,000	130,000	350,000	370,000	320,000
Additional costs to complete	<u>120,000</u>	<u>260,000</u>	<u>-0-</u>	<u>290,000</u>	<u>80,000</u>
Total cost	630,000	390,000	350,000	660,000	400,000
Total gross profit (loss)	<u>\$ (15,000)</u>	<u>\$ 60,000</u>	<u>\$125,000</u>	<u>\$ (60,000)</u>	<u>\$ 80,000</u>

The amount reported as gross profit (loss) under the completed-contract method for 2014 is:

Project A	\$(15,000)
B	-0-
C	125,000
D	(60,000)
E	-0-
	<u>\$ 50,000</u>

The amount reported as gross profit (loss) under the percentage-of-completion method for 2014 is:

Project A	\$(15,000)	
B	20,000	$\$60,000 \times (\$130,000 \div \$390,000)$
C	125,000	
D	(60,000)	
E	<u>64,000</u>	$\$80,000 \times (\$320,000 \div \$400,000)$
	<u>\$134,000</u>	

b)	Construction in Process	20,000	
	Construction Expenses	130,000	
	Revenue from Long-term Contracts.....		150,000

c)	Billings	\$240,000
	Cash collections	<u>160,000</u>
	Accounts receivable	<u>\$ 80,000</u>
	Billings on Construction in Process	\$240,000
	Costs incurred	\$370,000
	Loss reported	<u>(60,000)</u>
	Construction in process	<u>\$310,000</u>

- d) The account balances would be the same.

Pr. 6-84 Consignment sales

On July 2, Hummingbird Corp. ships merchandise costing \$460,000 on consignment to Thrush Stores. Hummingbird pays the freight of \$10,000. Upon sale, Thrush Stores will receive a 12% commission and a 6% allowance to offset its advertising expenses. At the end of the month,

Thrush notifies Hummingbird that 50% of the merchandise has been sold for \$560,000.

Instructions

Record the journal entries required by the two companies to account for this consignment.

Solution 6-84

	<u>Hummingbird</u>	<u>Thrush</u>
a) On shipment		
Inventory on Consignment	460,000	
Merchandise Inventory		460,000
b) Payment of freight		
Inventory on Consignment	10,000	
Cash		10,000
c) Sales of consigned merchandise		
		Cash 560,000
		Payable to Consignor 560,000
d) Notification of sales and expenses and remittance of cash		
Cash	459,200	Payable To Consignor 560,000
Advertising Expense	33,600	Advertising Expense 33,600
Commission Expense	67,200	Commission Revenue 67,200
Revenue from		Cash 459,200
Consignment Sales	560,000	
Cost of Goods Sold	235,000	
Inventory on Consignment	235,000	
$0.50 \times (460,000 + 10,000) = 235,000$		
$\$560,000 \times 12\% = \$67,200$		
$\$560,000 \times 6\% = \$33,600$		
$\$560,000 - \$33,600 - \$67,200 = \$459,200$		

Pr. 6-85 Percentage-of-completion and completed-contract methods

On January 1, 2014, Auk Construction Ltd. started a construction project for \$4,500,000.

Relevant data for 2014 and 2015 are as follows:

	<u>2014</u>	<u>2015</u>
Current year construction costs	\$ 3,300,000	\$ 620,000
Estimated remaining costs to complete	600,000	-0-
Current year billings	3,100,000	1,400,000
Current year collections	3,000,000	1,500,000

Instructions

Calculate the following amounts for each method:

	<u>Completed Contract</u>		<u>Percentage-of-Completion</u>	
	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>
a) Gross Profit	\$	\$	\$	\$

b) Construction in progress year-end balance	\$	\$	\$	\$
c) Costs in excess of billings (Billings in excess of costs)	\$	\$	\$	\$

Solution 6-85

	Completed Contract		Percentage-of- Completion	
	<u>2014</u>	<u>2015</u>	<u>2014</u>	<u>2015</u>
a) Gross Profit	-0-	580,000	507,692	72,308
b) Construction in progress year-end balance	3,300,000	-0-	3,807,692	-0-
c) Costs in excess of billings (Billings in excess of costs)	200,000	-0-	707,692	-0-

Calculations:

$$4,500,000 - 3,300,000 - 620,000 = \underline{580,000}$$

$$3,300,000 - 3,100,000 = \underline{200,000}$$

$$(4,500,000 - 3,300,000 - 600,000) \times (3,300,000 \div (3,300,000 + 600,000)) = \underline{507,692}$$

$$3,300,000 + 507,692 = \underline{3,807,692}$$

$$3,807,692 - 3,100,000 = \underline{707,692}$$

$$[(4,500,000 - 3,300,000 - 620,000) \times [(3,300,000 + 620,000) \div (3,300,000 + 620,000)] - 507,692 = \underline{72,308}$$

Pr.6-86 Percentage-of-completion and completed-contract methods

On June 15, 2014, Sparrow Construction signed a \$360,000 contract to build a small building. Sparrow estimated that the total cost would be \$320,000. Construction started immediately because the required completion date was August 31, 2015. Sparrow's relevant data relating to this construction project were as follows:

	<u>2014</u>	<u>2015</u>
Actual costs incurred	\$ 120,000	\$204,000
Estimated costs to complete	\$ 200,000	-0-
Progress billings	112,000	248,000
Collections	110,000	250,000

Instructions

Calculate how much gross profit that Sparrow should recognize each year, assuming:

<u>Method Used</u>	<u>For 2014</u>	<u>For 2015</u>
a) Completed contract		
b) Percentage-of-completion		

Solution 6-86

<u>Method Used</u>	<u>For 2014</u>	<u>For 2015</u>
a) Completed contract	-0-	\$ 36,000
b) Percentage-of-completion	\$15,000*	\$21,000**

$$*(360,000 - \$320,000) \times 120,000 \div 320,000 = \$15,000$$

$$**\$36,000 - \$15,000 = \$21,000$$

Pr. 6-87 Long-term contract (contract-based approach)

On January 1, 2014, Cowbird Corp., a management consulting firm, entered into a contract with Railbird Company to provide advisory services over a four-year period. The contract price was \$4,000,000 and was to be paid in four equal annual payments at the end of each year.

Cowbird's expenses relating to this contract were \$650,000, \$730,000, \$780,000 and \$710,000 for 2014-2017. Collectibility was reasonably assured throughout the duration of the contract and measurement uncertainties were not an issue.

Instructions

Using the contract-based revenue recognition model, prepare journal entries for all four years.

Solution 6-87

	2014		2015		2016		2017	
	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit
<u>To record contract rights and obligations:</u>								
Contract asset	4,000,000							
Contract liability		4,000,000						
<u>To record contract expenses:</u>								
Contract liability	650,000		730,000		780,000		710,000	
Materials, Cash, Payables etc.		650,000		730,000		780,000		710,000
<u>To record collections:</u>								
Cash	1,000,000		1,000,000		1,000,000		1,000,000	
Contract asset		1,000,000		1,000,000		1,000,000		1,000,000
<u>To recognize revenue and gross profit:</u>								
Expenses	650,000		730,000		780,000		710,000	
Contract liability		650,000		730,000		780,000		710,000
Contract asset	1,000,000		1,000,000		1,000,000		1,000,000	
Revenue from long-term contract		1,000,000		1,000,000		1,000,000		1,000,000

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CHAPTER 7

CASH AND RECEIVABLES

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	10.	4	M	19.	5	E	28.	7	M
2.	1	E	11.	4	M	20.	5	E	29.	7	M
3.	2	M	12.	4	E	21.	5	M	30.	8	E
4.	2	E	13.	4	E	22.	5	M	31.	8	E
5.	2	E	14.	4	E	23.	5	M	32.	9	E
6.	2	E	15.	5	E	24.	6	M	33.	9	E
7.	3	E	16.	5	E	25.	7	E	*34.	11	E
8.	4	E	17.	5	E	26.	7	E	*35.	11	M
9.	4	E	18.	5	M	27.	7	M	*36.	11	M
Multiple Choice–Computational											
37.	4	M	41.	5	H	45.	8	M	*49.	11	E
38.	4	M	42.	6	M	46.	8	H	*50.	11	M
39.	4	M	43.	7	M	47.	8	M	*51.	11	H
40.	5	H	44.	7	M	48.	8	M	*52.	11	M
Multiple Choice–CPA Adapted											
53.	3	M	55.	5	H	57.	5	E	*59.	11	H
54.	5	H	56.	5	M	*58.	11	M			
Exercises											
60.	1-10	M	63.	5	E	66.	8	M			
61.	1-8	M	64.	7	H	67.	9	M			
62.	2	M	65.	8	M	*68.	11	M			
Problems											
69.	5	M	71.	7	M	73.	8	M	75.	8	M
70.	7	H	72.	8	M	74.	8	M	*76.	11	H

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	2.	MC	60.	Ex	61.	Ex				
Learning Objective 2											
3.	MC	5.	MC	60.	Ex	62.	Ex				
4.	MC	6.	MC	61.	Ex						
Learning Objective 3											
7.	MC	53.	MC	60.	Ex	61.	Ex				
Learning Objective 4											
8.	MC	10.	MC	12.	MC	14.	MC	38.	MC	60.	Ex
9.	MC	11.	MC	13.	MC	37.	MC	39.	MC	61.	Ex
Learning Objective 5											
15.	MC	19.	MC	23.	MC	55.	MC	61.	Ex		
16.	MC	20.	MC	40.	MC	56.	MC	63.	Ex		
17.	MC	21.	MC	41.	MC	57.	MC	69.	Pr		
18.	MC	22.	MC	54.	MC	60.	Ex				
Learning Objective 6											
24.	MC	42.	MC	60.	Ex	61.	Ex				
Learning Objective 7											
25.	MC	27.	MC	29.	MC	44.	MC	61.	Ex	70.	Pr
26.	MC	28.	MC	43.	MC	60.	Ex	64.	Ex	71.	Pr
Learning Objective 8											
30.	MC	46.	MC	60.	Ex	66.	Ex	74.	Pr		
31.	MC	47.	MC	61.	Ex	72.	Pr	75.	Pr		
45.	MC	48.	MC	65.	Ex	73.	Pr				
Learning Objective 9											
32.	MC	33.	MC	60.	Ex	*60.	MC	67.	Ex		
Learning Objective 10											
60.	Ex										
Learning Objective 11											
*34.	MC	*36.	MC	*50.	MC	*52.	MC	*59.	MC	*76.	Pr
*35.	MC	*49.	MC	*51.	MC	*58.	MC	*68.	Ex		

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. Understand cash and accounts receivable from a business perspective. Companies often have a significant amount of accounts receivable, which requires time and effort to manage and control. Companies strive to ensure that their collection policy is restrictive enough to minimize large losses in the form of uncollectible accounts receivable, while not being so restrictive that it interferes with the ability to attract new customers. Typical accounts receivable related categories include trade receivables, loans receivable, and nontrade receivables (including items like interest receivable and amounts due from officers and advances to employees).

2. Define financial assets, and identify items that are considered cash and cash equivalents and how they are reported. Financial assets are a major type of asset defined as cash, a contractual right to receive cash or another financial asset, an equity holding in another company, or a contractual right to exchange financial instruments under potentially favourable conditions. To be reported as cash, an asset must be readily available to pay current obligations and not have any contractual restrictions that would limit how it can be used in satisfying debts. Cash consists of coins, currency, and available funds on deposit at a bank. Negotiable instruments such as money orders, certified cheques, cashier's cheques, personal cheques, and bank drafts are also viewed as cash. Savings accounts are usually classified as cash. Cash equivalents include highly liquid short-term investments (that is, those maturing three months or less from the date of purchase) that can be exchanged for known amounts of cash and have an insignificant chance of changing in value. Examples include treasury bills, commercial paper, and money-market funds. In certain circumstances, temporary bank overdrafts may be deducted in determining the balance of cash and cash equivalents.

Cash is reported as a current asset in the statement of financial position, with foreign currency balances reported at their Canadian dollar equivalent at the date of the statement of financial position. The reporting of other related items is as follows: (1) Restricted cash: Legally restricted deposits that are held as compensating balances against short-term borrowing are stated separately in Current Assets. Restricted deposits held against long-term borrowing arrangements are separately classified in non-current assets either in Investments or Other Assets. (2) Bank overdrafts: These are reported in the Current Liabilities section and may be added to the amount reported as accounts payable. (3) Cash equivalents: This item is often reported together with cash as "cash and cash equivalents".

3. Define receivables and identify the different types of receivables from an accounting perspective. Receivables are claims held against customers and others for money, goods, or services. Most receivables are financial assets. The receivables are described in the following ways: (1) current or non-current; (2) trade or nontrade; and (3) accounts receivable or notes or loans receivable.

4. Account for and explain the accounting issues related to the recognition and measurement of accounts receivable. The entity becomes a party to the contractual provisions of the accounts receivable financial instrument only when it has a legal claim to receive cash or other financial assets. Therefore the timing of recognition of accounts receivable is intertwined with the timing of recognition of revenue as was discussed in Chapter 6. For most companies when the sale is recognized, either cash is received (realized) or an account receivable is recognized.

Two issues that may complicate the measurement of accounts receivable are (1) the availability of discounts (trade and cash discounts) and (2) the length of time between the sale and the payment due dates (the interest element). Ideally, receivables should be measured initially at their fair value, which is their present value (discounted value of the cash to be received in the future). Receivables that are created by normal business transactions and are due in the short term are excluded from present value considerations.

5. Account for and explain the accounting issues related to the impairment in value of accounts receivable. Short-term receivables are reported at their net realizable value—the net amount that is expected to be received in cash, which is not necessarily the amount that is legally receivable. Determining net realizable value requires estimating uncollectible receivables and any future returns or allowances and discounts that are expected to be taken. The adjustments to the asset account also affect the income statement amounts of bad debt expense, sales returns and allowances, and sales discounts. The assessment of impairment is usually based on an aged accounts receivable report, with higher percentages of uncollectible accounts indicated for older amounts outstanding. Even if a company estimates bad debt expense each period as a percentage of sales, the accounts receivable at the date of the statement of financial position are analyzed to ensure the balance in the allowance account is appropriate.

6. Account for and explain the accounting issues related to the recognition and measurement of short-term notes and loans receivable. The accounting issues related to short-term notes receivable are identical to those of accounts receivable. However, because notes always contain an interest element, interest income must be properly recognized. Notes receivable either bear interest on the face amount (interest-bearing) or have an interest element that is the difference between the amount lent and the maturity value (non-interest-bearing).

7. Account for and explain the accounting issues related to the recognition and measurement of long-term notes and loans receivable. Long-term notes and loans receivable are recognized initially at their fair value (the present value of the future cash flows) and subsequently at their amortized cost. Transaction costs are capitalized. This requires amortizing any discount if the item was issued at less than its face value, or any premium if it was issued for an amount greater than its face value, using the effective interest method. The straight-line method may be used under ASPE. Amortization of the discount (or premium) results in a reduction of (or increase in) interest income below (or above) the cash amount received.

8. Account for and explain the basic accounting issues related to the derecognition of receivables. To accelerate the receipt of cash from receivables, the owner may transfer the receivables to another entity for cash. The transfer of receivables to a third party for cash may be done in one of two ways: (1) Secured borrowing: the creditor requires the debtor to designate or pledge receivables as security for the loan. (2) Sale (factoring or securitization) of receivables: Factors are finance companies or banks that buy receivables from businesses and then collect the remittances directly from the customers. Securitization is the transfer of receivables to a special purpose entity that is mainly financed by highly rated debt instruments. In many cases, transferors have some continuing involvement with the receivables they sell. A financial components approach is used to record this type of transaction: this approach breaks the receivables down into a variety of asset and liability components, and the sold components are derecognized and accounted for separately from the retained ones.

9. Explain how receivables and loans are reported and analyzed. Disclosure of receivables requires that valuation accounts be appropriately offset against receivables, that the receivables be appropriately classified as current or noncurrent, and that pledged or designated receivables be identified. As financial instruments, specific disclosures are required for receivables so that users can determine their significance to the company's financial position and performance and can assess the nature and extent of associated risks and how these risks are managed and measured. Private entities require less disclosure than those reporting under IFRS. Receivables are analyzed in terms of their turnover and age (number of days outstanding), and in terms of relative changes in the related sales, receivables, and allowance accounts.

10. Identify differences in accounting between accounting standards for private enterprises (ASPE) and IFRS, and what changes are expected in the near future. The two sets of standards are very similar, with minor differences relating to what is included in cash equivalents. ASPE does not require use of the effective interest method, whereas IFRS does for financial asset investments that are not held for trading purposes. Impairment provisions and derecognition of financial assets are two issues that remain under study by IFRS; the eventual resolution may generate additional differences in the near future.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Organizations with significant receivables
b	2.	Management of accounts receivable
d	3.	Definition of financial asset
a	4.	Identification of cash item
d	5.	Classification of bank overdraft
c	6.	Compensating balance
d	7.	Classification of dividends and interest receivable
b	8.	Standards for recognition and measurement of accounts receivable
c	9.	Trade discounts
d	10.	Net method of recording receivables
a	11.	Gross method of recording receivables
b	12.	Classification of Sales Returns and Allowances
a	13.	Non-recognition of interest element
c	14.	Valuation of short-term receivables
c	15.	Definition of credit risk
d	16.	Identification of impaired receivables
b	17.	Classification of allowance for doubtful accounts
c	18.	Write-off of receivables
a	19.	Bad debts and the matching concept
b	20.	Direct write-off method
c	21.	Effect of write-off entry
d	22.	Collection of a previously written off account receivable
a	23.	Relation of bad debts expense to accounts receivable
c	24.	Notes receivable
b	25.	Amortization methods allowed under IFRS
c	26.	Straight-line method of amortization
c	27.	Valuation of notes receivable
b	28.	Note issued at less than face value
a	29.	Note issued above face value
b	30.	Receivables used as collateral
d	31.	Factoring of receivables
d	32.	Accounts receivable turnover ratio
b	33.	Liquidity of accounts receivable
c	*34.	Purpose of Cash Over & Short account
c	*35.	Bank reconciliation journal entries
b	*36.	Treatment of bank error on bank reconciliation

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational

Answer	No.	Description
b	37.	Recording of receivables using the net method
c	38.	Recording of receivables using the gross method
b	39.	Use of the net method when discount is taken
d	40.	Calculation of net realizable value of accounts receivable
b	41.	Calculation of bad debt expense using aging of receivables
b	42.	Calculation of implicit interest rate for zero-interest bearing note
c	43.	Recognition of interest income in the first year
c	44.	Recognition of interest income in subsequent year
c	45.	Calculation of cash proceeds from transfer of receivables
c	46.	Entry to record collection of assigned receivables
b	47.	Factoring receivables without recourse
c	48.	Factoring receivables with recourse
d	*49.	Entry to replenish petty cash
a	*50.	Calculation of correct cash balance
b	*51.	Calculation of correct cash balance
c	*52.	Calculation of correct cash balance

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
b	53.	Calculation of current net receivables
d	54.	Calculation of bad debt expense
c	55.	Calculation of bad debt expense
a	56.	Calculation of actual bad debts written off
b	57.	Calculation of Allowance for Doubtful Accounts balance
c	*58.	Calculation of correct cash balance
a	*59.	Calculation of correct cash balance

*This topic is dealt with in an Appendix to the chapter.

EXERCISES

Item	Description
7-60	Definitions
7-61	Terminology
7-62	Reporting of cash
7-63	Entries for bad debt expense
7-64	Note with fair value not equal to cash consideration
7-65	Accounts receivable assigned
7-66	Sales of receivables without recourse
7-67	Accounts receivable analysis and securitization
*7-68	Reconciliation of cash account

PROBLEMS

Item	Description
7-69	Entries for bad debt expense
7-70	Amortization of discount under the straight-line and effective interest methods
7-71	Note with fair value not equal to cash consideration
7-72	Accounts receivable assigned
7-73	Factoring accounts receivable
7-74	Reasons for selling receivables
7-75	Secured borrowings vs factoring of receivables
*7-76	Bank reconciliation

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. Which of the following types of organizations would be most likely to have a significant amount of accounts receivable?
 - a) retailers and wholesalers
 - b) retailers and manufacturers
 - c) manufacturers and wholesalers
 - d) only retailers

2. Which of the following actions would NOT be considered good management of accounts receivable?
 - a) assessing creditworthiness of new or potential customers
 - b) very loose or flexible credit terms to encourage sales
 - c) offering discounts to encourage faster payment
 - d) regular aged receivables analysis

3. Which of the following is NOT a financial asset?
 - a) a contractual right to receive cash or other financial asset from another party
 - b) an equity instrument of another entity
 - c) a contractual right to exchange financial instruments with another party under potentially favourable conditions
 - d) a contractual right to pay cash or another financial asset to another party

4. Which of the following is considered as “cash” for reporting purposes?
 - a) money market chequing accounts
 - b) certificates of deposit (CDs)
 - c) travel advances to employees
 - d) postdated cheques

5. Bank overdrafts are generally reported as
 - a) a current asset.
 - b) a contra account.
 - c) a non-current asset.
 - d) a current liability.

6. The portion of any demand deposit that a customer keeps as support for its existing or maturing obligations is called a(n)
 - a) account receivable.
 - b) bank overdraft.
 - c) compensating balance.
 - d) restricted cash.

7. Dividends and interest receivable would be classified as
 - a) loans receivable.

- b) trade receivables.
 - c) notes receivable.
 - d) nontrade receivables.
8. The general accounting standards for recognition and measurement of accounts receivable include
- a) measuring the receivable initially at amortized cost.
 - b) measuring the receivable initially at fair value.
 - c) after initial recognition, measuring the receivable at fair value.
 - d) not recognizing the receivable until it is paid.
9. Trade discounts are generally NOT used to
- a) avoid frequent changes in catalogues.
 - b) quote different prices for different quantities purchased.
 - c) encourage faster payment.
 - d) hide the true invoice price from competitors.
10. The net method of recording accounts receivable is rarely used because it
- a) is less theoretically correct than the gross method.
 - b) requires an "Allowance for Sales Discounts" to be reported on the statement of financial position.
 - c) has a different effect on the statement of financial position and income statement.
 - d) requires more bookkeeping for the additional adjusting entries after the discount period has passed.
11. If a company uses the gross method of recording accounts receivable, then cash discounts taken should be reported as
- a) a deduction from sales in the income statement.
 - b) an item of "other expense" in the income statement.
 - c) a deduction from accounts receivable in determining the net realizable value of accounts receivable.
 - d) sales discounts forfeited in the cost of goods sold section of the income statement.
12. "Sales Returns and Allowances" are reported as
- a) an expense.
 - b) a deduction from Sales Revenue.
 - c) a deduction from Accounts Receivable.
 - d) an addition to Accounts Receivable.
13. The interest element for trade receivables
- a) is usually not recognized because of materiality considerations.
 - b) must always be recognized and be accounted for using the net method.
 - c) is included in the net realizable value of the receivables.
 - d) becomes more significant as the time between the sale and payment shortens.

14. Assuming that the ideal measure of short-term receivables in the statement of financial position is the discounted value of the cash to be received in the future, failure to follow this practice usually does NOT make the financial statements misleading because

- a) most short-term receivables are not interest-bearing.
- b) the allowance for uncollectible accounts includes a discount element.
- c) the amount of the discount is not material.
- d) most receivables can be sold to a bank or factor.

15. The likelihood of loss because of the failure of the other party to fully pay the amount owed is called

- a) accounting risk.
- b) bad debts.
- c) credit risk.
- d) currency risk.

16. The single most important indicator used to identify impaired accounts receivable (potential bad debts) is

- a) the dollar amount of the receivable.
- b) current economic conditions.
- c) geographic location.
- d) the age of the account.

17. "Allowance for Doubtful Accounts" is a(n)

- a) expense account.
- b) contra account.
- c) liability account.
- d) current asset.

18. Using the allowance method, when an account receivable is written off, the account to be debited is

- a) accounts receivable.
- b) bad debts expense.
- c) allowance for doubtful accounts.
- d) cash.

19. Which of the following approaches to determine bad debts expense best achieves the matching concept?

- a) percentage of sales
- b) percentage of ending accounts receivable
- c) percentage of average accounts receivable
- d) direct write-off

20. The direct write off method of accounting for the impairment of receivables

- a) is never acceptable.
- b) is an acceptable method when the effect of not applying the allowance method would be highly immaterial.

- c) is specifically disallowed under IFRS.
 - d) usually results in the same net income as the allowance method.
21. Under the allowance method of recognizing uncollectible accounts, the entry to write off an uncollectible account
- a) increases the allowance for doubtful accounts.
 - b) has no effect on the allowance for doubtful accounts.
 - c) has no effect on net income.
 - d) decreases net income.
22. Under the allowance method of recognizing uncollectible accounts, the entry to recognize the collection of a previously written off uncollectible account
- a) increases net income.
 - b) has no effect on the allowance for doubtful accounts.
 - c) decreases the allowance for doubtful accounts.
 - d) increases the allowance for doubtful accounts.
23. The advantage of relating a company's bad debt expense to its outstanding accounts receivable is that this approach
- a) gives a reasonably correct valuation of the receivables in the statement of financial position.
 - b) best relates bad debts expense to the period of sale.
 - c) is the only generally accepted method for valuing accounts receivable.
 - d) makes estimates of uncollectible accounts unnecessary.
24. Which of the following statements is correct?
- a) There is no interest included in a zero-interest-bearing note.
 - b) A long-term note's fair value and present value are always the same.
 - c) All notes contain an interest element because of the time value of money.
 - d) A note is signed by the payee in favour of the maker.
25. Under IFRS, interest income and the amortization of discounts and premiums for long-term notes must be accounted for using
- a) the straight-line method.
 - b) the effective interest method only.
 - c) either the straight-line or effective interest method.
 - d) the units-of-production method.
26. The straight-line method of amortization of discounts and premiums for long term notes
- a) is allowed by both IFRS and ASPE.
 - b) reflects the economic reality of the loan.
 - c) is only allowed by ASPE.
 - d) requires more complicated calculations than the effective interest method.
27. When the stated rate and market rate of a note receivable are the same

- a) the note's face value would be different.
 - b) the note's face value would be indeterminable.
 - c) the note's face value and fair value would be the same.
 - d) it must be a zero-interest-bearing note.
28. If a note receivable was issued at an amount that is *less* than its face value, then
- a) the note was issued at a premium.
 - b) the note was issued at a discount.
 - c) the note's stated rate was the same as the prevailing market rate of interest.
 - d) it must be a zero-interest-bearing note.
29. If a note receivable was issued at an amount that is *more* than its face value, then
- a) the note was issued at a premium and the note's stated rate was different from the prevailing market rate of interest.
 - b) the note was issued at a premium and the note's stated rate was the same as the prevailing market rate of interest.
 - c) the note was issued at a discount and the note's stated rate was the same as the prevailing market rate of interest.
 - d) the note was issued at a discount and the note's stated rate was different from the prevailing market rate of interest.
30. If receivables are used as collateral in borrowing transactions
- a) the receivables generally come under the control of the lender.
 - b) a liability is reported on the borrower's statement of financial position.
 - c) the receivables will be reported as a liability.
 - d) the transaction would be reported as a sale.
31. Which of the following is INCORRECT regarding factoring of receivables?
- a) Factoring usually involves a sale to only one company.
 - b) The fees are relatively high.
 - c) The quality of the receivables may be lower.
 - d) The seller usually continues to service the receivables.
32. The accounts receivable turnover ratio is calculated by dividing
- a) gross sales by ending net trade receivables.
 - b) gross sales by average net trade receivables.
 - c) net sales by ending net trade receivables.
 - d) net sales by average net trade receivables.
33. The ratio that is used to assess the liquidity of accounts receivable is the
- a) current ratio.
 - b) receivables turnover ratio.
 - c) quick ratio.
 - d) inventory turnover ratio.

- *34. A Cash Over and Short account is
- a) not generally acceptable under Canadian GAAP.
 - b) debited when the sum of the receipts and the cash in the fund is more than the imprest amount.
 - c) debited when the sum of the receipts and the cash in the fund is less than the imprest amount.
 - d) a contra account to Cash.
- *35. The journal entries related to a bank reconciliation
- a) are taken from the "balance per bank" section only.
 - b) may include a credit to Office Expense for bank service charges.
 - c) may include a debit to Accounts Receivable for an NSF cheque.
 - d) may include a debit to Accounts Payable for an NSF cheque.
- *36. When preparing a bank reconciliation, a deposit credited to our account by the bank in error is
- a) added to the bank statement balance.
 - b) deducted from the bank statement balance.
 - c) added to the balance per books.
 - d) deducted from the balance per books.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	7.	d	13.	a	19.	a	25.	b	31.	d
2.	b	8.	b	14.	c	20.	b	26.	c	32.	d
3.	d	9.	c	15.	c	21.	c	27.	c	33.	b
4.	a	10.	d	16.	d	22.	d	28.	b	*34.	c
5.	d	11.	a	17.	b	23.	a	29.	a	*35.	c
6.	c	12.	b	18.	c	24.	c	30.	b	*36.	b

MULTIPLE CHOICE—Computational

37. Macaroon Corp. has sold goods at terms 1/10, n/30. If the discount is not taken, the amount payable is \$8,524. Assuming Macaroon uses the *net* method, the entry to record the sale is

- a debit and credit of \$7,671.60 to both Accounts Receivable and Sales respectively.
- a debit and credit of \$8,438.76 to Accounts Receivable and Sales respectively.
- a debit and credit of \$8,524 to Accounts Receivable and Sales respectively.
- debits of \$8,438.76 and \$85.24 to Accounts Receivable and "Forfeited Sales Discounts" respectively, and a credit to Sales for the total.

38. Macaroon Corp. has sold goods at terms 1/10, n/30. If the discount is not taken, the amount payable is \$8,524. Assuming Macaroon uses the *gross* method, the entry to record the sale is

- a debit and credit of \$7,671.60 to Accounts Receivable and Sales respectively.
- a debit and credit of \$8,438.76 to Accounts Receivable and Sales respectively.
- a debit and credit of \$8,524 to Accounts Receivable and Sales respectively.
- debits of \$8,438.76 and \$85.24 to Accounts Receivable and "Forfeited Sales Discounts" respectively, and a credit to Sales for the total.

39. Macaroon Corp. has sold goods at terms 1/10, n/30. If the discount is not taken, the amount payable is \$8,524. Assuming Macaroon has used the *net* method, and payment was received *within* the discount period, the entry to record the payment would include

- an additional debit of \$85.24 to Accounts Receivable.
- a credit of \$8,438.76 to Accounts Receivable.
- a credit of \$85.24 to Sales.
- a debit of \$85.24 to "Forfeited Sales Discounts."

40. During the year, Brownie Inc, who uses the allowance method, made an entry to write off a \$2,000 uncollectible account. Before this entry was posted, the balance in accounts receivable was \$40,000 and the balance in the allowance account was \$3,500. The net realizable value of accounts receivable after the write-off entry was

- \$40,000.
- \$38,500.
- \$38,000.
- \$36,500.

41. The following information is available for Oreo Company:

Allowance for Doubtful Accounts at December 31, 2013	\$ 4,000
Credit Sales during 2014	300,000
Accounts Receivable deemed worthless and written off during 2014.....	4,500

As a result of a review and aging of Accounts Receivable in early January 2015, however, it has been determined that an Allowance For Doubtful Accounts of \$5,500 is required at December 31, 2014. What amount should Oreo record as Bad Debt Expense for calendar 2014?

- \$5,500
- \$6,000

- c) \$6,500
- d) \$10,000

42. Fudge Ltd. receives a four-year, \$100,000 zero-interest bearing note. The present value of this note is \$65,873.10. What is the implicit rate of interest?

- a) 12%
- b) 11%
- c) 10%
- d) 9%

43. Fudge Ltd. receives a four-year, \$100,000 zero-interest bearing note. The present value of this note is \$65,873.10. Assuming the note was issued on January 1, 2013, and the effective interest method is used, the interest income to be recognized for calendar 2013 will be

- a) \$11,000.00.
- b) \$ 9,000.46.
- c) \$ 7,246.04.
- d) \$ 6,587.31.

44. Fudge Ltd. receives a four-year, \$100,000 zero-interest bearing note. The present value of this note is \$65,873.10. Interest income to be recognized for calendar 2014 will be

- a) \$11,797.06.
- b) \$ 8,712.62.
- c) \$ 8,043.11.
- d) \$ 7,246.04.

45. Twinkie Ltd. assigned \$500,000 of Accounts Receivable to Friendly Finance as security for a loan of \$420,000. Friendly charged a 2% commission on the amount of the loan; the interest rate on the note was 10%. During the first month, Twinkie collected \$110,000 of the assigned accounts, after deducting \$380 of discounts. As well, Twinkie accepted returns worth \$1,350 and wrote off assigned accounts totalling \$3,700. The amount of cash Twinkie received from Friendly at the time of the transfer was

- a) \$378,000.
- b) \$410,000.
- c) \$411,600.
- d) \$420,000.

46. Twinkie Ltd. assigned \$500,000 of Accounts Receivable to Friendly Finance as security for a loan of \$420,000. Friendly charged a 2% commission on the amount of the loan; the interest rate on the note was 10%. During the first month, Twinkie collected \$110,000 of the assigned accounts, after deducting \$380 of discounts. As well, Twinkie accepted returns worth \$1,350 and wrote off assigned accounts totalling \$3,700. Entries made by Twinkie during the first month would include a

- a) debit to Cash of \$110,380.
- b) debit to Bad Debts Expense of \$3,700.
- c) debit to Allowance for Doubtful Accounts of \$3,700.
- d) debit to Accounts Receivable of \$115,430.

47. On February 1, 2013, Chocolate Corp. factored receivables with a carrying amount of \$300,000 to Eclair Inc. Eclair assessed a finance charge of 3% of the receivables and retained 5% of the receivables. Relative to this transaction, you are to determine the amount of loss on sale to be reported in the income statement of Chocolate Corp. for February. Assume that Chocolate factors the receivables on a *without recourse* basis. The loss to be reported is

- a) \$ 0.
- b) \$9,000.
- c) \$15,000.
- d) \$24,000.

48. On February 1, 2013, Chocolate Corp. factored receivables with a carrying amount of \$300,000 to Eclair Inc. Eclair assessed a finance charge of 3% of the receivables and retained 5% of the receivables. Relative to this transaction, you are to determine the amount of loss on sale to be reported in the income statement of Chocolate Corp. for February. Assume that Chocolate factors the receivables on a *with recourse* basis. The recourse obligation has a fair value of \$1,000. The loss to be reported is

- a) \$16,000.
- b) \$15,000.
- c) \$10,000.
- d) \$ 9,000.

*49. If a petty cash fund is established in the amount of \$350, and contains \$300 in cash and \$45 in receipts for disbursements when it is replenished, the journal entry to record replenishment should include credits to the following accounts:

- a) Petty Cash, \$45.
- b) Petty Cash, \$50.
- c) Cash, \$45; Cash Over and Short, \$5.
- d) Cash, \$50.

*50. If the month-end bank statement shows a balance of \$49,000, outstanding cheques are \$16,000, a deposit of \$7,000 was in transit at month end, and a cheque for \$800 was erroneously charged by the bank against the account, the correct balance in the bank account at month end is

- a) \$40,800.
- b) \$40,000.
- c) \$24,800.
- d) \$20,100.

*51. In preparing its bank reconciliation at April 30, 2013, Ritz Inc. has the following information available:

Balance per bank statement	\$65,280
NSF cheque returned with April bank statement.....	380
Deposits in transit.....	2,300
Outstanding cheques.....	16,300
Bank service charges for April	25

The correct balance of cash at April 30, 2013 is

- a) \$46,680.
- b) \$51,280.

- c) \$51,300.
- d) \$51,685.

*52. In preparing its bank reconciliation at May 31, 2013, Animal Crackers Co. has the following information available:

Balance per bank statement.....	\$41,000
Deposit in transit	6,800
Outstanding cheques	3,100
Note collected by bank in May.....	2,700

The correct balance of cash at May 31, 2013 is

- a) \$47,800.
- b) \$47,400.
- c) \$44,700
- d) \$42,000.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
37.	b	40.	d	43.	c	46.	c	*49.	d	*52.	c
38.	c	41.	b	44.	c	47.	b	*50.	a		
39.	b	42.	b	45.	c	48.	c	*51.	b		

DERIVATIONS — Computational

No.	Answer	Derivation
37.	b	$\$8,524 \times (1-0.01) = \$8,438.76$
38.	c	
39.	b	
40.	d	$(\$40,000 - \$2,000) - (\$3,500 - \$2,000) = \$36,500$
41.	b	$\$4,000 - \$4,500 = 500$ unadjusted Dr bal $\$500 + \$5,500$ desired bal = 6,000 bad debt exp
42.	b	4 N -65873.1 PV 100000 FV CPT I = 11%
43.	c	$\$65,873.10 \times 11\% = \$7,246.04$
44.	c	$(\$65,873.10 + \$7,246.04) \times 11\% = \$8,043.11$
45.	c	$\$420,000 \times 98\% = \$411,600$
46.	c	
47.	b	$\$300,000 \times .03 = \$9,000$
48.	c	$(\$300,000 \times .03) + \$1,000 = \$10,000$
*49.	d	$\$350 - \$300 = \$50$
*50.	a	$\$49,000 - \$16,000 + \$7,000 + \$800 = \$40,800$
*51.	b	$\$65,280 + \$2,300 - \$16,300 = \$51,280$
*52.	c	$\$41,000 + \$6,800 - \$3,100 = \$44,700$

MULTIPLE CHOICE—CPA Adapted

53. On Egypt Corp.'s December 31, 2013 statement of financial position, the current receivables consisted of the following:

Trade accounts receivable.....	\$ 74,000
Allowance for doubtful accounts	(3,500)
Claim against shipper for goods lost in transit (November 2013)	4,000
Selling price of unsold goods sent by Egypt on consignment at 130 percent of cost (not included in Egypt's ending inventory) ..	29,000
Security deposit on lease of warehouse used for storing some inventories.....	<u>24,000</u>
Total	<u>\$127,500</u>

At December 31, 2013, the correct total of Egypt's current net receivables was

- a) \$78,000.
- b) \$74,500.
- c) \$70,500.
- d) \$66,500.

54. Lebanon Ltd. prepared an aging of its accounts receivable at December 31, 2013 and determined that the net realizable value of the receivables was \$290,000. Additional information for calendar 2013 follows:

Allowance for doubtful accounts, beginning	\$ 34,000
Uncollectible account written off during year	23,000
Accounts receivable, ending	320,000
Uncollectible accounts recovered during year	5,000

For the year ended December 31, 2013, Lebanon's bad debt expense should be

- a) \$20,000.
- b) \$23,000.
- c) \$16,000.
- d) \$14,000.

55. For the year ended December 31, 2013, Tunisia Corp. estimated its allowance for doubtful accounts using the year-end aging of accounts receivable. Additional information for calendar 2013 follows:

Allowance for doubtful accounts, beginning	\$37,000
Estimated uncollectible accounts during 2013 (1% of credit sales of \$4,000,000)	40,000
Uncollectible accounts written off during year	52,000
Estimated uncollectible accounts per year-end aging	74,000

For the year ended December 31, 2013, Tunisia's bad debt expense should be

- a) \$37,000.
- b) \$52,000.
- c) \$89,000.
- d) \$126,000.

56. Sudan Ltd.'s allowance for doubtful accounts was \$85,000 at the end of 2013 and \$105,000 at the end of 2012. For the year ended December 31, 2013, Sudan reported bad debt expense of

\$18,000 in its income statement. What amount did Sudan debit to allowance for doubtful accounts during 2013 to write off actual bad debts?

- a) \$38,000
- b) \$34,650
- c) \$20,000
- d) \$12,000

57. The following accounts were included on Mali Co.'s *unadjusted* trial balance at December 31, 2013:

	<u>Debit</u>	<u>Credit</u>
Accounts receivable	\$850,000	
Allowance for doubtful accounts.....	11,000	
Net credit sales		\$2,950,000

Mali estimates that 1.5 % of the gross accounts receivable will become uncollectible. After the proper adjustment at December 31, 2013, the allowance for doubtful accounts should have a credit balance of

- a) \$23,750.
- b) \$12,750.
- c) \$11,000.
- d) \$ 1,750.

*58. In preparing its August 31 bank reconciliation, Ghana Corp. has the following information available:

Balance per bank statement.....	\$28,310
Deposit in transit	7,280
Customer's cheque returned NSF	700
Outstanding cheques	3,450
Bank service charges for August.....	50

Ghana's correct cash balance at August 31 is

- a) \$31,440.
- b) \$32,090
- c) \$32,140.
- d) \$32,190.

*59. Congo Ltd. prepared the following bank reconciliation at March 31:

Balance per bank statement.....	\$37,200
Add: Deposit in transit	<u>10,300</u>
	47,500
Less: Outstanding cheques.....	<u>12,600</u>
Correct cash balance per books, March 31	<u>\$34,900</u>

Data per bank statement for the month of April follows:

Deposits.....	\$47,700
Disbursements.....	49,700

All reconciling items at March 31 cleared the bank in April. Outstanding cheques at April 30 totalled \$5,000. There were no deposits in transit at April 30. What is the correct cash balance per books at April 30?

- a) \$30,200
- b) \$32,900
- c) \$35,200

d) \$40,500

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
53.	b	55.	c	57.	b	*59.	a
54.	d	56.	a	*58.	c		

DERIVATIONS — CPA Adapted

No.	Answer	Derivation
53.	b	$\$74,000 - \$3,500 + \$4,000 = \$74,500.$
54.	d	Allowance for Doubtful Acct. balance $\$34,000 + \$5,000 - \$23,000 = \$16,000$ (before bad debt expense) $\$320,000 - \$290,000 - \$16,000 = \$14,000$ (bad debt expense).
55.	c	$\$74,000 - \$37,000 + \$52,000 = \$89,000.$
56.	a	$\$105,000 + \$18,000 - \$85,000 = \$38,000.$
57.	b	$\$850,000 \times 1.5\% = \$12,750.$
*58.	c	$\$28,310 + \$7,280 - \$3,450 = \$32,140$
*59.	a	$\$37,200 + \$47,700 - \$49,700 = \$35,200$ (4/30 balance per bank) $\$35,200 - \$5,000 = \$30,200.$

EXERCISES

Ex. 7-60 Definitions

Provide clear, concise answers for the following:

1. What are cash and cash equivalents and how are they reported?
2. What are receivables and how are they reported?
3. How are receivables measured?
4. How are impairments relating to uncollectible receivables accounted for?
5. How can receivables be “converted” to cash prior to their collection from customers?
6. How are receivables analyzed?
7. Identify the main differences between private entity GAAP and IFRS with respect to the accounting for receivables?

Solution 7-60

1. Cash and cash equivalents are financial assets. Cash consists of coins, currency and available funds on deposit at a bank, as well as negotiable instruments. Cash equivalents are highly liquid short-term investments that can be exchanged for known amounts of cash. Together they are usually reported as a current asset, “cash and cash equivalents,” in the statement of financial position, unless the funds are restricted or otherwise encumbered.
2. Receivables are claims against customers and others for cash or other financial assets. They are classified according to their nature as trade, non-trade and accounts receivable (or notes receivable). Current receivables are expected to be collected within one year or during the current operating cycle, whichever is longer.
3. Receivables are initially measured at their fair value (i.e., their present value rather than their *future* value) with interest recognized as the future value is reached at collection. This principle however is generally not applied to short term receivables, as the interest element is usually not material when compared with the net income for the period.
4. The potential impairment is assessed based on management’s estimate of uncollectible accounts. This is commonly accomplished through a review of aged receivables, with special consideration given to older items. Based on that review, the allowance for doubtful accounts is then adjusted to reduce the value of gross receivables accordingly. Companies often use a mix of procedures whereby bad debts are initially estimated based on a percentage of sales and are then adjusted based on the aged receivables report.
5. This can be accomplished through a secured borrowing arrangement or through the sale of the underlying receivables. In secured borrowing, the receivables are merely used as collateral for a loan. In a sale, the receivables are either sold outright to “factors” or “securitized” whereby the seller usually retains some involvement.
6. Receivables are analyzed in terms of their turnover, age and change relative to related accounts. A key ratio used by analysts is the receivables turnover ratio. It is calculated by dividing net sales by average net receivables outstanding and is a measurement of the liquidity of a company’s receivables.
7. The two standards are for the most part very similar. Differences include the disclosure requirements, which are more extensive under IFRS, and the use of the effective interest

method for the amortization of discounts and premiums for financial assets (mandated by IFRS, but optional under ASPE).

Ex. 7-61 Terminology

In the space provided at right, write the word or phrase that is defined or indicated.

- | | |
|--|----------|
| 1. The minimum balances that may have to be kept in chequing or savings accounts. | 1. _____ |
| 2. Cash that has been set aside for investment or financing purposes. | 2. _____ |
| 3. Receivables with underlying <i>contractual</i> rights to receive cash. | 3. _____ |
| 4. The reduction from a supplier's list price. | 4. _____ |
| 5. The method used to record receivables that recognizes a deduction from sales when a discount is taken. | 5. _____ |
| 6. The method used to amortize discounts and premiums for notes receivable that results in the recognition of equal amounts of interest expense or interest income over the term of the notes. | 6. _____ |
| 7. The value at which receivables should be reported. | 7. _____ |
| 8. The method used to account for the estimated impairment of receivables. | 8. _____ |
| 9. The approach that specifically recognizes the assets and liabilities when receivables are sold. | 9. _____ |

Solution 7-61

1. Compensating balances
 2. Restricted cash
 3. A financial asset
 4. A trade discount
 5. The gross method
 6. The straight-line method
-

7. Their net realizable value
8. The allowance method
9. The financial components approach

Ex. 7-62 Reporting of cash

At December 31, 2013, Burkina Ltd.'s general ledger Cash balance was \$34,600. In addition, Burkina held the following items in its safe on December 31:

1. A cheque for \$820 from Zambia Ltd. received December 30, 2013, which was not deposited until January 2, 2014.
2. A cheque from Zanzibar Inc for \$1,400 that had been deposited on December 20, but was returned NSF on December 29. The cheque was to be re-deposited on January 3, 2014. The original deposit has been included in the December 31 chequebook balance.
3. Coin and currency on hand: \$2,630.

Instructions

Calculate the proper amount to be reported as cash on Burkina's statement of financial position at December 31, 2013.

Solution 7-62

Cash G/L account	\$34,600
Undeposited cheque	820
Coin & currency	2,630
Less NSF cheque	<u>(1,400)</u>
Cash to be reported	<u>\$36,650</u>

Ex. 7-63 Entries for bad debt expense

Angola Corp.'s unadjusted trial balance included the following:

	<u>Debit</u>	<u>Credit</u>
Accounts receivable	\$140,000	
Allowance for doubtful accounts		\$ 890
Sales		425,000
Sales returns and allowances	10,000	

Instructions

Prepare adjusting journal entries assuming that the estimate of uncollectibles is determined by using a) 4% of gross accounts receivable and b) 1.5% of net sales.

Solution 7-63

a) Bad Debts Expense	4,710	
Allowance for Doubtful Accounts		4,710

Gross receivables	\$140,000
Rate	<u>4%</u>
Total allowance needed	5,600
Present allowance	<u>(890)</u>
Adjustment needed	<u>\$ 4,710</u>

b) Bad Debts Expense.....	6,225	
Allowance for Doubtful Accounts		6,225
Sales.....	\$425,000	
Less sales returns and allowances.....	<u>10,000</u>	
Net sales.....	415,000	
Rate	<u>1.5%</u>	
Bad debts expense	<u>\$ 6,225</u>	

Ex. 7-64 Note with fair value not equal to cash consideration

On January 1, 2013, Cameroon Corp. lent \$50,000 to its CEO, interest-free. However, the loan is repayable in full in five years. The market rate for similar loans (with similar credit risk) is 4%.

Instructions

- Calculate the present value (fair value) of this loan (round to the nearest dollar). Why is it not the same as the actual cash advanced?
- Prepare the journal entry to record this transaction.

Solution 7-64

- a) 5 N 4 i 50000 FV CPT PV = \$41,096.

The fair value is less than the actual cash advanced due to the interest component. The present value actually represents the principal portion of the loan.

b) Loan Receivable.....	41,096	
Salaries & Wages Expense	8,904	
Cash.....		50,000

Ex. 7-65 Accounts receivable assigned

Moonbeam Ltd. assigned \$520,000 of their accounts receivable to the Sunbright Finance Company, as security for a loan of \$430,000. Sunbright charged a 3.5% commission on the face amount of the loan, and the note bears interest at 9%.

During the first month, Moonbeam collected \$260,000 on assigned accounts. This amount was paid to the finance company along with one month's interest on the note.

Instructions

Prepare the required journal entries on Moonbeam's books related to the transfer of the accounts receivable, the loan, and the payment to the finance company.

Solution 7-65

Cash	414,950	
Finance Charge \$430,000 x 3.5%	15,050	
Notes Payable.....		430,000
Cash	260,000	
Accounts Receivable.....		260,000
Notes Payable.....	260,000	
Interest Expense \$430,000 x 9% / 12	3,225	

Cash	263,225
------------	---------

Ex. 7-66 Sale of receivables without recourse

Sparwood Manufacturing factored \$250,000 of their accounts receivable to General Factor Corp., on a without recourse basis. The receivables are transferred to General Factor, who takes over the full responsibility of collection. General Factor charged a finance charge of 4% of the dollar value of the receivables, and withheld 5% of the receivable value.

Instructions

- Prepare the general journal entry to reflect this transaction on Sparwood's books.
- Prepare the general journal entry to reflect this transaction on General Factor's books.

Solution 7-66

- Entry on Sparwood's books:

Cash $500,000 - 12,500 - 10,000$	227,500
Due from Factor $250,000 \times 5\%$	12,500
Loss on Sale of Receivables $250,000 \times 4\%$	10,000
Accounts Receivable	250,000

- Entry on General Factor's books:

Accounts Receivable	250,000
Due to Sparwood $250,000 \times 5\%$	12,500
Financing Revenue $250,000 \times 4\%$	10,000
Cash	227,500

Ex. 7-67 Accounts receivable analysis and securitization

Discuss why adjustments might have to be made and caution has to be exercised when analysing accounts receivable due to the increased use of securitization transactions.

Solution 7-67

Securitization is a financing transaction, so the cash flows are actually from financing, not from operations. When the company has engaged in securitization transactions, adjustments would have to be made to receivables on the statement of financial position for accounts sold but not yet collected. These adjustments would be required before you could assess ratios such as receivables turnover and days sales uncollected. Liquidity ratios would also be affected. The sheer complexity of these transactions requires that the analyst exercise caution and read carefully all disclosures related to securitizations.

Ex. 7-68 Reconciliation of cash account

Togo Corp.'s book balance of cash account shows an unadjusted balance of \$64,000 before reconciliation. The following data was also available:

- The bank statement does not include a deposit of \$3,100 made on the last day of the month.
- The bank statement shows a collection of a note receivable by the bank of \$1,200 and a customer's cheque for \$580 was returned because it was NSF.
- A customer's cheque for \$360 was recorded on the books as \$630.
- A cheque written for \$179 was recorded as \$791.

Instructions

Calculate the correct balance in the cash account.

Solution 7-68

Unadjusted Cash G/L account.....	\$64,000
Note receivable collected	1,200
Less NSF cheque.....	(580)
Less error re deposit (630-360)	(270)
Add cheque error (791-179)	<u>612</u>
Correct cash balance	<u><u>\$64,962</u></u>

PROBLEMS

Pr. 7-69 Entries for bad debt expense

Uganda Corp.'s unadjusted trial balance includes the following balances:

	<u>Dr.</u>	<u>Cr.</u>
Accounts receivable	\$150,000	
Allowance for doubtful accounts.....		\$ 3,500
Sales (all on credit)		680,000
Sales returns and allowances.....	30,000	

Instructions

- Prepare the entries for estimated bad debts assuming that doubtful accounts are estimated to be (1) 6% of gross accounts receivable and (2) 1% of net sales.
- Assume that all the information above is the same, except that the Allowance for Doubtful Accounts has a *debit* balance of \$3,500 instead of a credit balance.

Solution 7-69

- | | | |
|--------------------------------------|-------|-------|
| (1) Bad Debt Expense | 5,500 | |
| Allowance for Doubtful Accounts..... | | 5,500 |

Gross receivables	\$150,000
Rate.....	<u>6%</u>
Total allowance needed.....	9,000
Present allowance	<u>(3,500)</u>
Bad debts expense	<u>\$ 5,500</u>

- | | | |
|---------------------------------------|-------|-------|
| (2) Bad Debt Expense | 6,500 | |
| Allowance for Doubtful Accounts | | 6,500 |

Sales	\$680,000
Sales returns and allowances	<u>(30,000)</u>
Net sales	650,000
Rate.....	<u>1%</u>
Bad debts expense	<u>\$ 6,500</u>

- The percentage of receivables approach would be affected as follows:

Gross receivables	\$150,000
Rate.....	<u>6%</u>
Total allowance needed.....	9,000
Present allowance	<u>3,500</u>
Additional amount required	<u>\$ 12,500</u>

The journal entry is therefore as follows:

Bad Debt Expense	12,500	
Allowance for Doubtful Accounts		12,500

Note that the balance in the Allowance account does not affect calculations for the percentage of sales method.

Pr. 7-70 Amortization of discount under the straight-line and effective interest methods

On January 1, 2013, Ethiopia Corporation receives a four-year, \$50,000 zero-interest bearing note in payment of goods sold. The present value of the note equals the agreed upon sales price of \$32,936.55. Ethiopia is a privately held company and follows ASPE.

Instructions

- Assuming Ethiopia uses the *straight-line* method to amortize the note's discount, prepare the journal entry to record the sale on January 1, and the interest accrual on December 31, 2013.
- Assuming Ethiopia uses the *effective interest* method to amortize the note's discount, prepare the journal entry to record the sale on January 1, and the interest accrual on December 31, 2013.

Solution 7-70

- a) To record the sale and issue of the note on Jan 1:

Note Receivable	32,936.55	
Sales		32,936.55

To record the interest accrual on Dec 31 (straight line):

Note Receivable (50,000 – 32,936.55) / 4	4,265.86	
Interest Income		4,265.86

- b) To record the sale and issue of the note on Jan 1:

This entry would be identical to the one prepared under part a) above.

To record the interest accrual on Dec 31 (effective interest):

Note Receivable 32,936.55 x 11%	3,623.02	
Interest Income		3,623.02

Implicit rate of interest - 4 N -32936.55 PV 50000 FV CPT i = 11%

Pr. 7-71 Note with fair value not equal to cash consideration

On January 1, 2013, Senegal Corp. lent \$50,000 to its CEO, interest-free. However, the loan is repayable in five instalments, each December 31, until paid. The market rate for similar loans (with similar credit risk) is 4%.

Instructions

- Calculate the present value (fair value) of this loan (round to the nearest dollar).
- Prepare the journal entry to record this transaction.

Solution 7-71

- a) 5 N 4 i 10000 PMT CPT PV = \$44,518.

b) Loan Receivable	44,518	
Salaries & Wages Expense	5,482	
Cash		50,000

Pr. 7-72 Accounts receivable assigned

Prepare journal entries for Tanzania Inc for:

- a) Accounts receivable of \$700,000 that were originally recorded using the gross method were assigned to Chad Finance Co. by Tanzania as security for a loan of \$580,000. Chad charged a 4% commission on the value of the accounts receivable; the interest rate on the note is 11%.
- b) During the first month, Tanzania collected \$300,000 on assigned accounts after deducting \$1,500 of sales discounts. As well, Tanzania wrote off a \$1,100 assigned account as a bad debt.
- c) Tanzania paid Chad the amount collected plus one month's interest on the note.

Solution 7-72

a) Cash	552,000	
Finance Charge $\$700,000 \times 4\%$	28,000	
Notes Payable		580,000
b) Cash	300,000	
Sales Discounts	1,500	
Allowance for Doubtful Accounts	1,100	
Accounts Receivable		302,600
c) Notes Payable	300,000	
Interest Expense $\$580,000 \times 11\% / 12$	5,317	
Cash		305,317

Pr. 7-73 Factoring accounts receivable

On April 1, Morocco Ltd. factored \$500,000 of accounts receivable with Kenya Finance Corp. on a without recourse basis. Under the arrangement, Morocco was to handle disputes concerning service, and Kenya Finance was to make the collections, handle the sales discounts, and absorb the credit losses. Kenya Finance assessed a finance charge of 5% of the total accounts receivable factored and retained an amount equal to 2% of the total receivables to cover sales discounts.

Instructions

- a) Prepare the journal entry required on Morocco's books on April 1.
- b) Prepare the journal entry required on Kenya Finance's books on April 1.
- c) Instead, assume Morocco factors the \$500,000 of accounts receivable with Kenya Finance on a *with* recourse basis. The recourse provision has a fair value of \$12,000. Prepare the journal entry required on Morocco's books on April 1.

Solution 7-73

a) Cash	465,000	
Due from Factor $2\% \times \$500,000$	10,000	
Loss on Sale of Receivables $5\% \times \$500,000$	25,000	
Accounts Receivable		500,000
b) Accounts Receivable	500,000	
Due to Morocco		10,000
Financing Revenue		25,000
Cash		465,000
c) Cash	465,000	

Due from Factor	10,000	
Loss on Sale of Receivables (\$25,000 + \$12,000).....	37,000	
Accounts Receivable		500,000
Recourse Liability		12,000

Pr. 7-74 Reasons for selling receivables

List three reasons why a business might sell its receivables to another party.

Solution 7-74

1. A business may sell its receivables because it needs the cash now and access to normal credit is not available or is too expensive.
2. A business may sell its receivables (instead of borrowing) to avoid violating debt covenant agreements.
3. A business may sell its receivables to avoid billing and collection activities, which are often costly and time-consuming.
4. For competitive reasons, many industries offer sales financing to encourage sales. However, they not be able to finance customers over long periods of time, so will sell or factor the receivables to obtain the cash more quickly.

Pr. 7-75 Secured borrowings vs factoring of receivables

Explain the difference between secured borrowings and factoring.

Solution 7-75

Secured borrowing is using accounts receivable (or other receivables, such as notes) as collateral to borrow money, usually from a bank. This is common business practice in Canada. The receivables are assigned or pledged as security for the loan. The assignor retains ownership and control of the receivables, thus the receivables remain as an asset on the assignor's statement of financial position; as well, the liability is recorded as with any other liability. As the assigned receivables are collected, the proceeds are used to pay down on the loan. Any interest or finance charges paid are expensed.

Factoring receivables is an outright sale to a factor or lender. The factor buys the receivables and deducts a fee upfront, which is recorded as a "Loss on Sale of Receivables." The receivables are transferred to the factor, who now has ownership and control of them, and the transferor derecognizes them from the books.

Receivables can be sold *without recourse* where the factor assumes the risk of collection and absorbs any bad debts. The factor may also keep a "holdback" (recorded as "Due from Factor" – a current asset) to cover any sales discounts or returns.

On the other hand, receivables are more commonly sold *with recourse* where the risk of bad debts remains with the transferor. In this case, a recourse liability must be recorded, which will increase the Loss on Sale.

***Pr. 7-76** Bank reconciliation

Benin Company deposits all receipts daily and makes all payments by cheque. The following information is available from the cash records:

March 31 Bank Reconciliation

Balance per bank	\$35,160
Add: Deposits in transit	4,200
Deduct: Outstanding cheques	<u>(3,200)</u>
Balance per books	<u>\$36,160</u>

Month of April Results

	<u>Per Bank</u>	<u>Per Books</u>
Balance April 30	\$38,000	\$42,140
April deposits recorded	11,200	17,300
April cheques recorded	12,010	11,320
<i>Items on bank statement but not in books:</i>		
Note collected by bank	5,500	-0-
Bank service charge	50	-0-
Customer's NSF cheque returned by the bank	1,800	-0-

Instructions

- a) Calculate the amount of the April 30:
 1. Deposits in transit
 2. Outstanding cheques
- b) What is the April 30 adjusted cash balance? Show all work.

***Solution 7-76**

- a)
 1. Deposits in transit: \$10,300 (\$17,300 + \$4,200 - \$11,200)
 2. Outstanding cheques: \$2,510 (\$11,320 - \$12,010 + \$3,200)
- b) Adjusted cash balance at April 30: \$45,790 (42,140 + \$5,500 - \$50 - \$1,800)

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CHAPTER 8

INVENTORY

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	18.	4	M	35.	6	M	52.	9	M
2.	1	E	19.	4	M	36.	6	M	53.	9	E
3.	1	M	20.	4	M	37.	6	E	54.	10	H
4.	1	M	21.	5	M	38.	6,7	M	55.	10	H
5.	3	M	22.	5	H	39.	7	E	56.	10	M
6.	3	M	23.	5	E	40.	7	H	57.	10	M
7.	3	E	24.	5	H	41.	7	E	58.	10	M
8.	3	M	25.	5	H	42.	7	M	59.	12	E
9.	3	M	26.	5	E	43.	7	E	60.	12	E
10.	3	H	27.	5	H	44.	7	E	61.	12	E
11.	3	H	28.	5	H	45.	8	M	*62.	14	E
12.	3	H	29.	5	H	46.	8	M	*63.	14	M
13.	3	E	30.	5	M	47.	8	E	*64.	14	M
14.	3	M	31.	5	E	48.	8	E	*65.	14	H
15.	3	M	32.	5	E	49.	8	E			
16.	3	M	33.	5	E	50.	8	M			
17.	3	E	34.	5	E	51.	8	E			
Multiple Choice–Computational											
66.	1	M	74.	4	M	82.	6,7	H	90.	10	H
67.	1	H	75.	4	H	83.	6,7	M	91.	10	H
68.	1	M	76.	5	M	84.	6,7	M	92.	10	M
69.	1	M	77.	5	M	85.	6,7	M	93.	10	M
70.	1	E	78.	6	M	86.	7	M	94.	12	E
71.	4	M	79.	6	E	87.	8	M	*95.	14	M
72.	4	H	80.	6	E	88.	8	H	*96.	14	H
73.	4	H	81.	6,7	M	89.	10	M	*97.	14	H
Multiple Choice–CPA Adapted											
98.	3	M	101.	3,5	M	104.	7	E	107.	12	H
99.	3	M	102.	5	M	105.	8	E	*108.	14	H
100.	3	M	103.	6,7	M	106.	10	E	*109.	14	M

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY (CONTINUED)

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Exercises											
110.	1,3,6,7	M	114.	6,7	E	118.	8	M	122.	10	M
111.	3,5,10	M	115.	6,7	E	119.	8	E	*123.	14	M
112.	5,6	M	116.	6,7	E	120.	8	E			
113.	6	M	117.	6,7	M	121.	10	M			
Problems											
124.	3	M	127.	4,6	M	130.	10	M	*133.	14	H
125.	3	M	128.	5,6	M	131.	10	H			
126.	4	H	129.	6	M	*132.	14	H			

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	3.	MC	66.	MC	68.	MC	70.	MC		
2.	MC	4.	MC	67.	MC	69.	MC	110.	Ex		
Learning Objective 3											
5.	MC	9.	MC	13.	MC	17.	MC	101.	MC	125.	Pr
6.	MC	10.	MC	14.	MC	98.	MC	110.	Ex		
7.	MC	11.	MC	15.	MC	99.	MC	111.	Ex		
8.	MC	12.	MC	16.	MC	100.	MC	124.	Pr		
Learning Objective 4											
18.	MC	20.	MC	72.	MC	74.	MC	126.	Pr		
19.	MC	71.	MC	73.	MC	75.	MC	127.	Pr		
Learning Objective 5											
21.	MC	25.	MC	29.	MC	33.	MC	126.	Pr		
22.	MC	26.	MC	30.	MC	34.	MC	127.	Pr		
23.	MC	27.	MC	31.	MC	76.	MC				
24.	MC	28.	MC	32.	MC	77.	MC				
Learning Objective 6											
35.	MC	78.	MC	82.	MC	103.	MC	114.	Ex	127.	Pr
36.	MC	79.	MC	83.	MC	110.	Ex	115.	Ex	128.	Pr
37.	MC	80.	MC	84.	MC	112.	Ex	116.	Ex	129.	Pr
38.	MC	81.	MC	85.	MC	113.	Ex	117.	Ex		
Learning Objective 7											
38.	MC	42.	MC	82.	MC	86.	MC	114.	Ex		
39.	MC	43.	MC	83.	MC	103.	MC	115.	Ex		
40.	MC	44.	MC	84.	MC	104.	MC	116.	Ex		
41.	MC	81.	MC	85.	MC	110.	Ex	117.	Ex		
Learning Objective 8											
45.	MC	48.	MC	51.	MC	105.	MC	120.	Ex		
46.	MC	49.	MC	87.	MC	118.	Ex				
47.	MC	50.	MC	88.	MC	119.	Ex				
Learning Objective 9											
52.	MC	53.	MC								
Learning Objective 10											
54.	MC	57.	MC	90.	MC	93.	MC	122.	Ex		
55.	MC	58.	MC	91.	MC	106.	MC	130.	Pr		
56.	MC	89.	MC	92.	MC	121.	Ex	131.	Pr		
Learning Objective 12											
59.	MC	60.	MC	61.	MC	94.	MC	107.	MC		
Learning Objective 14											
*62.	MC	*64.	MC	*95.	MC	*97.	MC	*109.	MC	*132.	Pr
*63.	MC	*65.	MC	*96.	MC	*108.	MC	*123.	Ex	*133.	Pr

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. **Understand inventory from a business perspective.** It is important to understand the nature of the various types of businesses that have significant inventory as well as the different types of inventory. Retailers, manufacturers, and wholesalers generally carry significant amounts of inventory. However, different companies have different business models. For example, some manufacturers follow a just-in-time strategy and carry very little inventory on hand. Only one inventory account, Merchandise Inventory, appears in the financial statements of a merchandising concern. A manufacturer normally has three inventory accounts: Raw Materials, Work in Process, and Finished Goods. There may also be an inventory account for factory or manufacturing supplies. Management must manage inventory levels in order to ensure sufficient choice and quantities to meet customer needs yet keep costs to a minimum. The financial statements need to provide information about all of this.

2. **Define inventory from an accounting perspective.** Differing companies have different types of inventories including securities, land for development, work in progress, grain, and other. For accounting purposes, inventory is defined as an asset that is held for sale in the ordinary course of business or for the production of such inventory (including raw materials, work in process, and supplies). Special guidance and/or industry practice exists for inventories of financial instruments, construction in progress, biological assets, agricultural products, mineral products, inventories held by producers of agricultural and forest products, and inventories held by commodity broker-traders.

3. **Identify which inventory items should be included in ending inventory.** Inventory is included on the balance sheet of the entity that has substantially all of the risks and rewards of ownership, which is generally the company that has possession and legal title to the goods. Professional judgement must be used to determine whether substantially all of the risks and rewards have passed. For instance, consigned goods remain the property of the consignor. Purchase commitments are generally not recognized unless onerous.

4. **Identify the effects of inventory errors on the financial statements and adjust for them.** If the ending inventory is misstated, (1) the inventory, retained earnings, working capital, and current ratio in the balance sheet will be incorrect; and (2) the cost of goods sold and net income in the income statement will be incorrect. If purchases and inventory are misstated, (1) the inventory, accounts payable, and current ratio will be incorrect; and (2) purchases and ending inventory will be incorrect.

5. **Determine the components of inventory cost.** Inventory costs include all costs of purchase, conversion, and other costs incurred in bringing the inventories to the present location and condition necessary for sale. Such charges include freight charges on goods purchased, other direct costs of acquisition, and labour and other direct production costs incurred in processing the goods up to the time of sale. Manufacturing overhead costs are allocated to inventory based on the normal capacity of the production facilities. Interest and asset retirement costs may be included as part of the cost of inventory depending on the circumstances.

6. Distinguish between perpetual and periodic inventory systems and account for them.

Under a perpetual inventory system, a continuous record of changes in inventory is maintained in the Inventory account. That is, all purchases into and transfers of goods out of the account are recorded directly in the Inventory account as they occur. No such record is kept under a periodic inventory system. Under the periodic system, year-end inventory is determined by a physical count, and the amount of ending inventory and cost of goods sold is based on this count. Even under the perpetual system, an annual count is needed to test the accuracy of the records.

7. Identify and apply GAAP cost formula options and indicate when each cost formula is appropriate.

The specific identification method is used to assign costs for items of inventory that are not ordinarily interchangeable or that are produced for specific projects. The weighted-average or first-in, first-out cost formula is used to assign costs to other types of inventory. All inventory items that have a similar nature and use to the entity apply the same cost formula.

8. Explain why inventory is measured at the lower of cost and market, and apply the lower of cost and net realizable value standard.

Current assets should not be reported on the balance sheet at a higher amount than the net cash that is expected to be generated from their use or sale. When this amount is less than "cost," inventory is written down and the loss in value is recognized in the same period as the decline. Net realizable value is the estimated selling price in the ordinary course of business reduced by the expected costs to complete and sell the goods. Ordinarily, each item's cost and NRV are compared and the lower value is chosen. However, items that are related to each other and have similar purposes, that are produced and marketed in the same geographical area, and that cannot be evaluated separately from other items may be grouped and the lower of the group's cost and net realizable value is chosen.

9. Identify inventories that are or may be valued at amounts other than the lower of cost and net realizable value.

Inventories of financial instruments, construction contract work in process, biological assets related to agricultural activity, agricultural produce at the point of harvest and after harvest, inventories held by producers of agricultural and forest products, mineral products, and inventories of commodity broker-traders all may be accounted for at other than the lower of cost and net realizable value.

10. Apply the gross profit method of estimating inventory.

Ending inventory is determined by deducting an estimate of cost of goods sold from the actual cost of goods available for sale. Cost of goods sold is estimated by multiplying net sales by the percentage of cost of goods sold to sales. This percentage is derived from the gross profit percent: $100\% - \text{gross profit percentage} = \text{cost of goods sold percentage}$.

11. Identify how inventory should be presented and the type of inventory disclosures required by ASPE and IFRS.

ASPE requires disclosure of how cost is determined, inventory that is pledged as security, the amount charged to the income statement as expense in the period, and the inventories' carrying value by category. Additional information is required by IFRS, including details about inventory impairment writedowns and any recoveries, the circumstances responsible for these, and the carrying amounts and reconciliations of items measured at NRV or fair value. Biological assets must be presented separately on the balance sheet under IFRS. In general, cost of sales is presented on the income statement under both IFRS and ASPE unless expenses are grouped by nature.

12. Explain how inventory analysis provides useful information and apply ratio analysis to inventory. Common ratios that are used in the management and evaluation of inventory levels are the inventory turnover and a related measure, average days to sell the inventory, often called the average age of inventory. This is useful information as excessive investment in inventory is expensive to carry, yet too little inventory results in lost sales and dissatisfied customers.

13. Identify differences in accounting between ASPE and IFRS, and what changes are expected in the near future. ASPE and IFRS are substantially harmonized. IFRS has specific guidance on the measurement of agricultural and construction inventories, the capitalization of borrowing costs on qualifying assets, and on onerous contracts. Asset retirement obligations may be treated differently under IFRS. No major changes are expected in the near future.

14. Apply the retail method of estimating inventory. The retail inventory method is based on converting the retail price of ending inventory by a cost-to-retail percentage, which is derived from information in the accounting and supplementary records. To use this method, records must be kept of the costs and retail prices for beginning inventory, net purchases, and abnormal spoilage, as well as the retail amount of net markups, net markdowns, and net sales. Which items go into the numerator and denominator of the cost-to-retail ratio depends on the type of inventory valuation estimate that is wanted.

15. Identify other primary sources of GAAP for inventory.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Inventory categories of a manufacturer
a	2.	Inventory categories of a retailer
d	3.	Monitoring of inventory
c	4.	Calculation of cost of goods available for sale
b	5.	Recognition of ownership
a	6.	Classification of goods in transit
b	7.	Classification of goods in transit
d	8.	Classification of goods in transit
b	9.	Goods on consignment
a	10.	Effect of consignment goods on financial statements
c	11.	Effect of consignment goods on financial statements
d	12.	Accounting for potential sales returns
c	13.	Identify a product financing arrangement
b	14.	Identify ownership under product financing arrangement.
a	15.	Purchase commitments
c	16.	Definition of onerous contract
a	17.	Material purchase commitments
a	18.	Effect of understating inventory on financial statements
d	19.	Effect of understating purchases and ending inventory
a	20.	Effect of inventory errors
d	21.	Use of Purchases Discounts account
c	22.	Effect on income of gross vs. net method
b	23.	Net method and cost/benefit constraint
d	24.	Vendor rebates
b	25.	Identification of product costs
a	26.	Concept of product costs
c	27.	Conversion costs
d	28.	Costs to charge to expense
b	29.	Interest capitalization in manufacturing inventory
a	30.	Classification of factory overhead costs
d	31.	Borrowing costs
a	32.	Concept of standard costs
c	33.	Definition of basket purchase
b	34.	Method to use for basket purchases
c	35.	Perpetual inventory system characteristics
a	36.	Periodic inventory system characteristics
d	37.	Accounts used with a periodic system
c	38.	Perpetual system – moving average cost
b	39.	Specific identification cost formula characteristics
a	40.	Nature of FIFO valuation of inventory
c	41.	FIFO in periodic vs perpetual system
a	42.	Weighted average cost formula characteristics
b	43.	FIFO cost formula characteristics
d	44.	Objectives underlying inventory standards
c	45.	Departure from accounting for inventory at cost
b	46.	Appropriate use of net realizable value
a	47.	Net realizable value
a	48.	“Replacement cost” definition of “market”

MULTIPLE CHOICE—Conceptual (CONTINUED)

- | | | |
|---|------|--|
| b | 49. | Definition of net realizable value |
| c | 50. | Appropriate use of net realizable value |
| a | 51. | Valuation of inventory at net realizable value |
| d | 52. | Valuation of inventory above cost |
| c | 53. | Valuation at fair value less costs to sell |
| d | 54. | Appropriate use of the gross profit method |
| b | 55. | Appropriate use of the gross profit method |
| c | 56. | Calculation of gross profit percentage |
| b | 57. | Appropriate use of the gross profit method |
| d | 58. | Gross profit method |
| a | 59. | Calculation of inventory turnover ratio |
| c | 60. | Calculation of inventory turnover ratio |
| d | 61. | Calculation of average days to sell inventory |
| c | *62. | Conventional retail method |
| b | *63. | Markdowns and the conventional retail method |
| a | *64. | Mark-ups and the conventional retail method |
| d | *65. | Use of the retail method |

MULTIPLE CHOICE—Computational

- | Answer | No. | Description |
|---------------|------------|--|
| c | 66. | Calculate cost of goods available for sale |
| d | 67. | Calculate sales given manufacturing cost information |
| d | 68. | Calculate ending inventory |
| c | 69. | Calculate beginning inventory |
| d | 70. | Calculate total sales from cost information |
| d | 71. | Effect of inventory and depreciation errors on income |
| a | 72. | Effect of inventory and depreciation errors on retained earnings |
| a | 73. | Effect of inventory errors on working capital |
| a | 74. | Account for inventory errors |
| d | 75. | Account for inventory errors |
| c | 76. | Accounting for a purchase return (net method) |
| b | 77. | Adjust account payable using the net method |
| b | 78. | Adjusting entry for inventory shortage |
| b | 79. | Journal entries for periodic inventory system |
| a | 80. | Journal entries for perpetual inventory system |
| a | 81. | Calculate ending inventory using weighted-average |
| c | 82. | Calculate ending inventory using moving average |
| b | 83. | Calculate ending inventory using FIFO |
| a | 84. | Calculate ending inventory using average cost |
| c | 85. | Journal entries for perpetual inventory system |
| c | 86. | Calculate cost of goods sold using FIFO |
| a | 87. | Adjusting entry to value inventory at NRV |
| c | 88. | Adjusting entry to value inventory at NRV |
| a | 89. | Mark-up on cost equivalent to mark-up on selling price |
| c | 90. | Estimate ending inventory using gross profit method |
| b | 91. | Estimate ending inventory using gross profit method |

MULTIPLE CHOICE—Computational (CONTINUED)

- | | | |
|---|------|---|
| a | 92. | Estimate ending inventory using gross profit method |
| d | 93. | Estimate cost of inventory destroyed by fire |
| d | 94. | Calculate inventory turnover ratio |
| d | *95. | Basis of cost to retail ratio |
| a | *96. | Calculate ending inventory at retail |
| c | *97. | Calculate ending inventory using conventional retail method |

MULTIPLE CHOICE—CPA Adapted

- | Answer | No. | Description |
|---------------|------------|--|
| c | 98. | Calculate accounts payable at year end |
| a | 99. | Calculate accounts payable at year end |
| d | 100. | Calculate accounts payable at year end |
| a | 101. | Calculate cost of sales |
| c | 102. | Calculate inventorable cost |
| b | 103. | Calculate unit cost using moving-average method |
| d | 104. | Calculate ending inventory using FIFO |
| a | 105. | Recognizing a loss due to application of lower of cost and NRV |
| d | 106. | Estimate cost of inventory lost by theft |
| c | 107. | Calculate average inventory |
| b | *108. | Calculate ending inventory using retail method |
| a | *109. | Calculate ending inventory using retail method |

EXERCISES

- | Item | Description |
|-------------|--|
| E8-110 | Definitions |
| E8-111 | Terminology |
| E8-112 | Recording purchases at net amounts |
| E8-113 | Year-end entries to update inventory accounts |
| E8-114 | FIFO cost formula |
| E8-115 | Perpetual FIFO |
| E8-116 | Periodic FIFO |
| E8-117 | Journal entries for perpetual inventory system |
| E8-118 | Adjustments to lower of cost and NRV |
| E8-119 | Lower of cost and net realizable value |
| E8-120 | Lower of cost and net realizable value |
| E8-121 | Gross profit method |
| E8-122 | Gross profit method |
| *E8-123 | Conventional retail inventory method |

*This topic is dealt with in an Appendix to the chapter.

PROBLEMS

Item	Description
P8-124	Theory (executory vs onerous contract)
P8-125	Inventory cut-off
P8-126	Inventory errors
P8-127	Analysis of errors
P8-128	Accounting for purchase discounts
P8-129	Year-end entries to update inventory under periodic system
P8-130	Gross profit method
P8-131	Gross profit method
*P8-132	Retail inventory method
*P8-133	Conventional retail inventory method

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. A manufacturing company typically maintains the following inventory account(s):
 - a) Merchandise Inventory.
 - b) Raw Materials and Work in Process only.
 - c) Raw Materials, Work in Process and Finished Goods.
 - d) Work in Process and Merchandise Inventory.

2. A hardware retailer typically maintains the following inventory account(s):
 - a) Merchandise Inventory.
 - b) Raw Materials and Work in Process only.
 - c) Raw Materials, Work in Process and Finished Goods.
 - d) Work in Process and Merchandise Inventory.

3. Companies that carry inventories must carefully monitor inventory in order to
 - a) have the greatest selection available so customers can always find what they want.
 - b) minimize carrying costs and keep inventory levels high so stockouts never occur.
 - c) keep inventory levels high to maximize profits.
 - d) minimize carrying costs and meet customer demands.

4. The cost of goods available for sale is calculated as
 - a) beginning inventory plus ending inventory.
 - b) beginning inventory minus ending inventory.
 - c) beginning inventory plus the cost of goods acquired during the period.
 - d) cost of goods acquired during the period minus ending inventory.

5. When substantially all risks and rewards of ownership have passed to the purchaser, the purchaser then recognizes an asset. For this recognition, which of the following statements is correct?
 - a) The purchaser must have both legal title and possession of the goods.
 - b) Legal title and possession do not always pass to the purchaser at the same time.
 - c) In practice, recording inventory purchases often takes place when they leave the seller's place of business.
 - d) The purchaser must have possession of goods before it has legal title.

6. Goods in transit which are shipped f.o.b. shipping point should be included
 - a) in the inventory of the buyer.
 - b) in the inventory of the seller.
 - c) in the inventory of the shipping company.
 - d) in no one's inventory until they arrive at their destination.

7. Goods in transit which are shipped f.o.b. destination should be included
 - a) in the inventory of the buyer.
 - b) in the inventory of the seller.

- c) in the inventory of the shipping company.
 - d) in no one's inventory until they arrive at their destination.
8. Which of the following items should be included in inventory at the balance sheet date?
- a) goods in transit which were purchased f.o.b. destination
 - b) goods received from another company for sale on consignment
 - c) goods sold to a customer, which are being held for the customer to call for at his or her convenience
 - d) goods in transit which were purchased f.o.b. shipping point
9. Which of the following is correct?
- a) Goods on consignment are included in the consignee's inventory.
 - b) Goods on consignment are included in the consignor's inventory.
 - c) The consignee essentially has the risks and rewards of ownership.
 - d) Inventory on consignment is always shown in a separate account.
10. Fred received merchandise on consignment from Barney. As of March 31, Fred had recorded the transaction as a purchase and included the goods in inventory. The effect of this on Fred's financial statements for March 31 would be
- a) net income was correct and current assets and current liabilities were overstated.
 - b) net income, current assets, and current liabilities were overstated.
 - c) net income and current liabilities were overstated.
 - d) no effect.
11. Wilma received merchandise on consignment from Bubbles. As of January 31, Wilma included the goods in inventory, but did not record the transaction. The effect of this on Wilma's financial statements for January 31 would be
- a) net income, current assets, and retained earnings were understated.
 - b) net income was correct and current assets were understated.
 - c) net income, current assets, and retained earnings were overstated.
 - d) net income and current assets were overstated and current liabilities were understated.
12. Certain industries allow full or partial refunds for returned inventory. In such cases, which of the following is INCORRECT?
- a) The vendor retains the risks and rewards for those items expected to be returned.
 - b) If returns can be reasonably predicted, then the goods may be considered sold by the vendor and removed from inventory.
 - c) If returns cannot be predicted, the sale is not recognized and the goods are not removed from inventory.
 - d) If returns cannot be predicted, the sale is still recognized but the goods are not removed from inventory.

Use the following information for questions 13 and 14.

During 2014 Ebert Corp. transferred inventory to Siskel Corp., and agreed to repurchase the merchandise early in 2015. Siskel then used the inventory as collateral to borrow from Southern

Bank, remitting the proceeds to Ebert. In 2015 when Ebert repurchased the inventory, Siskel used the proceeds to repay its bank loan.

13. This transaction is known as a(n)

- a) consignment.
- b) instalment sale.
- c) product financing arrangement.
- d) sale with delayed payment terms.

14. On whose books should the cost of the inventory appear at the December 31, 2014 statement of financial position date?

- a) Siskel Corp.
- b) Ebert Corp.
- c) Southern Bank.
- d) Siskel Corp., with Ebert Corp. making appropriate note disclosure of the transaction.

15. Which of the following does NOT correctly describe the implications of an executory contract on the accounting entries and/or disclosures to be made by the purchaser and/or seller?

- a) Assets and liabilities are usually recorded at inception of the contract.
- b) Assets and liabilities are usually *not* recorded at inception of the contract.
- c) Contract details should be disclosed if the amounts are abnormal in relation to the entity's normal business operations.
- d) Assets and liabilities are recognized as performance has occurred.

16. If the unavoidable costs of completing a purchase commitment are higher than the expected benefits from receiving the contracted goods or services, IFRS requires a loss provision to be recognized. This is known as a(n)

- a) executory contract.
- b) purchase commitment.
- c) onerous contract.
- d) impaired contract.

17. If a material amount of inventory has been ordered through a formal purchase contract at the statement of financial position date for future delivery at firm prices,

- a) this fact must be disclosed.
- b) disclosure is required only if prices have declined since the date of the order.
- c) disclosure is required only if prices have since risen substantially.
- d) an appropriation of retained earnings is necessary.

18. On December 27, Chen Corp. accepted delivery of merchandise which it purchased on account. As of December 31, Chen had recorded the transaction, but did not include the merchandise in its year end inventory. The effect of this on its December 31 financial statements would be

- a) net income, current assets, and retained earnings were understated.
- b) net income was correct and current assets were understated.
- c) net income was understated and current liabilities were overstated.

d) net income was overstated and current assets were understated.

19. On June 25, Bold Corp. accepted delivery of merchandise which it purchased on account. As of June 30, Bold had not recorded the transaction nor included the merchandise in its inventory.

The effect of this on Bold's June 30 balance sheet would be

- a) assets and shareholders' equity were overstated but liabilities were not affected.
- b) shareholders' equity was the only item affected by the omission.
- c) assets, liabilities, and shareholders' equity were understated.
- d) assets and liabilities were understated but shareholders' equity was not affected.

20. All else being equal, which of the following statements with respect to the impact of inventory errors is NOT correct?

- a) An overstatement of ending inventory will result in an understatement of income.
- b) An overstatement of ending inventory will result in an overstatement of income.
- c) An overstatement of beginning inventory will result in an understatement of income.
- d) An understatement of beginning inventory will cause cost of goods sold to be understated.

21. The use of a Purchase Discounts account implies that the recorded cost of a purchased inventory item is its

- a) invoice price plus any purchase discount lost.
- b) invoice price less the purchase discount taken.
- c) invoice price less the purchase discount allowable whether taken or not.
- d) invoice price.

22. During 2014, which was its first year of operations, Landers Company recorded the following:

- 1. Merchandise purchased for \$985,000 before cash discounts taken.
- 2. All purchases were made on terms of 2/10, n/30.
- 3. Three-quarters of the items purchased were paid for within ten days of purchase.
- 4. All of the goods available had been sold at year end.

Which of the following recording procedures would result in the highest net income for 2014?

- a) Recording purchases at net amounts, with the amount of discounts not taken shown under "other expenses" in the income statement.
- b) Recording purchases at gross amounts.
- c) Recording purchases at either gross or net will result in the same net income.
- d) Cannot be determined from the information provided.

23. Not using the net method because of difficulties that may arise is a good example of applying

- a) relevance.
- b) the cost/benefit constraint.
- c) representational faithfulness.
- d) the fair value principle.

24. Which of the following is correct regarding vendor rebates?

- a) Vendor rebates are generally recorded as a reduction from sales.
- b) The rebate is never recognized until it is actually received.

- c) If the rebate meets asset recognition criteria, the receivable is allocated to goods sold.
 - d) Vendor rebates are generally recorded as a reduction in the purchase cost of inventory.
25. Which of the following is correct?
- a) Selling costs are product costs.
 - b) Manufacturing overhead costs are product costs.
 - c) Interest costs for routine inventories are product costs.
 - d) Direct labour costs are usually period costs.
26. Which of the following best describes the concept of product costs?
- a) They are costs that are "attached" to inventory.
 - b) They are costs that are usually expenses.
 - c) They usually don't include freight charges.
 - d) They usually don't include conversion costs.
27. Conversion costs include
- a) all materials plus direct labour.
 - b) all materials plus variable overhead allocated.
 - c) direct labour plus variable and fixed overhead allocated.
 - d) direct labour plus fixed overhead allocated.
28. All of the following costs should be charged to expense in the period in which they are incurred EXCEPT for
- a) manufacturing overhead costs for a product manufactured and sold in the same accounting period.
 - b) costs which will not benefit any future period.
 - c) costs from idle manufacturing capacity resulting from an unexpected plant shutdown.
 - d) costs of normal shrinkage and scrap incurred for the manufacture of a product in ending inventory.
29. Which of the following types of interest cost incurred in connection with the purchase or manufacture of inventory should be capitalized as a product cost?
- a) purchase discounts lost
 - b) interest incurred during the production of discrete projects such as ships or real estate projects
 - c) interest incurred on notes payable to vendors for routine purchases made on a repetitive basis
 - d) interest on a building mortgage
30. An EXCEPTION to the general rule that costs should be charged to expense in the period incurred is
- a) factory overhead costs incurred on a product manufactured but not sold during the current accounting period.
 - b) interest costs for financing of inventories that are routinely manufactured in large quantities on a repetitive basis.
 - c) general and administrative fixed costs incurred in connection with the purchase of

- inventory.
- d) sales commission and salary costs incurred in connection with the sale of inventory.
31. Which of the following statements regarding borrowing costs is correct?
- a) Neither ASPE nor IFRS usually require disclosure of these items.
 - b) They are usually amortized until the majority of the underlying products have been sold.
 - c) They are usually treated as period costs if they are incurred to bring inventories to a condition ready for sale.
 - d) If interest is capitalized, ASPE requires this policy and the amount capitalized to be disclosed.
32. Which of the following best describes the concept of standard costs?
- a) They are the costs that *should* be incurred per unit of finished goods inventory.
 - b) They are the costs that are *actually* incurred per unit of finished goods inventory.
 - c) When using standard costs, unallocated overhead is capitalized.
 - d) Standard costs are always acceptable for reporting purposes.
33. A “basket purchase” is a purchase of
- a) a group of units with *similar* characteristics at a single lump-sum price.
 - b) individual units with *similar* characteristics priced individually.
 - c) a group of units with *different* characteristics at a single lump-sum price.
 - d) individual units with *different* characteristics priced individually.
34. To record a “basket purchase” or to allocate a joint product cost, which method is the most rational?
- a) average cost
 - b) relative sales value
 - c) fair value
 - d) amortized cost
35. Which of the following does NOT correctly describe a *perpetual* inventory system?
- a) Cost of goods sold is calculated every time a sale is made.
 - b) Assuming shrinkage of zero, inventory and cost of goods sold do *not* have to be updated at the end of the period.
 - c) The use of this system eliminates the requirement for an annual physical inventory count.
 - d) Assuming a FIFO cost flow, cost of goods sold would equal that calculated by the *periodic* system.
36. Which of the following does NOT correctly describe a *periodic* inventory system?
- a) Cost of goods sold is calculated every time a sale is made.
 - b) Cost of goods sold is a residual amount.
 - c) Assuming a FIFO cost flow, cost of goods sold would equal those that calculated by the *perpetual* system.
 - d) Inventory and cost of goods sold must be updated at the end of the period.

37. When using a periodic inventory system,
- a) a Purchases account is not used.
 - b) a Cost of Goods Sold account is used.
 - c) two entries are required to record a sale.
 - d) a Cost of Goods Sold account is not used.
38. When using the moving-average cost formula with a perpetual system,
- a) a weighted-average cost is calculated at year end.
 - b) a new unit cost is calculated each time a sale is made.
 - c) a new unit cost is calculated each time a purchase is made.
 - d) a new unit cost is calculated both when a sale is made and when a purchase is made.
39. Which of the following does NOT correctly describe the specific identification cost formula?
- a) This method is most appropriate when goods are *not* interchangeable.
 - b) This method is most appropriate when goods are interchangeable.
 - c) This method is generally used for expensive, one-of-a-kind merchandise.
 - d) This method is often used for merchandise with serial numbers such as televisions.
40. An inventory cost formula in which the oldest costs incurred rarely have an effect on the ending inventory valuation is
- a) FIFO.
 - b) moving-average cost.
 - c) LIFO.
 - d) weighted-average.
41. All else being equal, which of the following statements is correct for a company that uses the FIFO costing formula with a perpetual inventory system (compared to a periodic system)?
- a) The value of the ending inventory would be *higher* under a periodic system.
 - b) The value of the ending inventory would be *lower* under a periodic system.
 - c) The value of the ending inventory would be the *same* under both systems.
 - d) The periodic system would not require any additional entries at the end of the period.
42. Which of the following does NOT correctly describe the weighted average cost formula?
- a) It prices inventory on the basis of the average cost of beginning inventory.
 - b) It prices inventory on the basis of the average cost of goods available for sale during the period.
 - c) It takes into account that the volume of goods acquired at each price is different.
 - d) It includes the cost of beginning inventory in the calculations.
43. Which of the following does NOT correctly describe the FIFO cost formula?
- a) This method assumes that the oldest inventory costs are the first costs recorded for cost of goods sold.
 - b) This method assumes that most current inventory costs are the first costs recorded for cost of goods sold.
 - c) This method approximates the physical flow of most types of goods.
 - d) This method is permitted under both ASPE and IFRS.

44. Which of the following statements is INCORRECT regarding the overriding objectives underlying inventory standards and guide management?

- a) Report an inventory cost on the statement of financial position that is representative of the inventory's recent cost.
- b) Choose an approach that corresponds as closely as possible to the physical flow of goods.
- c) Use the same method for all inventory assets that have similar economic characteristics.
- d) It is permissible under ASPE to use any inventory method, including LIFO.

45. The primary basis of accounting for inventories is cost. A departure from the cost basis of pricing inventory is required where there is evidence that when the goods are sold in the ordinary course of business their

- a) selling price will be less than their replacement cost.
- b) replacement cost will be more than their net realizable value.
- c) future utility will be less than their cost.
- d) cost will be less than their replacement cost.

46. In no case can "net realizable value" (in the lower of cost and net realizable value rule) be more than

- a) estimated selling price in the ordinary course of business.
- b) estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal.
- c) estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal and an allowance for a normal profit margin.
- d) estimated selling price in the ordinary course of business less reasonably predictable costs of completion and disposal, an allowance for a normal profit margin, and an adequate reserve for possible future losses.

47. When inventory declines in value below original (historical) cost, and this decline is considered other than temporary, what is the maximum amount that the inventory can be valued at?

- a) net realizable value
- b) selling price
- c) historical cost
- d) net realizable value reduced by a normal profit margin

48. The use of a "replacement cost" definition of "market" is based on the assumption that

- a) a decline in an item's replacement cost results in a decline in its selling price.
- b) prices will fall in the same proportion as input costs fall.
- c) replacement cost is appropriate for all situations.
- d) using "net realizable value less a normal profit margin" will arbitrarily shift profits from one period to another.

49. Which of the following does NOT correctly describe the concept of net realizable value (NRV)?

- a) Estimates of NRV are based on the best evidence available at and shortly after the balance sheet date.
 - b) NRV generally does *not* change over time.
 - c) NRV generally changes over time.
 - d) A new estimate of NRV is required at each balance sheet date.
50. Lower of cost and net realizable value
- a) is most conservative if applied to the total inventory.
 - b) is most conservative if applied to major categories of inventory.
 - c) is most conservative if applied to individual items of inventory.
 - d) must be applied to major categories for income tax purposes.
51. If a unit of inventory has declined in value below original cost, but the market value exceeds net realizable value, the amount to be used for purposes of inventory valuation is
- a) net realizable value.
 - b) original cost.
 - c) market value.
 - d) net realizable value less a normal profit margin.
52. Which of the following criteria does NOT have to be met in order to be able to value inventory ABOVE cost?
- a) The cost of disposal can be estimated.
 - b) The sale is assured.
 - c) There is an active market for the product.
 - d) The sale must already have occurred.
53. Which of the following inventories may NOT be valued at fair value less costs to sell?
- a) grain and livestock futures
 - b) biological assets
 - c) farm equipment
 - d) agricultural produce
54. The gross profit method of inventory valuation is NOT suitable when
- a) a portion of the inventory is destroyed.
 - b) there is a substantial increase in inventory during the year.
 - c) there is no beginning inventory because it is the first year of operation.
 - d) the gross profit percentage applicable to the goods in ending inventory is different from the percentage applicable to the goods sold during the period.
55. Which statement is NOT true about the gross profit method of inventory valuation?
- a) It may be used to estimate inventories for interim statements.
 - b) It may be used to estimate inventories for annual statements.
 - c) It may be used by auditors.
 - d) It may be used to provide a rough check on the accuracy of the physical inventory count.

56. The gross profit percentage is calculated by
- dividing cost of goods sold by net sales.
 - dividing gross profit on sales by cost of goods sold.
 - dividing gross profit on sales by net sales.
 - dividing gross profit on sales by goods available for sale.
57. The gross profit method of inventory valuation
- can be used as a substitute for the annual physical count of inventory.
 - assumes past percentages are appropriate for the current period.
 - uses mark-ups but not markdowns.
 - is designed to approximate inventory valuation at the lower of cost and net realizable value.
58. Which of the following statements with respect to the gross profit method of estimating inventory is NOT correct?
- It may be used for interim reporting.
 - It may be used to estimate ending inventory when inventory has been destroyed.
 - It uses the interrelationship between the accounts used in the cost of goods sold calculation.
 - The use of this method eliminates the need for performing an actual inventory count.
59. The inventory turnover ratio is calculated as
- cost of goods sold divided by average inventory.
 - average inventory divided by cost of goods sold.
 - cost of goods sold times average inventory.
 - average assets divided by cost of goods sold.
60. The inventory turnover ratio is calculated by dividing the cost of goods sold by
- beginning inventory.
 - ending inventory.
 - average inventory.
 - number of days in the year.
61. The average days to sell inventory ratio is calculated as
- average inventory divided by inventory turnover.
 - inventory turnover divided by cost of goods sold.
 - inventory turnover divided by 365 days.
 - 365 days divided by inventory turnover.
- *62. An inventory method which is designed to approximate inventory valuation at the lower of average cost and market is
- last-in, first-out.
 - weighted average.
 - conventional retail method.
 - specific identification.

*63. When the conventional retail inventory method is used, markdowns are commonly ignored in the calculation of the cost to retail ratio because

- a) there may be no markdowns in a given year.
- b) this tends to give a better approximation of the lower of cost and market.
- c) mark-ups are also ignored.
- d) this tends to result in showing a normal profit margin in a period when no markdown goods have been sold.

*64. To produce an inventory valuation which approximates the lower of average cost and market using the conventional retail inventory method, the calculation of the ratio of cost to retail should

- a) include mark-ups but not markdowns.
- b) include mark-ups and markdowns.
- c) ignore both mark-ups and markdowns.
- d) include markdowns but not mark-ups.

*65. The retail inventory method is NOT used

- a) as a control measure to determine inventory shortages.
- b) to allow the calculation of net income without taking a physical inventory count.
- c) to control quantities of merchandise on hand.
- d) to calculate the gross profit percentage.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	10.	a	19.	d	28.	d	37.	d	46.	b	55.	b	*64.	a
2.	a	11.	c	20.	a	29.	b	38.	c	47.	a	56.	c	*65.	d
3.	d	12.	d	21.	d	30.	a	39.	b	48.	a	57.	b		
4.	c	13.	c	22.	c	31.	d	40.	a	49.	b	58.	d		
5.	b	14.	b	23.	b	32.	a	41.	c	50.	c	59.	a		
6.	a	15.	a	24.	d	33.	c	42.	a	51.	a	60.	c		
7.	b	16.	c	25.	b	34.	b	43.	b	52.	d	61.	d		
8.	d	17.	a	26.	a	35.	c	44.	d	53.	c	*62.	c		
9.	b	18.	a	27.	c	36.	a	45.	c	54.	d	*63.	b		

MULTIPLE CHOICE—Computational

66. The following information is available for Hornblow Ltd. for last year:

Freight-in.....	\$ 20,000
Purchase returns.....	62,000
Selling expenses.....	110,000
Ending inventory	260,000

The cost of goods sold is equal to 300% of selling expenses. What is the cost of goods available for sale?

- a) Cannot be determined from information given.
- b) \$370,000
- c) \$590,000
- d) \$610,000

67. For calendar 2014, the gross profit of Allan Corp. was \$350,000; the cost of goods manufactured was \$890,000; the beginning inventories of goods in process and finished goods were \$76,000 and \$112,000, respectively; and the ending inventories of goods in process and finished goods were \$92,000 and \$143,000, respectively. Allan Corp.'s sales for 2014 must have been

- a) \$730,000.
- b) \$894,000.
- c) \$1,101,000.
- d) \$1,209,000.

68. Nottingham Inc.'s net sales and gross profit were \$1,341,000 and \$471,000 respectively. Assuming the cost of goods available were \$1,084,000, what was the cost value of the ending inventory?

- a) \$870,000
- b) \$471,000
- c) \$247,000
- d) \$214,000

69. For last month, Perma Corp.'s cost of goods sold and ending inventory were \$100,000 and \$150,000 respectively. Assuming Perma had neither purchases nor returns during the month, what was the cost of its *beginning* inventory?

- a) \$50,000
- b) \$150,000
- c) \$250,000
- d) Cannot be determined from the information given.

70. In its *first* year of operations as a retailer, Hwang Ltd. reported a gross profit of \$135,000, total purchases of \$160,000, and an ending inventory of \$75,000. Therefore, Hwang's sales in its first year must have been

- a) \$60,000.
- b) \$80,000.
- c) \$180,000.

d) \$220,000.

Use the following information for questions 71 through 73.

Giselle Ltd. is a calendar-year corporation. Its financial statements for the years 2015 and 2014 contained errors as follows:

	<u>2015</u>	<u>2014</u>
Ending inventory.....	\$2,000 overstated	\$3,000 overstated
Depreciation expense.....	\$6,000 understated	\$12,000 overstated

71. Assume that the proper correcting entries were made at December 31, 2014. By how much will 2015 pre-tax income be overstated or understated?

- a) \$2,000 understated
- b) \$2,000 overstated
- c) \$6,000 overstated
- d) \$8,000 overstated

72. Assume that *no* correcting entries were made at December 31, 2014. *Ignoring income taxes*, by how much will retained earnings at December 31, 2015 be overstated or understated?

- a) \$4,000 understated
- b) \$6,000 overstated
- c) \$6,000 understated
- d) \$15,000 understated

73. Assume that *no* correcting entries were made at December 31, 2014, or December 31, 2015 and that *no* additional errors occurred in 2016. *Ignoring income taxes*, by how much will working capital, at December 31, 2016 be overstated or understated?

- a) \$0
- b) \$4,000 overstated
- c) \$4,000 understated
- d) \$6,000 understated

74. For calendar 2014, Gomez Corporation reported pre-tax income of \$70,000. A recount of the company's inventory revealed that 2014 ending inventory was overstated by \$10,000. What is Gomez's corrected pre-tax income for 2014?

- a) \$60,000
- b) \$80,000
- c) \$70,000
- d) \$75,000

75. For calendar 2014, Halima Corporation reported pre-tax income of \$345,000. You have been made aware that the company's beginning inventory was overstated by \$12,000 and ending inventory was understated by \$11,000. What is Halima's corrected pre-tax income for 2014?

- a) \$322,000
- b) \$344,000

- c) \$346,000
- d) \$368,000

Use the following information for questions 76 and 77.

Tuck Corp. records purchases at net amounts. On May 5, Tuck purchased merchandise on account costing \$8,000 (gross), terms 2/10, n/30. Tuck returned \$700 of the May 5 purchase and received credit on account. At May 31 the balance had not been paid.

76. The amount to be recorded as a purchase return is

- a) \$714.
- b) \$700.
- c) \$686.
- d) \$630.

77. By how much should the account payable be adjusted on May 31?

- a) \$0
- b) \$146
- c) \$160
- d) \$540

78. At the end of its accounting year, Guild Corp.'s physical inventory count indicated that 540,000 units of inventory, costing \$1.50 each, were on hand. The company's perpetual inventory system reported a balance of \$817,200. The year end adjusting entry is

- a) debit Inventory and credit Loss on Inventory Due to Count, \$7,200.
- b) debit Loss on Inventory Due to Count and credit Inventory, \$7,200.
- c) debit Inventory and credit Loss on Inventory Due to Count, \$277,200.
- d) debit Loss on Inventory Due to Count and credit Inventory, \$277,200.

Use the following information for questions 79 and 80.

Tehran Ltd. uses FIFO to cost its inventory. The following information is available for Tehran's inventory of product # 101:

Beginning inventory:.	120 units @ \$3.14 per unit
March 1:	Purchase of 250 units @ \$3.50 per unit
April 10:	Sale of 100 units @ \$5.10 per unit

79. Assuming Tehran uses the *periodic* inventory system, the entry to account for the March 1 purchase is

- a) debit Inventory and credit Accounts Payable, \$875.
- b) debit Purchases and credit Accounts Payable, \$875.
- c) debit Accounts Payable and credit Purchases, \$875.
- d) debit Accounts Payable and credit Inventory, \$875.

80. Assuming Tehran uses the *perpetual* inventory system, the entry to account for the March 1 purchase is

- a) debit Inventory and credit Accounts Payable, \$875.
- b) debit Purchases and credit Accounts Payable, \$875.
- c) debit Accounts Payable and credit Purchases, \$875.
- d) debit Accounts Payable and credit Inventory, \$875.

Use the following information for questions 81 and 82.

The following information was available from the inventory records of Lock Company for January:

	<u>Units</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Balance at January 1.....	3,000	\$9.77	\$29,310
Purchases:			
January 6.....	2,000	10.30	20,600
January 26.....	2,700	10.71	28,917
Sales:			
January 7.....	(2,500)		
January 31.....	<u>(4,200)</u>		
Balance at January 31.....	<u>1,000</u>		

81. Assuming that Lock uses the *periodic* inventory system, what should the inventory be at January 31, using the weighted-average inventory method, rounded to the nearest dollar?

- a) \$10,237
- b) \$10,260
- c) \$10,360
- d) \$10,505

82. Assuming that Lock uses the *perpetual* inventory system, what should the inventory be at January 31, using the moving-average inventory method, rounded to the nearest dollar?

- a) \$10,237
- b) \$10,260
- c) \$10,360
- d) \$10,505

Use the following information for questions 83 and 84.

Transactions for Littlejohn Ltd. for the month of June were:

<u>Purchases</u>				<u>Sales</u>			
June	1	(balance)	400 @ \$3.20	June	2	.....	300 @ \$5.50
	3	.....	1,100 @ 3.10		6	.....	800 @ 5.50
	7	.....	600 @ 3.30		9	.....	500 @ 5.50
	15	.....	900 @ 3.40		10	.....	200 @ 6.00
	22	.....	250 @ 3.50		18	.....	700 @ 6.00
					25	.....	150 @ 6.00

Littlejohn uses the periodic inventory system.

83. The ending inventory on a FIFO basis is

- a) \$2,100.
- b) \$2,065.
- c) \$1,920.
- d) \$1,900.

84. The ending inventory on a weighted average-cost basis, rounded to the nearest dollar, is

- a) \$1,956.
- b) \$1,970.
- c) \$1,980.
- d) \$1,995.

85. Tehran Ltd. uses FIFO to cost its inventory. The following information is available for Tehran's inventory of product # 101:

Beginning inventory: 120 units @ \$3.14 per unit
 March 1: Purchase of 250 units @ \$3.50 per unit
 April 10: Sale of 100 units @ \$5.10 per unit

Assuming Tehran uses the *perpetual* inventory system, the second entry to account for the April 10 sale is

- a) debit Cost of Goods Sold and credit Inventory, \$350.
- b) debit Cost of Goods Sold and credit Purchases, \$350.
- c) debit Cost of Goods Sold and credit Inventory, \$314.
- d) debit Cost of Goods Sold and credit Purchases, \$314.

86. Pate Ltd. has the following data related to an item of inventory:

Inventory, March 1 100 units @ \$8.40
 Purchase, March 7 350 units @ \$8.80
 Purchase, March 16 70 units @ \$9.50
 Inventory, March 31 150 units

If Pate Ltd. uses FIFO, the value assigned to *cost of goods sold* is

- a) \$3,305.
- b) \$3,262.
- c) \$3,216.
- d) \$1,369.

Use the following information for questions 87 and 88.

The following information is available for Anselmo Corporation's inventories:

December 31, 2014:

At cost: \$585,000

At lower of cost and net realizable value (NRV): \$525,000

December 31, 2015:

At cost: \$780,000

At lower of cost and net realizable value (NRV): \$740,000

Anselmo uses a periodic inventory system and an allowance account to adjust its inventory from cost to the lower of cost and NRV.

87. Anselmo's 2014 journal entry to adjust its inventory from cost to the lower of cost and net realizable value (NRV) will include a

- a) debit of \$60,000 to Loss on Inventory Due to Decline in NRV.
- b) credit of \$60,000 to Loss on Inventory Due to Decline in NRV.
- c) debit of \$60,000 to Allowance to Reduce Inventory to NRV.
- d) credit of \$60,000 to Inventory.

88. Anselmo's 2015 journal entry to adjust its inventory from cost to the lower of cost and net realizable value (NRV) will include a

- a) debit of \$40,000 to Loss on Inventory Due to Decline in NRV.
- b) debit of \$40,000 to Allowance to Reduce Inventory to NRV.
- c) debit of \$20,000 to Allowance to Reduce Inventory to NRV.
- d) credit of \$40,000 to Recovery of Loss Due to Decline in Inventory.

89. Rounded to the nearest whole percent, a mark-up of 35% on cost is equivalent to what percentage of gross profit on selling price?

- a) 26%
- b) 29%
- c) 40%
- d) 60%

90. Oregon Ltd. estimates the cost of its physical inventory at March 31 for use in interim financial statements. The rate of mark-up on cost is 25%. The following account balances are available:

Inventory, March 1.....	\$220,000
Purchases	172,000
Purchase returns	8,000
Sales during March.....	350,000

What is the estimated dollar value of the inventory at March 31?

- a) \$34,000
- b) \$78,000
- c) \$104,000
- d) \$121,500

91. On January 1, 2014, the merchandise inventory of Morton Corp. was \$600,000. During 2014, Morton purchased \$1,150,000 of merchandise and recorded sales of \$1,350,000. The gross profit rate on these sales was 35%. What is the estimated dollar value of the inventory at December 31?

- a) \$877,500
- b) \$872,500
- c) \$562,500
- d) \$472,500

92. For calendar 2014, cost of goods available for sale for Scarlett Corp. was \$870,000. The average gross profit rate was 40%. Sales for the year were \$700,000. What is the estimated dollar value of the inventory at December 31?

- a) \$450,000
- b) \$420,000
- c) \$170,000
- d) \$68,000

93. On April 15 of the current year, a fire destroyed the entire inventory of The Corner Shoppe, a retail store. The following data are available:

Sales, January 1 through April 15	\$485,000
Inventory, January 1.....	80,000
Purchases, January 1 through April 15.....	391,000
Mark-up on cost	25%

The amount of the inventory loss is estimated to be

- a) \$174,000.
- b) \$97,000.
- c) \$94,000.
- d) \$83,000.

94. The 2014 financial statements of Barclay Ltd. reported beginning inventory of \$130,000, ending inventory of \$140,000, and cost of goods sold of \$650,000 for the year. To one decimal, Barclay's inventory turnover ratio for 2014 is

- a) 2.9 times.
- b) 3.4 times.
- c) 4.0 times.
- d) 4.8 times.

Use the following information for questions *95 through *97.

Tang Inc. uses the retail inventory method. The following information is available for the current year:

	<u>Cost</u>	<u>Retail</u>
Beginning inventory.....	\$117,000	\$183,000
Purchases	442,000	623,000
Freight-in.....	8,000	—
Employee discounts	—	3,000
Net mark-ups	—	22,000
Net markdowns	—	30,000
Sales.....	—	585,000

*95. If the ending inventory is to be valued at approximately lower of average cost and market, the calculation of the cost ratio should be based on cost and retail of

- a) \$450,000 and \$645,000.
- b) \$450,000 and \$642,000.
- c) \$559,000 and \$825,000.
- d) \$567,000 and \$828,000.

*96. The ending inventory at retail should be

- a) \$210,000.
- b) \$216,000.
- c) \$225,000.
- d) \$240,000.

*97. The approximate cost of the ending inventory by the conventional retail method is

- a) \$153,720.
- b) \$147,000.
- c) \$143,850.
- d) \$142,380.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
66.	c	72.	a	78.	b	84.	a	90.	c	*96.	a
67.	d	73.	a	79.	b	85.	c	91.	b	*97.	c
68.	d	74.	a	80.	a	86.	c	92.	a		
69.	c	75.	d	81.	a	87.	a	93.	d		
70.	d	76.	c	82.	c	88.	c	94.	d		
71.	d	77.	b	83.	b	89.	a	*95.	d		

DERIVATIONS—Computational

No.	Answer	Derivation
66.	c	$\$260,000 + (300\% \times \$110,000) = \$590,000$
67.	d	$\$890,000 + \$112,000 - \$143,000 = \$859,000$ (COGS) $\$859,000 + \$350,000 = \$1,209,000$
68.	d	$\$1,084,000 - (\$1,341,000 - \$471,000) = \$214,000.$
69.	c	$\$100,000 + \$150,000 = \$250,000.$
70.	d	$\$135,000 + (\$160,000 - \$75,000) = \$220,000.$
71.	d	$\$2,000 + \$6,000 = \$8,000.$
72.	a	$\$12,000 - (\$2,000 + \$6,000) = \$4,000.$
73.	a	The effect of the errors in ending inventories reverse themselves in the following year.
74.	a	$\$70,000 - \$10,000 = \$60,000.$
75.	d	$\$345,000 + \$12,000 + \$11,000 = \$368,000$
76.	c	$\$700 \times 98\% = \$686.$
77.	b	$(\$8,000 - \$700) \times .02 = \$146.$
78.	b	$\$817,200 - (540,000 \times \$1.50) = \$7,200$ Loss.
79.	b	Under the periodic system, a Purchases account is used. $250 \times \$3.50 = \$875.$
80.	a	Under the perpetual system, purchases are debited to Inventory. $250 \times \$3.50 = \$875.$
81.	a	$(\$29,310 + \$20,600 + \$28,917) \div (3,000 + 2,000 + 2,700) = \$10.237/\text{unit}$ $\$10.237 \times 1,000 = \$10,237.$
82.	c	Avg. on Jan 6 $\$49,910 \div 5,000 = \$9.982/\text{unit}$ Avg. on Jan 26 $\$53,872 \div 5,200 = \$10.36/\text{unit}$ $\$10.36 \times 1,000 = \$10,360.$
83.	b	Total GAFS 3,250 units; total sold 2,650 units; EI = 600 units $\text{EI} = (250 \times \$3.50) + (350 \times \$3.40) = \$2,065.$
84.	a	$\$10,605 \div 3,250 \text{ units} = \$3.26; \$3.26 \times 600 = \$1,956.$

DERIVATIONS—Computational (CONTINUED)

No.	Answer	Derivation
85.	c	Under FIFO, the unsold units in beginning inventory are considered to be the first units sold. $100 \times \$3.14 = \314 .
86.	c	$100 + 350 + 70 - 150 = 370$ units sold $(100 \times \$8.40) + (270 \times \$8.80) = \$3,216$.
87.	a	$\$585,000 - \$525,000 = \$60,000$.
88.	c	Existing balance in allowance account must decrease from \$60,000 to \$40,000. This is accomplished by debiting the allowance account by \$20,000. Then the adjusted inventory will be $\$780,000 - \$40,000 = \$740,000$.
89.	a	$35\% \div (1 + 35\%) = 26\%$ (rounded).
90.	c	$\text{COGS} = \$350,000 \div 1.25 = \$280,000$ $(\$220,000 + \$172,000 - \$8,000) - \$280,000 = \$104,000$.
91.	b	$\text{COGS} = \$1,350,000 \times 0.65 = \$877,500$ $\$600,000 + \$1,150,000 - \$877,500 = \$872,500$.
92.	a	$\$870,000 - (\$700,000 \times 0.60) = \$450,000$.
93.	d	$\$80,000 + \$391,000 - (\$485,000 \div 1.25) = \$83,000$.
94.	d	$\$650,000 \div [(\$130,000 + \$140,000) \div 2] = 4.8$ times.
*95.	d	Cost: $\$117,000 + \$442,000 + \$8,000 = \$567,000$. Retail: $\$183,000 + \$623,000 + \$22,000 = \$828,000$.
*96.	a	$\$183,000 + \$623,000 - \$3,000 + \$22,000 - \$30,000 - \$585,000 = \$210,000$.
*97.	c	Cost: $\$117,000 + \$442,000 + \$8,000 = \$567,000$ Retail: $\$183,000 + \$623,000 + \$22,000 = \$828,000$ Cost-to-retail ratio = $\$567,000 \div \$828,000 = 68.5\%$ $\$210,000 \times 68.5\% = \$143,850$.

MULTIPLE CHOICE—CPA Adapted

98. Delaware Corp.'s accounts payable at December 31, 2014, totalled \$450,000 before any necessary year-end adjustments relating to the following:

1. On December 27, 2014, Delaware wrote and recorded cheques to creditors totalling \$175,000 causing an overdraft of \$100,000 in Delaware's bank account at December 31, 2014. The cheques were mailed out on January 10, 2015.
2. On December 28, 2014, Delaware purchased and received goods for \$100,000, terms 2/10, n/30. Delaware records purchases and accounts payable at net amounts. The invoice was recorded and paid on January 3, 2015.
3. Goods shipped f.o.b. destination on December 20, 2014 from a vendor were received on January 2, 2015. The invoice cost was \$65,000.

At December 31, 2014, what amount should Delaware report as total accounts payable?

- a) \$550,000
- b) \$575,000
- c) \$723,000
- d) \$755,500

99. The balance in Georgia Corp.'s accounts payable account at December 31, 2014 was \$900,000 before any necessary year-end adjustments relating to the following:

1. Goods were in transit to Georgia from a vendor on December 31, 2014. The invoice cost was \$75,000. The goods were shipped f.o.b. shipping point on December 29, 2014 and were received on January 4, 2015.
2. Goods shipped f.o.b. destination on December 21, 2014 from a vendor were received on January 6, 2015. The invoice cost was \$37,500.
3. On December 27, 2014, Georgia wrote and recorded cheques to creditors totalling \$45,000 that were mailed on January 10, 2015.

At December 31, 2014, what amount should Georgia report as total accounts payable?

- a) \$1,020,000
- b) \$1,012,500
- c) \$975,000
- d) \$945,000

100. Florida Ltd.'s accounts payable balance at December 31, 2014 was \$600,000 before any necessary year-end adjustments relating to the following:

1. Goods were in transit from a vendor to Florida on December 31, 2014. The invoice price was \$40,000, and the goods were shipped f.o.b. shipping point on December 29, 2014. The goods were received on January 4, 2015.
2. Goods shipped to Florida, f.o.b. shipping point on December 20, 2014, from a vendor were lost in transit. The invoice price was \$25,000. On January 5, 2015, Florida filed a \$25,000 claim against the common carrier.

At December 31, 2014, what amount should Florida report as total accounts payable?

- a) \$600,000
- b) \$625,000
- c) \$640,000
- d) \$665,000

101. The following information was derived from the 2014 accounting records of Jersey Co.:

	<u>Jersey's Central Warehouse</u>	<u>Jersey's Goods held by consignees</u>
Beginning inventory	\$260,000	\$28,000
Purchases	475,000	90,000
Freight-in	15,000	
Transportation to consignees		5,000
Freight-out	25,000	8,000
Ending inventory	290,000	20,000

Jersey's 2014 cost of sales was

- a) \$563,000.
- b) \$558,000.
- c) \$488,000.
- d) \$460,000.

102. The following information was reported by Montana Inc. for 2014:

Merchandise purchased for resale.....	\$100,000
Freight-in	7,000
Freight-out.....	4,000
Purchase returns	2,000

Based on this data, Montana's 2014 inventoriable cost was

- a) \$113,000.
- b) \$111,000.
- c) \$105,000.
- d) \$100,000.

103. Arizona Inc. uses the perpetual inventory system, and recorded the following data pertaining to raw material X during January 2014:

		Units			
<u>Date</u>		<u>Received</u>	<u>Cost</u>	<u>Issued</u>	<u>On Hand</u>
Jan 1	Inventory		\$4.00		3,200
Jan 11	Issue (sold)			1,600	1,600
Jan 22	Purchase	4,000	\$4.70		5,600

The moving-average unit cost of raw material X inventory at January 31, 2014 is

- a) \$4.70.
- b) \$4.50.
- c) \$4.43.
- d) \$4.35.

104. At January 1, 2014, Nevada Ltd. had 150 units of product A on hand, costing \$32 each. Purchases of product A during January were as follows:

<u>Date</u>	<u>Units</u>	<u>Unit Cost</u>
Jan 10	200	\$33.00
18	250	34.50
28	100	36.00

A physical count on January 31, 2014 shows 200 units of product A on hand. The cost of the

inventory at January 31, 2014 under the FIFO cost formula is

- a) \$6,150.
- b) \$6,375.
- c) \$6,600.
- d) \$7,050.

105. Washington Distribution Co. has determined its December 31, 2014 inventory on a FIFO basis at \$240,000. Information pertaining to that inventory follows:

Estimated selling price	\$255,000
Estimated cost of disposal.....	10,000
Normal profit margin.....	30,000

Washington records losses that result from applying the lower of cost and net realizable value rule. At December 31, 2014, the loss that Washington should recognize is

- a) \$0.
- b) \$5,000.
- c) \$15,000.
- d) \$25,000.

106. Tennessee Ltd.'s accounting records reported the following information:

Inventory, Jan 1, 2014.....	\$ 300,000
Purchases during 2014	1,500,000
Sales during 2014	2,000,000

A physical inventory taken on December 31, 2014 resulted in an ending inventory of \$350,000. Tennessee's gross profit on sales has remained constant at 30% in recent years. Tennessee suspects some inventory may have been taken by a new employee. At December 31, 2014, what is the estimated cost of the *missing* inventory?

- a) \$400,000
- b) \$100,000
- c) \$ 75,000
- d) \$ 50,000

107. For 2014, Colorado Corp.'s cost of goods sold was \$562,500 and their sales were \$1,200,000. Assuming an inventory turnover of 3.5 for the year, what was the company's average inventory? (Round to the nearest dollar.)

- a) \$251,786
- b) \$170,682
- c) \$160,714
- d) Cannot be determined from the information given.

*108. Maine Co. uses the retail inventory method to estimate its inventory for interim statement purposes. Data relating to the calculation of the inventory at July 31, 2014, are as follows:

	<u>Cost</u>	<u>Retail</u>
Inventory, July 1/14	\$ 200,000	\$ 250,000
Purchases	1,200,000	1,575,000
Mark-ups, net		175,000
Sales		1,700,000

Estimated normal shoplifting losses.....	20,000
Markdowns, net.....	110,000

Under the lower of average cost and market method, Maine's estimated inventory at July 31, 2014, is

- a) \$85,000.
- b) \$119,000.
- c) \$133,000.
- d) \$136,000.

*109. At December 31, 2014, the following information was available from Hampshire Corp.'s accounting records:

	<u>Cost</u>	<u>Retail</u>
Inventory, Jan 1.....	\$147,000	\$ 205,000
Purchases	763,000	1,155,000
Additional mark-ups.....		<u>40,000</u>
Available for sale	<u>\$910,000</u>	<u>\$1,400,000</u>

Sales for the year totalled \$1.1 million. Markdowns amounted to \$10,000. Under the lower of average cost and market method, Hampshire's estimated inventory at December 31, 2014 was

- a) \$188,500.
- b) \$195,000.
- c) \$201,500.
- d) \$318,500.

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
98.	c	101.	a	104.	d	107.	c
99.	a	102.	c	105.	a	*108.	b
100.	d	103.	b	106.	d	*109.	a

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
98.	c	$\$450,000 + \$175,000 + \$98,000 = \$723,000.$
99.	a	$\$900,000 + \$75,000 + \$45,000 = \$1,020,000.$
100.	d	$\$600,000 + \$40,000 + \$25,000 = \$665,000.$
101.	a	$\$260,000 + \$28,000 + \$475,000 + \$90,000 + \$15,000 + \$5,000 - \$290,000 - \$20,000 = \$563,000.$
102.	c	$\$100,000 + \$7,000 - \$2,000 = \$105,000.$
103.	b	$[(3,200 \times \$4) - (1,600 \times \$4) + (4,000 \times \$4.70)] \div 5,600 = \$4.50.$
104.	d	$(100 \times \$36) + (100 \times \$34.50) = \$7,050.$
105.	a	NRV = $\$255,000 - \$10,000 = \$245,000$; Cost = $\$240,000$; Therefore no loss.
106.	d	$\$2,000,000 \times .70 = \$1,400,000$ (COGS) $\$300,000 + \$1,500,000 - \$1,400,000 - \$350,000 = \$50,000.$
107.	c	$\$562,500 \div 3.5 = \$160,714.$
*108.	b	$(\$200,000 + \$1,200,000) \div (\$250,000 + \$1,575,000 + \$175,000) = 0.7$ $(\$250,000 + \$1,575,000 + \$175,000 - \$20,000 - \$110,000 - \$1,700,000) \times 0.7 = \$119,000.$
*109.	a	$\$910,000 \div \$1,400,000 = 65.0\%$ $(\$1,400,000 - \$10,000 - \$1,100,000) \times 65.0\% = \$188,500.$

EXERCISES

Ex. 8-110 Definitions

Provide clear, concise answers for the following:

1. Identify the inventory categories of a manufacturing company and describe how they are related.
2. What is a perpetual inventory system?
3. What is a periodic inventory system?
4. What is the specific identification cost flow method?
5. What is the average cost inventory cost flow method?
6. What is the FIFO cost flow method?

Solution 8-110

1. Manufacturing companies typically have three inventory categories: raw materials, work-in-process and finished goods. Their relationship can be seen in that both the raw materials and the finished goods are included in the finished goods inventory. Specifically, the raw materials can be traced directly to the end product.
2. In a perpetual inventory system, all purchases and sales are recorded directly in the inventory general ledger account as they occur. Cost of goods sold is calculated every time goods are sold. As a result, up-to-date information as to the number of units on hand and cost of goods sold is always available.
3. In a periodic inventory system, detailed records of purchases and sales are not kept in the inventory accounts. Cost of goods sold is a residual amount and is only available after a physical inventory count has been performed.
4. This method is used to assign costs to individual inventory items that are not interchangeable and are identifiable. Examples include special orders and serialized products such as automobiles and major appliances.
5. This method prices items in inventory on the basis of average cost of goods available for sale during the period. The weighted average cost formula takes into account that the volume of goods purchased at each price is different.
6. This method assumes that the oldest inventory costs are the first costs recorded for goods sold. As a result, it matches the physical flow of goods for most types of inventory.

Ex. 8-111 Terminology

In the space provided at right, write the word or phrase that is defined or indicated.

1. An approach whereby a company finances its inventory without reporting either the liability or the inventory asset on its statement of financial position. 1. _____
2. The method of initially recording purchases at the full invoice amount. 2. _____

- | | |
|--|----------|
| 3. The method of initially recording purchases at an amount that assumes that discounts will be taken. | 3. _____ |
| 4. A contract in which neither party has fulfilled its part of the contract. | 4. _____ |
| 5. The costs that are "attached" to Inventory. | 5. _____ |
| 6. Direct costs and allocated overhead that are incurred to process raw materials into finished goods. | 6. _____ |
| 7. The predetermined costs to produce one unit of a given item of inventory. | 7. _____ |
| 8. The purchase of a group of units with different characteristics at a single lump sum price. | 8. _____ |
| 9. An inventory estimation method that uses the interrelationships between the accounts used in the calculation of cost of goods sold. | 9. _____ |

Solution 8-111

1. A product financing arrangement
2. The gross method
3. The net method
4. Executory contract
5. Product costs
6. Conversion costs
7. Standard costs
8. Basket purchase
9. The gross profit method

Ex. 8-112 Recording purchases at net amounts

Mexico Inc. records purchases at net amounts and uses the periodic inventory system. Prepare entries for the following:

- May 11 Purchased merchandise on account, \$16,000, terms 2/10, n/30.
 15 Returned part of May 11 purchase, \$2,000, and received credit on account.

- 30 Prepared the adjusting entry required for financial statements.

Solution 8-112

May 11	Purchases (.98 × \$16,000).....	15,680	
	Accounts Payable		15,680
15	Accounts Payable (.98 × \$2,000)	1,960	
	Purchase Returns and Allowances		1,960
30	Purchase Discounts Lost [0.02 × (\$15,680 – 1,960)]	274.40	
	Accounts Payable		274.40

Ex. 8-113 Year-end entries to update inventory accounts

Omaha Corporation uses FIFO and a periodic inventory system. You have been provided with the following information relating to the company's inventory for the year ended December 2014:

Beginning inventory Jan 1	\$24,500
Ending inventory Dec 31	109,080
Total purchases recorded during 2014	130,000

Instructions

Record the journal entry (entries) that are required to bring Omaha's inventory accounts and cost of goods sold up to date for 2014.

Solution 8-113

Ending inventory (Note 1).....	109,080	
Cost of goods sold (Note 2).....	45,420	
Beginning inventory (Note 3).....		24,500
Purchases (Note 4).....		130,000

Note 1: To record ending inventory

Note 2: To record cost of goods sold (\$24,500 + \$130,000 - \$109,080)

Note 3: To remove beginning inventory

Note 4: To clear purchases account

Ex. 8-114 FIFO cost formula

The Malibu Shop shows the following data related to item Y27:

Inventory, February 1	100 units @ \$7.00
Purchase, February 9	200 units @ \$7.60
Purchase, February 19	150 units @ \$7.90
Inventory, February 28	200 units

Instructions

Using the FIFO cost formula, what value should be assigned to the ending inventory of item Y27?

Solution 8-114

150 @ \$7.90 =	\$1,185
50 @ \$7.60 =	<u>380</u>
	<u>\$1,565</u>

Ex. 8-115 Perpetual FIFO

A record of transactions for the month of May is as follows:

Purchases			Sales		
May 1 (balance)	400	@ \$4.00	May 3.....	300	@ \$7.00
4.....	1,300	@ \$4.10	6.....	1,000	@ 7.00
8.....	800	@ \$4.30	12.....	900	@ 7.50
14.....	700	@ \$4.40	18.....	400	@ 7.50
22.....	1,200	@ \$4.50	25.....	1,400	@ 8.00
29.....	500	@ \$4.75			

Assuming that perpetual inventory records are kept in dollars, calculate the ending inventory using FIFO.

Solution 8-115

$$\begin{array}{r}
 500 @ \$4.75 = \$2,375 \\
 400 @ \$4.50 = \underline{1,800} \\
 \hline
 \$4,175
 \end{array}$$

Ex. 8-116 Periodic FIFO

Maine Corporation sells item A as part of its product line, using the periodic system. Information as to balances on hand, purchases, and sales of item A are given in the following table for the first six months of 2014:

Date	Quantities		Balance	Unit Price of Purchase
	Purchased	Sold		
January 11	—	—	300	\$5.00
January 24	1,300	—	1,600	5.20
February 8	—	300	1,300	—
March 16	—	560	740	—
June 11	600	—	1,340	5.60

Instructions

Calculate the cost of goods sold for the first six months of 2014 using the FIFO cost formula.

Solution 8-116

$$\begin{array}{r}
 300 @ \$5.00 = \$1,500 \\
 560 @ \$5.20 = \underline{2,912} \\
 \hline
 860 \quad \underline{\$4,412}
 \end{array}$$

Ex. 8-117 Journal entries for perpetual inventory system

Idaho Inc. is a wholesale company selling special parts for the automotive industry. The company uses FIFO and a perpetual inventory system. Its inventory records for part SA-123 show the following transactions for the month of May 2014:

Date	Transaction	Units Purchased	Unit Cost	Units Sold	Unit Selling Price
May 1	Balance	120	\$7.00		
May 10	Purchase	500	\$7.20		
May 15	Sale			(100)	\$12.40
May 21	Sale			(150)	\$12.50
May 23	Purchase	250	\$7.30		

Instructions

Assuming Idaho makes all sales and purchases of inventory on account, prepare the journal entries for each of the above listed transactions.

Solution 8-117May 10

Inventory.....	3,600	
Accounts Payable		3,600

To record purchase (500 x \$7.20 = \$3,600)

May 15

Accounts Receivable.....	1,240	
Sales.....		1,240

To record sale (100 x \$12.40 = \$1,240)

Cost of goods sold.....	700	
Inventory.....		700

To update inventory and cost of goods sold (100 x \$7.00 (from BI) = \$700)

May 21

Accounts Receivable.....	1,875	
Sales.....		1,875

To record sale (150 x \$12.50 = \$1,875)

Cost of goods sold.....	1,076	
Inventory.....		1,076

To update inventory and cost of goods sold
(20 x \$7.00 – from BI) + (130 x \$7.20 - from May 10 purch) = \$1,076

May 23

Inventory.....	1,825	
Accounts Payable.....		1,825

To record purchase (250 x \$7.30 = \$1,825)

Ex. 8-118 Adjustments to lower of cost and NRV

The controller of Utah Corp. has provided you with the following information relating to its inventory:

Date	Cost	Lower of cost and NRV
Dec 31/14	\$457,000	\$410,000

Dec 31/15 \$615,000 \$555,000

Utah uses the periodic inventory system, and records its inventory at cost. An allowance account is adjusted at the end of each year to adjust the value of the inventory to the lower of cost and NRV.

Instructions

Prepare the journal entries that Utah would have prepared for its 2014 and 2015 year ends, assuming that 2014 was its first year of operations.

Solution 8-118

December 2014:

Loss on Inventory Due to Decline in NRV.....	47,000	
Allowance to Reduce Inventory to NRV.....		47,000

To set up allowance to decrease inventory from cost to the lower of cost and NRV (\$457,000 – \$410,000 = \$47,000)

December 2015:

Loss on Inventory Due to Decline in NRV.....	13,000	
Allowance to Reduce Inventory to NRV.....		13,000

To increase the balance in the allowance account by \$13,000
 (\$615,000 – \$47,000) – \$555,000 = \$13,000.
 Allowance account now at \$60,000 Cr = difference between cost and NRV

Ex. 8-119 Lower of cost and net realizable value (NRV)

Determine the unit value that should be used for inventory costing, using the "lower of cost and NRV" rule.

	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>
Cost	\$2.40	\$2.40	\$2.30	\$2.54	\$2.44	\$2.65
Replacement cost	2.20	2.60	2.20	2.50	2.42	2.36
Net realizable value	2.50	2.50	2.25	2.45	2.50	2.50

Solution 8-119

Case A \$2.40

Case B \$2.40

Case C \$2.25

Case D \$2.45

Case E \$2.44

Case F \$2.50

Ex. 8-120 Lower of cost and net realizable value (NRV)

The December 31, 2014 inventory of Rhode Inc. consisted of four products, for which certain information is provided below:

Replacement	Estimated	Expected
-------------	-----------	----------

Product	Original Cost	Cost	Disposal Cost	Selling Price
A	\$29.00	\$22.00	\$6.50	\$40.00
B	\$44.00	\$40.00	\$8.00	\$48.00
C	\$145.00	\$125.00	\$25.00	\$190.00
D	\$21.00	\$15.80	\$3.00	\$28.00

Instructions

Using the lower of cost and NRV approach applied on an individual-item basis, calculate the inventory valuation that should be reported for each product on December 31, 2014.

Solution 8-120

Product	Net Realizable Value	Cost	Lower of Cost And NRV
A	\$40.00 – \$6.50 = \$33.50	\$29.00	\$29.00
B	\$48.00 – \$8.00 = \$40.00	\$44.00	\$40.00
C	\$190.00 – \$25.00 = \$165.00	\$145.00	\$145.00
D	\$28.00 – \$3.00 = \$25.00	\$21.00	\$21.00

Ex. 8-121 Gross profit method

An inventory taken the morning after a large theft (March 12) discloses \$27,500 of goods on hand. The following additional data is available from the books:

Inventory on hand, March 1	\$ 42,000
Purchases received, March 1 – 11	36,000
Sales (goods delivered to customers).....	67,500

Past records indicate that sales are made at 50% above cost.

Instructions

Estimate the inventory of goods on hand at the close of business on March 11 by the gross profit method and determine the amount of the theft loss. Show appropriate titles for all amounts in your presentation.

Solution 8-121

Beginning inventory	\$ 42,000
Purchases	<u>36,000</u>
Goods available for sale	78,000
Less COGS ($\$67,500 \div 150\%$)	<u>(45,000)</u>
Estimated ending inventory	33,000
Physical inventory still on hand.....	<u>(27,500)</u>
Theft loss	<u>\$ 5,500</u>

Ex. 8-122 Gross profit method

On January 1, Jasper Store had inventory valued at \$124,000. January purchases were \$78,000 and January sales were \$220,000. On February 1, a fire destroyed most of the inventory. The rate of gross profit was 25% of cost. Merchandise with a selling price of \$10,000 remained undamaged after the fire.

Instructions

Calculate the amount of the fire loss. Show appropriate titles for all amounts in your presentation.

Solution 8-122

Beginning inventory	\$ 124,000
Purchases.....	<u>78,000</u>
Goods available for sale.....	202,000
Less COGS ($\$220,000 \div 125\%$).....	<u>(176,000)</u>
Estimated ending inventory	26,000
Cost of undamaged inventory ($\$10,000 \div 125\%$)	<u>(8,000)</u>
Estimated fire loss.....	<u><u>\$ 18,000</u></u>

***Ex. 8-123** Conventional retail inventory method

Karel's General Store uses the conventional retail inventory method. Information relating to the calculation of the inventory at December 31, 2014, follows:

	<u>Cost</u>	<u>Retail</u>
Inventory, January 1	\$140,000	\$220,000
Purchases.....	480,000	720,000
Freight-in.....	80,000	
Sales.....		750,000
Net mark-ups		160,000
Net markdowns		60,000

Instructions

Calculate the inventory at December 31, 2014, using the conventional retail inventory method. (Carry the cost ratio to two decimal places, e.g. 12.34%. Show your calculations in good form and label all amounts.)

***Solution 8-123**

	<u>At Cost</u>	<u>At Retail</u>	<u>Ratio</u>
Inventory, January 1	\$140,000	\$ 220,000	
Purchases.....	480,000	720,000	
Freight-in.....	80,000		
Net mark-ups	<u>0</u>	<u>160,000</u>	
.....	700,000	1,100,000	63.64%
Net markdowns		<u>(60,000)</u>	
Totals.....	<u>\$700,000</u>	1,040,000	
Less sales.....		<u>750,000</u>	
Inventory, Dec. 31, at retail		<u><u>\$ 290,000</u></u>	
Estimated inventory, Dec. 31 ($\$290,000 \times 63.64\%$)		<u><u>\$184,556</u></u>	

PROBLEMS

Pr. 8-124 Theory

What is the difference between an *executory* contract and an *onerous* contract?

Solution 8-124

An executory contract is one where neither party has performed (or fulfilled) its part of the contract. No asset or liability is recognized when the contract takes effect. However, if the amounts are abnormal in relation to the entity's normal business operations or financial position, the contract details should be disclosed in the financial statement notes.

On the other hand, an onerous contract is present if the unavoidable costs of completing the contract are higher than the benefits expected from the contract. IFRS requires the entity to recognize a loss provision (IAS 37). ASPE does not require a loss provision, but normal Canadian practice is to record such a loss/liability.

Pr. 8-125 Inventory cut-off

At December 31, 2014, Dakota Corp.'s perpetual inventory showed as \$43,100 in the general ledger. Towards the end of 2014, a new approach for compiling inventory was used and apparently a satisfactory cut-off for preparation of financial statements was not made. Some events that occurred are as follows:

1. Units shipped to a customer January 2, 2015, costing \$6,000, were included in inventory at December 31, 2014. The sale was recorded in 2015.
2. Units costing \$25,000 received December 30, 2014, were recorded as received on January 2, 2015.
3. Units received during 2014 costing \$4,300 were recorded twice in the general ledger.
4. Units shipped to a customer December 28, 2014, f.o.b. shipping point, which cost \$14,000, were not received by the customer until January 2015. The units were included in the ending inventory.
5. Units on hand that cost \$5,600 were never recorded on the books.

Instructions

Calculate the correct inventory at December 31, 2014.

Solution 8-125

Inventory per books.....		\$43,100
Add: Shipment received Dec 30	\$25,000	
Units on hand never recorded	<u>5,600</u>	<u>30,600</u>
		73,700
 Deduct: Units recorded twice	 4,300	
Units shipped Dec 28	<u>14,000</u>	<u>18,300</u>
 Correct inventory, Dec 31.....		 <u>\$55,400</u>

Pr. 8-126 Inventory errors

An audit of the inventory records of Missouri Inc. identified a number of errors. These errors are summarized in Exhibit A below:

EXHIBIT A			
Year	Net Income Reported	Description of Error	
2010	\$120,000	Overstatement of ending inventory	\$11,000
2011	\$95,000	Understatement of ending inventory	\$1,500
2012	\$99,000	Understatement of ending inventory	\$18,000
2013	\$105,000	Overstatement of ending inventory	\$20,000
2014	\$120,000	Overstatement of ending inventory	\$5,200

Instructions

- As financial accountant for Missouri, you have been asked to calculate the corrected net income amounts for each of the five years based on the audit findings.
- Review your solution to part a) and consider the self correcting effect of inventory errors. Why does total reported net income not equal total corrected income?

Solution 8-126

a)

Year	Net Income As Reported	ADD: Beginning Inventory Over Statement	DEDUCT: Beginning Inventory Under Statement	DEDUCT: Ending Inventory Over Statement	ADD: Ending Inventory Under Statement	Net Income Corrected
2010	\$120,000			(\$11,000)		\$109,000
2011	\$95,000	\$11,000			\$1,500	\$107,500
2012	\$99,000		(\$1,500)		\$18,000	\$115,500
2013	\$105,000		(\$18,000)	(\$20,000)		\$67,000
2014	\$120,000	\$20,000		(\$5,200)		\$134,800
	<u>\$539,000</u>					<u>\$533,800</u>

b)

While it is true that inventory errors are self correcting, the (self) correction occurs in the accounting period *following* the error. For Missouri, the over-statement of the 2014 ending inventory reduces corrected 2014 income by \$5,200. If that amount were to be added back to total corrected net income, it would be equal to reported net income:

Total corrected net income.....	\$533,800	
Add:		
Self correction to take effect in 2015	<u>5,200</u>	
Total.....	\$539,000	equal to reported net income

Pr. 8-127 Analysis of errors

Indicate in each of the spaces provided the effect of the described errors on the various elements

of a company's financial statements. Use the following codes:

O = amount is overstated;

U = amount is understated;

NE = no effect.

Assume a periodic inventory system and that all sales and purchases are on credit.

	<u>Accounts Receivable</u>	<u>Inventory</u>	<u>Accounts Payable</u>	<u>Sales</u>	<u>Cost of Goods Sold</u>
EXAMPLE: Goods in rented warehouse were excluded from inventory count.	NE	U	NE	NE	O
1. Goods in transit shipped "f.o.b. destination" by supplier were recorded as a purchase but were excluded from ending inventory.	—	—	—	—	—
2. Goods held on consignment were included in inventory count and recorded as a purchase.	—	—	—	—	—
3. Goods in transit shipped "f.o.b. shipping point" were not recorded as a sale and were included in ending inventory.	—	—	—	—	—
4. Goods were shipped and appropriately excluded from ending inventory but sale was not recorded.	—	—	—	—	—

Solution 8-127

1.	NE	NE	O	NE	O
2.	NE	O	O	NE	NE
3.	U	O	NE	U	U
4.	U	NE	NE	U	NE

Pr. 8-128 Accounting for purchase discounts

Texas Corp. purchased merchandise during 2014 on credit for \$200,000; terms 2/10, n/30. All of the gross liability except \$30,000 was paid within the discount period. The remainder was paid within the 30-day term. At the end of the annual accounting period, December 31, 2014, 90% of the merchandise had been sold and 10% remained in inventory. The company uses the periodic inventory system.

Instructions

- Assuming that the net method is used for recording purchases, prepare the entries for the purchase and two subsequent payments.
- What dollar amounts should be reported for the ending inventory and cost of goods sold

under the (1) net method and (2) gross method? Assume that there was no beginning inventory.

Solution 8-128

a) Purchases	196,000	
Accounts Payable		196,000
To record the purchase at net amount:		
$98\% \times \$200,000 = \$196,000$		
Accounts Payable	166,600	
Cash		166,600
To record payment within the discount period:		
$\$200,000 - \$30,000 = \$170,000 \times 98\% = \$166,600$		
Accounts Payable	29,400	
Purchase Discounts Lost	600	
Cash		30,000
To record final payment		

b)

(1) Net method:

Purchases:	\$196,000
Ending inventory: $10\% \times \$196,000 =$	<u>19,600</u>
Cost of goods sold: $90\% \times \$196,000 =$	<u>\$176,400</u>

(The \$600 discount lost is reported in the other expense section of the income statement.)

(2) Gross method:

Purchases:	\$200,000
Less purchase discounts:	
$.02 \times \$170,000 =$	<u>3,400</u>
Goods available	196,600
Final inventory:	
$10\% \times \$196,600 =$	<u>19,660</u>
Cost of goods sold:	
$90\% \times \$196,600 =$	<u>\$176,940</u>

(Assuming that the \$2,400 discount is prorated between the cost of goods sold, 90%, and ending inventory, 10%)

OR

Purchases:	\$200,000
Less purchase discounts:	
$.02 \times \$170,000 =$	<u>3,400</u>
Goods available	196,600
Final inventory:	
$10\% \times \$200,000 =$	<u>20,000</u>
Cost of goods sold:	
$\$196,600 - \$20,000 =$	<u>\$176,600</u>

(Assuming that the \$2,400 discount is used to reduce cost of goods sold. Ending inventory is carried at the gross amount.)

Pr. 8-129 Year end entries to update inventory under periodic system

The accountant for the Oswego chain of retail stores is getting ready to prepare the 2014 year end inventory entries for its periodic inventory system. Her assistant has provided the following information:

Beginning inventory	\$88,000
Inventory purchases during year	900,000
Ending inventory	62,000

Instructions

Record the journal entry(ies) that Oswego's accountant would prepare to bring the inventory and cost of goods sold up to date for 2014.

Solution 8-129

Ending inventory (Note 1).....	62,000	
Cost of goods sold (Note 2).....	926,000	
Beginning inventory (Note 3).....		88,000
Purchases (Note 4).....		900,000

Note 1: To record ending inventory

Note 2: To record cost of goods sold (\$88,000 + \$900,000 - \$62,000)

Note 3: To remove beginning inventory

Note 4: To clear purchases account

Pr. 8-130 Gross profit method

Kiowa Ltd. prepares monthly financial statements. Inventory is counted only at year end; thus, month-end inventories must be estimated. All sales are made on account. The rate of mark-up on cost is 25%. The following information relates to the month of May:

Accounts receivable, May 1.....	\$31,000
Accounts receivable, May 31.....	37,000
Collections of accounts during May.....	94,000
Inventory, May 1.....	47,000
Purchases during May.....	75,000

Instructions

Calculate the estimated cost of the inventory on May 31.

Solution 8-130

Collections of accounts	\$ 94,000
Add accounts receivable, May 31.....	37,000
Deduct accounts receivable, May 1.....	<u>(31,000)</u>
Sales during May.....	<u>\$ 100,000</u>

Inventory, May 1.....	\$ 47,000
Purchases during May.....	<u>75,000</u>
Goods available for sale.....	122,000
COGS (\$100,000 ÷ 125%)	<u>(80,000)</u>
Estimated cost of inventory, May 31.....	<u>\$ 42,000</u>

Pr. 8-131 Gross profit method

In the early morning of January 1, 2015, Minnesota Corp.'s inventory was destroyed by fire. The following information was available for calendar 2014:

Sales.....	\$950,000
Net purchases.....	600,000
Beginning inventory.....	110,000

Minnesota's gross profit on sales has averaged 35% for several years.

Instructions

- Calculate the estimated cost of the inventory destroyed.
- Prepare entries at December 31, 2014 to close the sales and merchandise accounts.

Solution 8-131

a)		
Beginning inventory	\$ 110,000	
Add net purchases	<u>600,000</u>	
Cost of goods available	710,000	
Less COGS (\$950,000 x 65%)	<u>(617,500)</u>	
Estimated inventory lost	<u>\$ 92,500</u>	
b)		
Sales	950,000	
Income Summary		950,000
Cost of Goods Sold	617,050	
Fire Loss	92,500	
Beginning Inventory		110,000
Purchases		600,000

***Pr. 8-132 Retail inventory method**

California Corp. is preparing the financial statements at its fiscal year end, January 31, 2015. The following information is available:

	<u>At Cost</u>	<u>At Retail</u>
Inventory, February 1, 2014	\$ 83,400	\$ 103,400
Markdowns		47,000
Mark-ups		71,000
Markdown cancellations		22,000
Mark-up cancellations		9,000
Purchases	241,200	294,300
Sales		329,000
Purchases returns and allowances	5,150	6,700
Sales returns and allowances		9,000

Instructions

Calculate the ending inventory at cost at January 31, 2015, using the retail method that approximates lower of average cost and market. Your solution should be in good form with amounts clearly labelled. Carry the cost ratio to two decimals, e.g. 12.34%.

***Solution 8-132**

	<u>At Cost</u>	<u>At Retail</u>
Beginning inventory	\$ 83,400	\$ 103,400
Purchases	\$241,200	\$294,300
Less purchase returns	<u>5,150</u>	<u>6,700</u>
Totals	<u>236,050</u>	<u>287,600</u>
Add mark-ups (net) (\$71,000 – \$9,000)		<u>62,000</u>
Totals		453,000
Deduct markdowns (net) (\$47,000 – \$22,000)		<u>25,000</u>
Sales price of goods available		428,000

Sales less sales returns (\$329,000 – \$9,000)	<u>320,000</u>
Ending inventory at retail	<u>\$ 108,000</u>

Ending inventory at cost:

Ratio of cost to retail = $\$319,450 \div \$453,000 = 70.52\%$

$\$108,000 \times 70.52\% = \$76,162$ \$ 76,162

***Pr. 8-133** Conventional retail inventory method

The records of Little Hawaii Stores included the following data:

Inventory, May 1, at retail, \$14,500; at cost, \$10,150

Purchases during May, at retail, \$42,900; at cost, \$31,550

Freight-in, \$2,000; purchase discounts, \$500

Additional mark-ups, \$3,800; mark-up cancellations, \$400; net markdowns, \$1,300

Sales during May, \$46,700

Instructions

Calculate the estimated inventory at May 31 under the conventional retail inventory method. (Carry the cost ratio to two decimal places, e.g. 12.34%.) Show your calculations in good form and label all amounts.

***Solution 8-133**

	<u>Cost</u>	<u>Retail</u>	<u>Ratio</u>
Inventory, May 1.....	\$10,150	\$14,500	
Purchases	31,550	42,900	
Freight-in.....	2,000		
Purchase discounts	(500)		
Net mark-ups.....	<u>0</u>	<u>3,400</u>	
.....	<u>\$43,200</u>	60,800	71.05%
Net markdowns		<u>(1,300)</u>	
Goods available		59,500	
Sales.....		<u>(46,700)</u>	
Inventory, May 31.....		<u>\$12,800</u>	

Estimated inventory, May 31 ($\$12,800 \times 71.05\% = \$9,094.40$)

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CHAPTER 9

INVESTMENTS

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	13.	2	M	25.	5	M	37.	6	E
2.	1	E	14.	2	H	26.	5	M	38.	7	M
3.	1	M	15.	3	E	27.	6	M	39.	7	M
4.	1	E	16.	3	M	28.	6	H	40.	7	E
5.	1	E	17.	4	E	29.	6	M	41.	7	E
6.	1	E	18.	4	M	30.	6	M	42.	8	E
7.	1	M	19.	4	M	31.	6	M	43.	8	M
8.	2	E	20.	4	M	32.	6	E	44.	8	H
9.	2	E	21.	4	M	33.	6	H	45.	8	M
10.	2	M	22.	4	H	34.	6	M	46.	9	M
11.	2	M	23.	5	H	35.	6	M	47.	9	H
12.	2	E	24.	5	H	36.	6	M	48.	9	H
Multiple Choice–Computational											
49.	2	M	55.	2	H	61.	3	E	67.	6	M
50.	2	M	56.	2	E	62.	4	M	68.	6	M
51.	2	H	57.	2	M	63.	6	E	69.	6	M
52.	2	H	58.	2	M	64.	6	E	70.	6	M
53.	2	H	59.	3	M	65.	6	M	71.	6	M
54.	2	H	60.	3	E	66.	6	M	72.	6	E
Multiple Choice–CPA Adapted											
73.	2	H	76.	3	E	79.	6	M			
74.	3	E	77.	4	M	80.	6	H			
75.	3	E	78.	6	M	81.	6	M			
Exercises											
82.	1	E	85.	2,5	E	88.	4	H	91.	6,7	M
83.	2	H	86.	2,6	E	89.	6	M			
84.	2	M	87.	3,6	M	90.	6	M			
Problems											
92.	2	M	94.	3	E	96.	3	M	98.	3,6	H
93.	3	H	95.	3	M	97.	3	M	99.	6	H

Note: E = Easy M = Medium H = Hard

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC	3.	MC	5.	MC	7.	MC				
2.	MC	4.	MC	6.	MC	82.	Ex				
Learning Objective 2											
8.	MC	12.	MC	50.	MC	54.	MC	58.	MC	85.	Ex
9.	MC	13.	MC	51.	MC	55.	MC	73.	MC	86.	Ex
10.	MC	14.	MC	52.	MC	56.	MC	83.	Ex	92.	Pr
11.	MC	49.	MC	53.	MC	57.	MC	84.	Ex		
Learning Objective 3											
15.	MC	60.	MC	75.	MC	93.	Pr	96.	Pr		
16.	MC	61.	MC	76.	MC	94.	Pr	97.	Pr		
59.	MC	74.	MC	87.	Ex	95.	Pr	98.	Pr		
Learning Objective 4											
17.	MC	19.	MC	21.	MC	62.	MC	88.	Ex		
18.	MC	20.	MC	22.	MC	77.	MC				
Learning Objective 5											
23.	MC	24.	MC	25.	MC	26.	MC	85.	Ex		
Learning Objective 6											
27.	MC	33.	MC	64.	MC	70.	MC	81.	MC	98.	Pr
28.	MC	34.	MC	65.	MC	71.	MC	86.	Ex	99.	Pr
29.	MC	35.	MC	66.	MC	72.	MC	87.	Ex		
30.	MC	36.	MC	67.	MC	78.	MC	89.	Ex		
31.	MC	37.	MC	68.	MC	79.	MC	90.	Ex		
32.	MC	63.	MC	69.	MC	80.	MC	91.	Ex		
Learning Objective 7											
38.	MC	39.	MC	40.	MC	41.	MC	91.	Ex		
Learning Objective 8											
42.	MC	43.	MC	44.	MC	45.	MC				
Learning Objective 9											
46.	MC	47.	MC	48.	MC						

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

CHAPTER STUDY OBJECTIVES

1. Understand the nature of investments including which types of companies have significant investments.

This chapter deals with investments in basic debt and equity instruments of other companies. Debt instruments such as bonds generally carry contractual rights to receive principal and interest payments. Equity instruments such as shares may carry contractual rights to receive dividends (depending on the type of share) and may also carry voting rights and /or rights to receive residual assets upon windup of a company. Care must be taken to determine exactly what rights the investments entitle the holder to as this will help determine the accounting. Not all companies carry significant investments. It depends on the business model. Examples of types of companies that generally carry significant investments are financial institutions, insurance companies, and pension funds.

2. Explain and apply the cost/amortized cost model of accounting for investments.

At acquisition, the cost of the investment is recognized as its fair value plus transaction costs. If the investment is a debt instrument, any premium or discount is amortized to interest income. Holding gains are recognized only when realized, as are holding losses, unless the investment is impaired. The investment is reported at its cost or amortized cost as either a current asset or a long-term investment, depending on its maturity and management's intention to hold it. ASPE uses this model for most investments excluding equity investments where an active market exists for trading the shares and derivatives. IAS 39 uses this model for debt investments where the entity has the intent and ability to hold the investment to maturity. It is also used for equity investments where the entity is unable to measure fair value. IFRS 9 uses this model for debt instruments where the entity's business model is to hold the investments to maturity.

3. Explain and apply the fair value through net income model of accounting for investments.

At acquisition, the investment is recognized at its fair value, with transaction costs being expensed. At each reporting date, the investment is revalued to its current fair value, with holding gains and losses recognized in net income. Dividend and interest income is also recognized in net income. If the investment is not held for trading purposes, any interest income is reported separately and is adjusted for discount or premium amortization. If held for trading or other current purposes, the investment is reported as a current asset. ASPE uses this for equity instruments where there is an active market and derivatives. IAS 39 uses this for held for trading securities including derivatives. IFRS 9 uses this model for all investments not accounted for under the cost/amortized cost model or the FVOCI model. ASPE and IFRS both allow any investment to be accounted for using FV–NI under the fair value option.

4. Explain and apply the fair value through other comprehensive income model of accounting for investments.

At acquisition, the investment is recognized at fair value plus transaction costs. At each reporting date, the investment is revalued to its current fair value, with the holding gains or losses reported in other comprehensive income. On disposal, the accumulated holding gains or losses are either recycled to net income (IAS 39) or transferred directly to retained earnings (IFRS 9). Investments are reported as current or long-term assets, depending on marketability and management intent. ASPE does not allow this method. IAS 39 allows this method for available for sale investments. IFRS 9 allows this method for certain equity investments.

5. Explain and apply the incurred loss, expected loss, and fair value loss impairment models. The three impairment loss models differ in the timing of the recognition of impairment losses and the discount rate used. Under the incurred loss approach, a triggering event is required before a loss is recognized and measured, and the revised cash flows are discounted using either the historical or a current market rate. Under the expected loss approach, no triggering event is required, and revised cash flows and impairment losses are determined on a continual basis. The discount rate is the historical/original rate. Using the fair value loss model, the asset is written down to fair value taking into account market information (refer back to Chapter 2). ASPE and IFRS use the incurred loss model for all cost/amortized cost investments, although the post-impairment carrying values are measured differently. IAS 39 uses the incurred loss model for FV–OCI investments once a trigger or loss event has occurred and any resulting impairment loss is recognized in net income. Under IFRS 9, impairment losses on FV–OCI investments are not recognized in net income. Where the FV–NI model is used, there is no need to specifically assess impairment because the investment is continually revalued to fair value and any gains or losses are booked to income.

6. Explain the concept of significant influence and apply the equity method. Significant influence is the ability to have an effect on strategic decisions made by an investee's board of directors, but not enough to control those decisions. The equity method, sometimes referred to as one-line consolidation, is used because income is recognized by the investor as it is earned. The investor's income statement will reflect the performance of the investee company. Under this method, the investment account is adjusted for all changes in the investee's book value and for the amortization of any purchase discrepancy. IFRS requires use of the equity method for its associates (investees a company can significantly influence). ASPE provides a policy choice: either the equity method or the cost method, except that associates with a quoted price in an active market cannot be accounted for at cost. Instead, the FV–NI model can be used.

7. Explain the concept of control and when consolidation is appropriate. Control relates to the ability to direct the strategic decisions of another entity and to generate returns for your own benefit or loss. When one company controls another, it controls all the net assets of that entity and is responsible for all its revenues and expenses. Therefore, all of the subsidiary's assets and liabilities, and revenues and expenses, are reported by the parent investor on a line-by-line basis in consolidated financial statements. The interests of the noncontrolling shareholders in the subsidiary company are reported separately as noncontrolling interest. Under IFRS, all subsidiaries are consolidated. ASPE, on the other hand, allows consolidation or a choice of the equity or cost method. Investments in companies with shares traded in an active market cannot be reported using the cost method, but may use FV–NI.

8. Explain how investments are presented and disclosed in the financial statements noting how this facilitates analysis. The objectives of disclosure are to provide information so users can assess the significance of the financial asset investments to the entity's financial position and performance, the extent of risks to which the company is exposed as a result, and how those risks are managed. As a result, the investments are identified on the statement of financial position according to how they are classified for accounting purposes, with the income statement reporting information on the returns by method of classification. Extensive disclosure

is required, particularly under IFRS, on the entity's risk exposures and how it manages those risks.

9. *Identify differences in accounting between IFRS and ASPE, and what changes are expected in the near future.* The differences are noted in Illustrations 9-13, 9-14, and 9-23. There are significant differences because there are two standards currently in effect under IFRS (IAS 39 and IFRS 9) and because the standards are currently in transition. It is expected that IFRS 9 will change in order to align more closely with the proposed U.S. standard. In addition, both the IASB and FASB are looking at a new impairment model.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Debt securities
b	2.	Investment in debt instruments
c	3.	Equity instruments
d	4.	Definition of equity security
b	5.	Accounting for investments
a	6.	Valuation of debt instruments
a	7.	Transaction costs
d	8.	Cost model for debt securities
a	9.	Holding gains under cost model
c	10.	Equity investments and the cost model
b	11.	Recognition of interest for bond investment
b	12.	Amortization of premium or discount
a	13.	Recording amortization of bond discount
b	14.	Accounting for investments in associates
c	15.	Holding gains with FV–NI model
d	16.	FV–NI model and transaction costs
b	17.	Unrealized gains and losses with FV–OCI
c	18.	Classification of comprehensive income
c	19.	FV–OCI with recycling
b	20.	Inclusions in OCI
d	21.	Accumulated other comprehensive income
a	22.	The concept of “recycling”
c	23.	Indications for potential impairment
d	24.	Impairment – incurred loss model
b	25.	Impairment – expected loss model
c	26.	Impairment – fair value loss model
a	27.	Equity investments and significant influence
b	28.	Conditions for using the equity method
a	29.	Significant influence
d	30.	Degree of control
a	31.	Recording of dividends received under the equity method
c	32.	Recognition of earnings of investee using the equity method
c	33.	Effect of using the cost method in error
c	34.	Accounting for investments in associates
c	35.	Accounting for investments in associates
d	36.	Investor paying more than book value
b	37.	Equity Investments traded in active market
c	38.	Implications of control
a	39.	Investing in subsidiaries
d	40.	Accounting for subsidiary
b	41.	Reporting model for control

MULTIPLE CHOICE—Conceptual (CONTINUED)

Answer	No.	Description
d	42.	Classification as current assets
b	43.	Objectives of disclosure requirements
b	44.	Disclosures for private entities
a	45.	Consolidation under IFRS and ASPE
c	46.	Differences in disclosure for IFRS and ASPE
c	47.	Transaction costs under IFRS and ASPE
d	48.	Treatment of interest and dividend income under IFRS and ASPE

MULTIPLE CHOICE—Computational

Answer	No.	Description
b	49.	Acquisition of long-term investment in bonds
a	50.	Recording purchase of bonds
c	51.	Carrying value of long-term investment in bonds – cost model
d	52.	Carrying value of long-term investment in bonds – cost model
a	53.	Calculation of income from long-term investment in bonds
b	54.	Calculation of income from long-term investment in bonds
c	55.	Determine gain on sale of bond investment
c	56.	Cost model of accounting for share investment
b	57.	Recognition of interest income from bond
d	58.	Calculation of bond discount to be amortized
d	59.	Temporary investments in equity securities
a	60.	Year end adjustments for FV–NI investment
c	61.	Accounting for fair value adjustments
b	62.	Accounting for fair value adjustments
a	63.	Equity method of accounting for share investment
b	64.	Equity method of accounting for share investment
c	65.	Equity method of accounting for share investment
b	66.	Equity method of accounting for share investment
b	67.	Equity method of accounting for share investment
a	68.	Balance of investment account using the equity method
c	69.	Investment income recognized under the equity method
c	70.	Balance of investment account using the equity method
b	71.	Balance of investment account using the equity method
c	72.	Investment income recognized using the equity method

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
d	73.	Carrying value of long-term investment in bonds
d	74.	Valuation of marketable equity securities
b	75.	Valuation of marketable equity securities
c	76.	Accounting method for investment
b	77.	Accounting method for investment
c	78.	Investment income recognized under equity method
a	79.	Balance of investment account using the equity method
c	80.	Sale of share investment
d	81.	Calculate acquisition price of an investment in associate

EXERCISES

Item	Description
E9-82	Motivation for investments
E9-83	Investment in debt securities at a premium
E9-84	Investment in debt securities at a premium
E9-85	Investments in debt securities
E9-86	Cost and equity methods
E9-87	Cost and equity methods
E9-88	Sale of equity investments – FV–OCI
E9-89	Significant influence
E9-90	Investment in equity securities
E9-91	True-false questions

PROBLEMS

Item	Description
P9-92	Accounting for bonds – amortized cost model
P9-93	Temporary investments – FV–NI model
P9-94	Year-end adjustments for temporary investments
P9-95	Accounting for debt investment purchased at premium – FV–NI model
P9-96	Accounting for investments – FV–NI model
P9-97	Long-term investment – FV–NI model
P9-98	Equity method (ASPE)
P9-99	Equity method – IFRS

MULTIPLE CHOICE—Conceptual

1. Which of the following is NOT a debt security?
 - a) Convertible bonds
 - b) Commercial paper
 - c) Loans receivable
 - d) Government treasury bills

2. An investment in an entity's debt instruments makes that investor a(n)
 - a) owner of the issuing entity.
 - b) creditor of the issuing entity.
 - c) parent company.
 - d) subsidiary.

3. Which of the following is NOT an equity instrument?
 - a) Common shares
 - b) Preferred shares
 - c) Convertible bonds
 - d) Put options

4. Any contract that is evidence of a residual interest in an entity's assets is called a(n)
 - a) debt security.
 - b) liability.
 - c) derivative.
 - d) equity security.

5. How investments are accounted for does NOT usually depend on
 - a) the type of investment.
 - b) whether the investments are bought on margin.
 - c) management intent.
 - d) company strategy.

6. The price of a debt instrument is quoted as a percentage of its
 - a) face or par value.
 - b) fair market value.
 - c) book value.
 - d) present value.

7. Generally, transaction costs are
 - a) capitalized when investments are accounted for using a cost based model.
 - b) capitalized when investments are accounted for using a fair value model.
 - c) always expensed.
 - d) never expensed.

8. When the cost model is applied to an investment in debt securities, such as bonds, it is referred to as the
- a) equity method.
 - b) fair value through net income model.
 - c) fair value through other comprehensive income model.
 - d) amortized cost model.
9. Under the cost/amortized cost model, holding gains are
- a) recognized in net income only when realized.
 - b) recognized in other comprehensive income.
 - c) recognized depending on management's intention.
 - d) not recognized at all.
10. Equity investments that are accounted for under the cost model will result in
- a) recognition of dividend income only when actually received.
 - b) expensing transaction costs when incurred.
 - c) recognition of a gain or loss in net income at disposal.
 - d) recognition of a gain or loss in other comprehensive income at disposal.
11. To calculate the amount of interest to recognize each period for a bond investment (unless it held for trading purposes),
- a) ASPE requires the use of the effective-interest method.
 - b) IFRS requires the use of the effective-interest method.
 - c) IFRS allows the use of either the effective-interest or the straight-line method.
 - d) ASPE requires the use of the straight-line method.
12. The premium or discount on bonds accounted for under the cost/amortized cost model is
- a) amortized over the expected holding period.
 - b) amortized over the life of the bond.
 - c) not amortized.
 - d) treated as a transaction cost.
13. A bond is purchased at a discount and will be accounted for under the amortized cost model. The entry to record the amortization of the discount includes a
- a) debit to the investment account.
 - b) debit to "Gain from Discount."
 - c) debit to Interest Revenue.
 - d) credit to the investment account.
14. Under ASPE, for accounting for investments in associates,
- a) the cost method must be used for all such investments.
 - b) the fair value method can be used for shares quoted in an active market.
 - c) the investor may use the cost method for one investment and the fair value for another.

- d) the fair value method must be used for all such investments.
15. Under the fair value through net income model, holding gains are
- a) recognized in other comprehensive income only.
 - b) recognized in either net income or other comprehensive income.
 - c) recognized in net income only.
 - d) ignored.
16. The fair value through net income model requires that
- a) investments are measured at fair value.
 - b) transaction costs are expensed.
 - c) investments are measured at fair value and transaction costs are capitalized.
 - d) investments are measured at fair value and transaction costs are expensed.
17. Under the fair value through other comprehensive income model, unrealized gains and losses are
- a) recognized in net income.
 - b) recognized in other comprehensive income.
 - c) recognized in either net income or other comprehensive income.
 - d) ignored.
18. Accumulated Comprehensive income is included as part of
- a) retained earnings.
 - b) net income.
 - c) shareholders' equity.
 - d) unearned revenue.
19. Under the fair value through other comprehensive income model, with recycling, previously unrealized holding gains and/or losses to the date of disposal are
- a) ignored.
 - b) transferred to Retained Earnings.
 - c) transferred to net income.
 - d) transferred to "Unrealized Gain or Loss – OCI."
20. Other comprehensive income does NOT include
- a) comprehensive income.
 - b) net income.
 - c) unrealized gains resulting from the application of the fair value through other comprehensive income model.
 - d) unrealized losses resulting from the application of the fair value through other comprehensive income model.
21. Accumulated other comprehensive income includes
- a) current year's net income.

- b) all previous debits to other comprehensive income.
 - c) all previous credits to other comprehensive income.
 - d) all previous debits *and* credits to other comprehensive income.
22. The concept of recycling within the context of investments
- a) refers to the transfer of previously unrealized gains or losses to net income.
 - b) refers to the switch of income between different investments categories.
 - c) should be used in the fair value through net income model.
 - d) should *not* be used in the fair value through other comprehensive income model.
23. Which of the following situations would NOT necessarily indicate the potential impairment of the underlying securities?
- a) The issuing entity is experiencing major financial difficulties.
 - b) The issuing entity is unable to pay its liabilities.
 - c) The issuing entity has temporarily halted dividend payments in order to retain cash for future expansion.
 - d) The issuing entity is undergoing a major reorganization.
24. Assuming the revised amount and timing of cash flows for an investment can be reasonably determined, the incurred loss impairment model uses which discount rate?
- a) the investor's internal rate of return
 - b) the historical interest rate
 - c) the current market rate
 - d) either the historical rate or the current market rate.
25. Assuming the revised amount and timing of cash flows for an investment can be reasonably determined, the expected loss impairment model uses which discount rate?
- a) the investor's internal rate of return
 - b) the historical interest rate
 - c) the current market rate
 - d) either the historical rate or the current market rate
26. The fair value loss impairment model
- a) is used for all investments that are not accounted for as FV–NI.
 - b) requires a separate impairment test.
 - c) calculates the impairment loss as the difference between the asset's fair value and its current carrying amount.
 - d) calculates the impairment loss as the difference between the asset's original cost and its current carrying amount.
27. The accounting for investments in another entity's equity instruments depends mainly on
- a) the level of influence the investor is *able* to exert.
 - b) the level of influence the investor *actually* exerts.
 - c) the quality of earnings of the investee.
 - d) whether the investee pays dividends.

28. When a public company holds between 20% and 50% of the outstanding common shares of an investee, which of the following statements applies?
- a) The investor should always use the equity method to account for its investment.
 - b) The investor should use the equity method to account for its investment unless circumstances indicate that it is unable to exercise "significant influence" over the investee.
 - c) The investor must use the cost method unless it can clearly demonstrate the ability to exercise "significant influence" over the investee.
 - d) The investor should always use the cost method to account for its investment.
29. An investor who owns 15% of an entity's voting shares can
- a) potentially have influence over the investee if the shares are widely held.
 - b) always be assumed to have little or no influence over the investee.
 - c) be assumed to be using the cost model.
 - d) be assumed to always use the equity method.
30. An investor who owns 11% of an entity's voting shares
- a) must use the equity method.
 - b) would be likely to prepare consolidated statements.
 - c) may have significant influence over the investee if the shares are *closely* held.
 - d) may have significant influence over the investee if the shares are widely held.
31. Olde Corp. accounts for its investment in the common shares of Young Inc. under the equity method. Olde Corp. should record a cash dividend received from Young as
- a) a reduction of the carrying value of the investment.
 - b) additional paid-in capital.
 - c) an addition to the carrying value of the investment.
 - d) dividend income.
32. Under the equity method of accounting for investments, an investor recognizes its share of the earnings in the period in which the
- a) investor sells the investment.
 - b) investee declares a dividend.
 - c) earnings are reported by the investee in its financial statements.
 - d) investee pays a dividend.
33. Jabba Inc. owns 35% of Hutt Corp., and has significant influence over Hutt. During the calendar year 2014, Hutt reported net income of \$300,000 and paid dividends of \$30,000. Jabba mistakenly recorded these transactions using the cost method rather than the equity method of accounting. What effect would this have on Jabba's investment account, net income, and retained earnings, respectively?
- a) understate, overstate, overstate
 - b) overstate, understate, understate
 - c) understate, understate, understate
 - d) overstate, overstate, overstate

34. When an investor is using the equity method and receives dividends from the investee, the journal entry will include a
- a) credit to Dividend Income.
 - b) credit to Retained Earnings.
 - c) credit to the Investment account.
 - d) debit to the Investment account.
35. When an investor is using the equity method and the investee reports a net loss, the journal entry will include a
- a) debit to the Investment account.
 - b) debit to Retained Earnings.
 - c) credit to the Investment account.
 - d) credit to Investment Income or Loss.
36. When an investor, using the equity method, pays more than its share of the investee's book value, the difference is
- a) ignored.
 - b) accounted for on the investor's books by a debit to Goodwill.
 - c) accounted for on the investee's books by a debit to Goodwill.
 - d) requires that the investor's Investment account and any investment income from the associate be adjusted over time.
37. Current IFRS rules for equity investments that are traded in an active market require that they
- a) can be accounted for under the cost model.
 - b) can be accounted for under the fair value through net income model.
 - c) should generally be accounted for under the fair value through other comprehensive income model.
 - d) cannot be accounted for under the fair value through net income model.
38. When one corporation has control over another corporation, the investor corporation
- a) is referred to as an associate.
 - b) is referred to as the subsidiary.
 - c) can determine the investee's strategic operating and financing policies.
 - d) must have obtained at least 50% of the investee's issued common shares.
39. An investor who has subsidiaries
- a) is required to prepare consolidated financial statements under IFRS.
 - b) is required to prepare consolidated financial statements under ASPE.
 - c) does not have to prepare consolidated financial statements under IFRS.
 - d) ignores the noncontrolling interest on the consolidated financial statements.

40. If a parent company owns 90% of a subsidiary's outstanding shares, the parent should generally account for the subsidiary's income under the
- a) cost/amortized cost model.
 - b) fair value through net income model.
 - c) fair value through other comprehensive model.
 - d) consolidation method.
41. When the investor has control over the investee, the reporting model to be used is the
- a) cost model.
 - b) consolidation model.
 - c) market value model.
 - d) equity method.
42. Under IFRS, which of the following is NOT a condition for an investment to be classified as current?
- a) It is held primarily for trading purposes.
 - b) It is a cash equivalent.
 - c) It must be expected to be sold or realized within 12 months from the balance sheet date.
 - d) It must be accounted for under the cost model.
43. The objectives of disclosures required for investments in debt and equity investments do NOT include
- a) how significant the investments are to the investor's financial position and performance.
 - b) whether the investments are classified as current or long-term.
 - c) the nature and extent of the risks that the investor faces as a result of the investments.
 - d) how the risks that the investor faces as a result of the investments are managed.
44. The disclosure requirements for private entities are usually less extensive as compared to those for public entities because
- a) investors in private entities are expected to have *less* information about the company.
 - b) investors in private entities are expected to have *more* information about the company.
 - c) investors in private entities tend to be *more* sophisticated.
 - d) investors in private entities tend to be *less* sophisticated.
45. The standards relating to consolidation differ under ASPE and IFRS. Which of the following statements best describes the difference?
- a) IFRS requires consolidation whereas ASPE offers a choice of methods.
 - b) ASPE requires consolidation whereas IFRS offers a choice of methods.
 - c) Consolidation is specifically excluded as one of the choices under ASPE.
 - d) Consolidation is specifically excluded as one of the choices under IFRS.
46. Which of the following is a reason for the differences in the disclosure requirements for investments in associates under IFRS and ASPE?
- a) ASPE requires that the associate must be a private entity.
 - b) ASPE does not include an "associates" category.

- c) ASPE allows the use of methods other than the equity method.
- d) ASPE does not allow the equity method.

47. The standards relating to the treatment of transaction costs differ under ASPE and IFRS. Which of the following statements best describe the difference?

- a) ASPE requires that transaction costs are capitalized, except for those investments that are accounted for under the fair value through net income model.
- b) ASPE requires that transaction costs are expensed whenever cost-based measures are used.
- c) IFRS requires that transaction costs are capitalized except for those investments that are accounted for under the fair value through net income model.
- d) IFRS requires that all transaction costs are capitalized.

48. The standards relating to the treatment of interest and dividend income differ under ASPE and IFRS. Which of the following statements is INCORRECT?

- a) IFRS requires the use of the effective interest method when interest income is to be reported separately.
- b) IFRS requires certain dividends to be recognized in other comprehensive income.
- c) ASPE allows the use of either the straight-line or effective interest method.
- d) When using the equity method, IFRS allows a dividend from an investee to be recorded as income, while ASPE does not.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	11.	b	21.	d	31.	a	41.	b
2.	b	12.	b	22.	a	32.	c	42.	d
3.	c	13.	a	23.	c	33.	c	43.	b
4.	d	14.	b	24.	d	34.	c	44.	b
5.	b	15.	c	25.	b	35.	c	45.	a
6.	a	16.	d	26.	c	36.	d	46.	c
7.	a	17.	b	27.	a	37.	b	47.	c
8.	d	18.	c	28.	b	38.	c	48.	d
9.	a	19.	c	29.	a	39.	a		
10.	c	20.	b	30.	d	40.	d		

MULTIPLE CHOICE—Computational

49. On August 1, 2014, Harley Inc. acquired \$180,000 (face value) 10% bonds of Davidson Corporation at 104 plus accrued interest. The bonds were dated May 1, 2014, and mature on April 30, 2017, with interest payable each October 31 and April 30. The bonds will be held to maturity. Assuming the amortized cost model is used, the entry to record the purchase of the bonds on August 1, 2014 is

a) Investment in Bonds	191,700	
Cash		191,700
b) Investment in Bonds	187,200	
Interest Revenue	4,500	
Cash		191,700
c) Investment in Bonds	191,700	
Interest Revenue		4,500
Cash		187,200
d) Investment in Bonds	180,000	
Premium on Bonds	11,700	
Cash		191,700

50. On August 1, 2014, Canmore Corp. acquired 20, \$1,000, 9% bonds at 97 plus accrued interest. The bonds were dated May 1, 2014, and mature on April 30, 2020, with interest paid semiannually on October 31 and April 30. The bonds will be held to maturity. Assuming the amortized cost model is used, the entry to record the purchase of the bonds on August 1, 2014 is

a) Investment in Bonds	19,400	
Interest Revenue	450	
Cash		19,850
b) Investment in Bonds	19,850	
Cash		19,850
c) Investment in Bonds	19,400	
Interest Receivable	450	
Cash		19,850
d) Investment in Bonds	20,000	
Interest Revenue	450	
Discount on Debt Securities		600
Cash		19,850

51. On October 1, 2014, Golden Corp. purchased 800, \$1,000, 9% bonds for \$792,000, which included \$12,000 accrued interest. The bonds, which mature on February 1, 2023, pay interest semiannually on February 1 and August 1. The bonds will be held to maturity. Golden uses the straight-line method of amortization. The bonds, which are accounted for under the amortized cost model, should be reported in the December 31, 2014 balance sheet at a carrying value of

- a) \$792,240.
- b) \$780,000.
- c) \$780,600.
- d) \$792,000.

52. On November 1, 2014, Bieber Ltd. purchased 300 of the \$1,000 face value, 9% bonds of Justin Corp., for \$316,000, which included accrued interest of \$4,500. The bonds, which mature on January 1, 2019, pay interest semiannually on March 1 and September 1. The bonds will be held to maturity. Assuming that Bieber uses the straight-line method of amortization and that the bonds are accounted for under the amortized cost method, the carrying value of the bonds should be shown on Bieber's December 31, 2014 balance sheet at

- a) \$316,000.
- b) \$300,000.
- c) \$311,500.
- d) \$311,040.

53. On November 1, 2014, Heckell Corp. purchased 10-year, 9%, bonds with a face value of \$360,000, for \$324,000. An additional \$10,800 was paid for the accrued interest, which is paid semiannually on January 1 and July 1. The bonds mature on July 1, 2021 and will be held to maturity. Heckell uses the straight-line method of amortization and the amortized cost method for these bonds. Ignoring income taxes, the amount to be reported in Heckell's 2014 income statement as a result of this investment is

- a) \$6,300.
- b) \$6,000.
- c) \$5,400.
- d) \$4,800.

54. On October 1, 2014, Claremont Corp. purchased 250, \$1,000, 9% bonds for \$260,000. An additional \$7,500 was paid for the accrued interest, which is paid semiannually on December 1 and June 1. The bonds mature on December 1, 2018 and will be held to maturity. Claremont uses the straight-line method of amortization and the amortized cost model for these bonds. Ignoring income taxes, the amount to be reported in Claremont's 2014 income statement as a result of this investment is

- a) \$3,750.
- b) \$5,025.
- c) \$5,625.
- d) \$6,225.

55. During 2014, Brandon Inc. purchased 2,000, \$1,000, 9% bonds. The bonds mature on March 1, 2019, and pay interest on March 1 and September 1. The carrying value of the bonds at December 31, 2014 was \$1,960,000. On September 1, 2015, after the semiannual interest was received, Brandon sold half of these bonds for \$988,000. Brandon uses straight-line amortization and has accounted for the bonds under the amortized cost model. The gain on the sale is

- a) \$11,200.
- b) \$8,000.
- c) \$4,800.
- d) \$0.

56. On January 2, 2014, Hull Corp. purchased 200 of the 1,000 outstanding common shares of Gatineau Ltd. for \$120,000. During 2014, Gatineau declared total cash dividends of \$20,000

and reported net income for the year of \$80,000. If Hull uses the cost model to account for its investment in Gatineau, Hull's Investment in Gatineau Ltd. account at December 31, 2014 should be

- a) \$136,000.
- b) \$132,000.
- c) \$120,000.
- d) \$116,000.

Use the following information for questions 57–58.

On July 1, 2014, Harry Ltd. purchased \$200,000 (par value) of Prince's 8% bonds. Because the market rate was 9%, Harry purchased them for \$186,992. The bonds pay interest semiannually on December 31 and June 30. Harry uses the amortized cost model and the effective interest method to recognize interest income on bond investments.

57. Rounding values to the nearest dollar (if necessary), the entry to recognize receipt of the first interest payment on December 31, 2014 will include a

- a) Debit to Cash of \$9,000.
- b) Credit to Interest Income of \$8,415.
- c) Debit to Cash of \$8,415.
- d) Credit to Interest Income of \$8,000.

58. Rounding values to the nearest dollar (if necessary), the bond discount to be amortized on December 31, 2014 is

- a) \$8,415.
- b) \$8,000.
- c) \$7,585.
- d) \$415.

59. On its December 31, 2014 balance sheet, Holly Corp. reported a short-term investment in equity securities, under the fair value through net income model, at \$660,000. At December 31, 2015, the fair value of the securities was \$700,000. What should Holly report on its 2015 income statement as a result of the increase in fair value of the investments during 2015?

- a) \$0.
- b) Loss on investments of \$40,000.
- c) Unrealized gain of \$40,000.
- d) Investment income of \$40,000.

60. Ruskin Inc. owns bonds that are accounted for under the fair value through net income model. On December 31, 2014, the bonds have a carrying value of \$124,365. The fair value at that date is \$123,000. The entry to record the year-end adjustment is

- a) Investment Income or Loss..... 1,365
FV–NI Investments 1,365
- b) Unrealized Holding Loss on FV–OCI Investments 1,365
FV–NI Investments 1,365
- c) FV–NI Investments 1,365

- Unrealized Holding Gain on FV–NI Investments 1,365
 d) No adjustment is required.

61. At December 31, 2014, Morgan Corp.'s stock investment portfolio, which is being accounted for by the fair value through net income (FV–NI) model, shows a general ledger balance of \$214,500. It is determined that the fair value of the securities is actually \$225,400. The entry to adjust the portfolio to fair value will include a

- a) Debit to Investment Income or Loss of \$10,900.
 b) Credit to Cash of \$10,900.
 c) Debit to FV–NI Investments of \$10,900.
 d) Credit to FV–NI Investments of \$10,900.

62. At December 31, 2014, Swift Current Inc. has the following portfolio of common shares in which it does not have significant influence:

	<u>Cost</u>	<u>Fair Value</u>
Barrick Corp.	\$100,000	\$120,000
Chester Inc.	200,000	205,000
Dooley Ltd.	<u>300,000</u>	<u>500,000</u>
	<u>\$600,000</u>	<u>\$825,000</u>

Assuming Swift Current uses the fair value through other comprehensive income (FV–OCI) model to account for this portfolio of investments, the most informative entry to record the year-end adjustment is

- a) FV–OCI Investments 225,000
 Unrealized Gain or Loss–OCI 225,000
 b) FV–OCI Investment in Barrick Corp. 20,000
 FV–OCI Investment in Chester Inc. 5,000
 FV–OCI Investment in Dooley Ltd. 200,000
 Unrealized Gain or Loss–OCI on Barrick Corp. 20,000
 Unrealized Gain or Loss–OCI on Chester Inc. 5,000
 Unrealized Gain or Loss–OCI on Dooley Ltd. 200,000
 c) Unrealized Gain or Loss–OCI on Barrick Corp. 20,000
 Unrealized Gain or Loss–OCI on Chester Inc. 5,000
 Unrealized Gain or Loss–OCI on Dooley Ltd. 200,000
 FV–OCI Investment in Barrick Corp. 20,000
 FV–OCI Investment in Chester Inc. 5,000
 FV–OCI Investment in Dooley Ltd. 200,000
 d) Unrealized Gain or Loss–OCI 225,000
 FV–OCI Investments 225,000

Use the following information for questions 63–66.

The summarized balance sheets of Thunder Bay Corp. and Fort William Corp. at December 31, 2014 are as follows:

THUNDER BAY CORP.	
Balance Sheet	
December 31, 2014	
Assets	<u>\$400,000</u>

Liabilities	\$ 50,000
Common shares.....	200,000
Retained earnings.....	<u>150,000</u>
Total equities	<u>\$400,000</u>

FORT WILLIAM CORP.
Balance Sheet
December 31, 2014

Assets.....	<u>\$300,000</u>
Liabilities	\$ 75,000
Common shares.....	185,000
Retained earnings.....	<u>40,000</u>
Total equities	<u>\$300,000</u>

63. If Thunder Bay acquired a 20% interest in Fort William on December 31, 2014 for \$65,000 and the equity method of accounting for the investment were used, the amount of the debit to Investment in Fort William Corp. would have been

- a) \$65,000.
- b) \$60,000.
- c) \$45,000.
- d) \$37,000.

64. If Thunder Bay acquired a 30% interest in Fort William on December 31, 2014 for \$75,000 and the equity method of accounting for the investment were used, the amount of the debit to Investment in Fort William Corp. would have been

- a) \$90,000.
- b) \$75,000.
- c) \$67,500.
- d) \$60,000.

65. If Thunder Bay acquired a 20% interest in Fort William on December 31, 2014 for \$45,000, and during 2015 Fort William reported net income of \$25,000 and paid a total cash dividend of \$10,000, applying the equity method would give a debit balance in the Investment in Fort William Corp. account at the end of 2015 of

- a) \$37,000.
- b) \$45,000.
- c) \$48,000.
- d) \$50,000.

66. If Thunder Bay acquired a 30% interest in Fort William on December 31, 2014 for \$67,500 and during 2015 Fort William reported net income of \$25,000 and paid a total cash dividend of \$30,000, applying the equity method would give a debit balance in the Investment in Fort William Corp. account at the end of 2015 of

- a) \$67,500.
- b) \$66,000.
- c) \$62,500.

- d) \$58,500.

67. On January 2, 2014, Hull Corp. purchased 200 of the 1,000 outstanding common shares of Gatineau Ltd. for \$120,000. During 2014, Gatineau declared total cash dividends of \$20,000 and reported net income for the year of \$80,000. If Hull uses the equity method of accounting for its investment in Gatineau, Hull's Investment in Gatineau Ltd. account at December 31, 2014 should be

- a) \$136,000.
- b) \$132,000.
- c) \$120,000.
- d) \$116,000.

Use the following information for questions 68–69.

During calendar 2014, Caraway Corp. reported net income of \$60,000 and paid total cash dividends of \$20,000. Seed Inc. owns 3,000 of the 10,000 outstanding shares of Caraway and exercises significant influence.

68. What amount should Seed show in the investment account at December 31, 2014 if the beginning of the year balance in the account was \$80,000?

- a) \$92,000.
- b) \$98,000.
- c) \$80,000.
- d) \$120,000.

69. How much income from its Investment in Caraway should Seed report in 2014?

- a) \$60,000.
- b) \$20,000.
- c) \$18,000.
- d) \$60,000.

70. On December 31, 2014, Ryan Corp. acquired a 60% interest in Gosling Corp. for \$315,000. During 2015, Gosling reported net income of \$200,000 and paid total cash dividends of \$50,000. Assuming Ryan uses the equity method, at December 31, 2015, the balance in the investment account should be

- a) \$465,000.
- b) \$435,000.
- c) \$405,000.
- d) \$315,000.

Use the following information for questions 71–72.

Red Corp. owns 3,000 of the 10,000 outstanding common shares of Grey Corp. and exercises significant influence. During 2014, Grey reported net income of \$120,000 and paid total cash dividends of \$40,000.

71. If the beginning 2014 balance in the Investment In Grey Corp. account was \$180,000, the balance at December 31, 2014 should be

- a) \$260,000.
- b) \$204,000.
- c) \$180,000.
- d) \$132,000.

72. Red Corp. should report investment revenue for 2014 of

- a) \$12,000.
- b) \$24,000.
- c) \$36,000.
- d) \$48,000.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
49.	b	53.	a	57.	b	61.	c	65.	c	69.	c
50.	a	54.	b	58.	d	62.	b	66.	b	70.	c
51.	c	55.	c	59.	d	63.	a	67.	b	71.	b
52.	d	56.	c	60.	a	64.	b	68.	a	72.	c

DERIVATIONS—Computational

No.	Answer	Derivation
49.	b	Dr. Investment in Bonds: $\$180,000 \times 1.04 = \$187,200$ Dr. Interest Revenue: $\$180,000 \times .10\% \times 3 \div 12 = \$4,500$ Cr. Cash: $\$187,420 + \$4,500 = \$191,700$
50.	a	Dr. Investment in Bonds: $20 \times \$1,000 \times .97 = \$19,400$ Dr. Interest Revenue: $\$20,000 \times 9\% \times 3 \div 12 = \450 Cr. Cash: $\$19,400 + \$450 = \$19,850$
51.	c	$\$780,000 + (\$20,000 \times 3 \div 100) = \$780,600$
52.	d	$\$316,000 - \$4,500 = \$311,500$ $\$311,500 - (\$11,500 \times 2 \div 50) = \$311,040$
53.	a	$(\$360,000 \times .045) - \$10,800 + (\$36,000 \times 2 \div 80) = \$6,300$
54.	b	$(\$250,000 \times .09 \times 3 \div 12) - (\$10,000 \times 3 \div 50) = \$5,025$
55.	c	Discount amortization: $\$40,000 \times 8 \div 50 = \$6,400$ $(\$1,960,000 + \$6,400) \div 2 = \$983,200$; $\$983,200 - \$988,000 = \$4,800$ gain
56.	c	\$120,000, acquisition cost
57.	b	Interest income = $\$186,992 \times 9\% \times 6 \div 12 = \$8,415$ rounded
58.	d	Cash received \$8,000; interest income \$8,415; discount amortized \$415
59.	d	$\$700,000 - \$660,000 = \$40,000$
60.	a	$\$124,365 - \$123,000 = \$1,365$ unrealized holding loss
61.	c	$\$225,400 - \$214,500 = \$10,900$ increase to investment account
62.	b	$\$120,000 - \$100,000 = \$20,000$ gain for Barrick $\$205,000 - \$200,000 = \$5,000$ gain for Chester $\$500,000 - \$300,000 = \$200,000$ gain for Dooley
63.	a	\$65,000, acquisition cost
64.	b	\$75,000, acquisition cost
65.	c	$\$45,000 + (\$25,000 \times .2) - (\$10,000 \times .2) = \$48,000$
66.	b	$\$67,500 + (\$25,000 \times .3) - (\$30,000 \times .3) = \$66,000$
67.	b	$\$120,000 + (\$80,000 \times .2) - (\$20,000 \times .2) = \$132,000$
68.	a	$\$80,000 + (\$60,000 \times .3) - (\$20,000 \times .3) = \$92,000$
69.	c	$\$60,000 \times .3 = \$18,000$
70.	c	$\$315,000 + (\$200,000 \times .6) - (\$50,000 \times .6) = \$405,000$

71. b $\$180,000 + (\$120,000 \times .3) - (\$40,000 \times .3) = \$204,000$
72. c $\$120,000 \times .3 = \$36,000$

MULTIPLE CHOICE—CPA Adapted

73. On October 1, 2014, Moray Ltd. purchased 500 of the \$1,000 face value, 8% bonds of Eel Ltd. for \$585,000, including accrued interest of \$10,000. The bonds, which mature on January 1, 2021, pay interest semiannually on January 1 and July 1. Moray used the straight-line method of amortization and appropriately recorded the bonds as long-term. On Moray's December 31, 2015 balance sheet, the carrying value of the bonds would be

- a) \$575,000.
- b) \$570,000.
- c) \$568,000.
- d) \$560,000.

74. Kipper Corp. began operations in 2014. An analysis of Kipper's equity securities portfolio acquired in 2014 shows the following totals at the end of the year. Kipper accounts for these investments using the fair value through net income (FV–NI) model.

Total cost	\$228,000
Total fair market value	192,000

Based on this information, what amount should Kipper report in its 2014 income statement for "Investment Income or Loss"?

- a) \$16,000 loss
- b) \$20,000 gain
- c) \$36,000 gain
- d) \$36,000 loss

75. At December 31, 2014, Escargot Corp. has the following equity securities (no significant influence) that were purchased earlier in 2014, its first year of operation:

	<u>Cost</u>	<u>Market</u>
Security A	\$ 40,000	\$ 41,500
B	<u>56,000</u>	<u>62,000</u>
Totals	<u>\$ 96,000</u>	<u>\$ 103,500</u>

If the investments are being accounted for under the fair value through net income (FV–NI) model, the total book value of the investment accounts should

- a) be decreased by \$7,500.
- b) be increased by \$7,500.
- c) be decreased by \$16,000.
- d) remain unchanged.

76. In January 2014, Haddock Ltd. had purchased an investment for \$150,000. By December 31, 2014, the fair market value of that investment had increased by \$20,000. Assuming this gain was included in the company's 2014 net income, which accounting method did Haddock use to account for this investment?

- a) Cost
- b) Fair value through other comprehensive income (FV–OCI)
- c) Fair value through net income (FV–NI)
- d) Equity

77. Salmon Corporation purchased an investment in 2014 (an equity investment without significant influence). The purchase price of \$94,000 included transaction costs of \$1,000. Assuming the transaction costs were capitalized and Salmon follows IFRS, which accounting method did Salmon NOT use to account for this investment?

- a) Amortized cost
- b) Fair value through net income (FV–NI)
- c) Fair value through other comprehensive income (FV–OCI)
- d) Equity

Use the following information for questions 78–80.

On January 1, 2014, Abalone Ltd. acquired 30% of Flounder Corp.'s common shares for \$240,000. During 2014, Flounder reported net income of \$100,000 and paid total dividends of \$60,000. Abalone's 30% interest in Flounder gives Abalone the ability to exercise significant influence over their operating and financial policies. During 2015, Flounder reported net income of \$150,000 and paid total dividends of \$30,000 on April 1 and \$40,000 on October 1. On July 1, 2015, Abalone sold half of its shares in Flounder for \$158,000 cash.

78. Before income taxes, what income should Abalone include in its 2014 income statement as a result of this investment?

- a) \$100,000
- b) \$60,000
- c) \$30,000
- d) \$18,000

79. The carrying amount of this investment in Abalone's December 31, 2014 balance sheet should be

- a) \$252,000.
- b) \$240,000.
- c) \$270,000.
- d) \$275,000.

80. The gain on sale of this investment in Abalone's 2015 income statement should be

- a) \$8,000.
- b) \$20,750.
- c) \$25,250.
- d) \$32,000.

81. On January 1, 2014, Scallop Corp. purchased 25% of Prawn Corp.'s common shares; no goodwill resulted from the purchase. Scallop correctly uses the equity method to account for this investment at equity. The Investment in Associate account related to the Scallop investment was reported on the December 31, 2014 balance sheet at \$360,000. Prawn had reported net income of \$225,000 for calendar 2014, and paid dividends totaling \$90,000 during 2014. How much did Scallop pay for its 25% interest in Prawn?

- a) \$393,750

- b) \$382,500
- c) \$360,000
- d) \$326,250

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
73.	d	75.	b	77.	b	79.	a	81.	d
74.	d	76.	c	78.	c	80.	c		

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
73.	d	$\begin{aligned} \$585,000 - \$10,000 &= \$575,000 \\ \$575,000 - \left(\$75,000 \times \frac{15}{75} \right) &= \$560,000 \end{aligned}$
74.	d	$\$192,000 - \$228,000 = \$36,000$ loss
75.	b	$\$103,500 - \$96,000 = \$7,500$ gain
76.	c	Conceptual
77.	b	Conceptual
78.	c	$\$100,000 \times 30\% = \$30,000$
79.	a	$\$240,000 + \$30,000 - (\$60,000 \times 30\%) = \$252,000$
80.	c	$\begin{aligned} \$252,000 - (\$30,000 \times 30\%) + (\$150,000 \times 50\% \times 30\%) &= \$265,500 \\ \$158,000 - (\$265,500 \div 2) &= \$25,250 \end{aligned}$
81.	d	$\$360,000 - (\$225,000 \times 25\%) + (\$90,000 \times 25\%) = \$326,250$

EXERCISES

Ex. 9-82 Motivation for investments

List three reasons why an organization would make investments.

Solution 9-82

1. for the returns provided (interest, dividends, capital appreciation)
2. to develop a special relationship with a supplier or customer.
3. to establish a long-term operating relationship with the investee (usually by influencing or controlling the investee)

Ex. 9-83 Investment in debt securities at a premium

On April 1, 2014, Margarita Corp. purchased 6%, \$120,000 (par value) bonds for \$124,725 plus accrued interest. Interest is paid on July 1 and January 1 and the bonds mature on July 1, 2019. Margarita uses the amortized cost model to account for this investment, and intends to hold the bonds to maturity. Margarita Corp. follows ASPE.

Instructions

- a) Prepare the journal entry to record the purchase.
- b) The bonds are sold on November 1, 2015 at 103 plus accrued interest. Amortization was recorded when interest was received by the straight-line method. Prepare all entries required to properly record the sale. Round values to the nearest dollar, if necessary.

Solution 9-83

a)	Bond Investment at Amortized Cost	124,725	
	Interest Income ($\$120,000 \times .06 \times 3 \div 12$).....	1,800	
	Cash.....		126,525
	Discount on bond: $\$124,725 - \$120,000 = \$4,725$		
b)	Interest Income ($\$4,725 \times 4 \div 63$)	300	
	Bond Investment at Amortized Cost		300
	Cash ($\$120,000 \times .06 \times 4 \div 12$).....	2,400	
	Interest Income		2,400
	Cash	123,600	
	Gain on Sale of Investments.....		300
	Bond Investment at Amortized Cost		123,300
	$\$124,725 - (\$4,725 \times 19 \div 63)$		

Ex. 9-84 Investment in debt securities at a premium

On January 1, 2014, Genevieve Ltd. purchased 8%, \$100,000 (par value) bonds for \$108,530. The bonds were purchased to yield 6%. Interest is paid on July 1 and January 1 and the bonds mature on January 1, 2019. Genevieve uses the amortized cost method and the effective interest method to amortize the premium. Genevieve has a year end of December 31. and follows ASPE.

Instructions

- a) Prepare the journal entry to record the purchase.
- b) Prepare the journal entries for the receipt of interest and amortization of the premium for the remainder of 2014. Round all values to the nearest dollar.
- c) To the nearest dollar, what is the carrying value of the investment at the end of 2015?

Solution 9-84

- a) Bond Investment at Amortized Cost 108,530
 Cash..... 108,530
- b) July 1, 2014
 Cash 4,000
 Interest Income 3,256
 Bond Investment at Amortized Cost 744
 $\$108,530 \times .06 \times .5 = \$3,256$
- December 31, 2014
 Interest Receivable 4,000
 Interest Income 3,234
 Bond Investment at Amortized Cost 766
 $(\$108,530 - \$744) \times .06 \times .5 = \$3,234$
- c) $(\$108,530 - \$744 - \$766) \times .06 \times .5 = \$3,211$; $\$4,000 - \$3,211 = \$789$
 $(\$108,530 - \$744 - \$766 - \$789) \times .06 \times .5 = \$3,187$; $\$4,000 - \$3,187 = \$813$
 Carrying value at the end of 2015:
 $(\$108,530 - \$744 - \$766 - \$789 - \$813) = \$105,418$

Ex. 9-85 Investments in debt securities

Presented below are unrelated cases involving investments in debt securities.

Case 1:

A company owns another firm's debt securities in the form of bonds. The bonds were acquired at a discount and are accounted for under the amortized cost model.

Case 2:

An investment in notes receivable that had been held for several years is being sold. The investment was accounted for under the amortized cost model.

Case 3:

A portfolio of debt investments has been determined to be impaired.

Instructions

Indicate the accounting required and/or available for each individual case.

Solution 9-85

Case 1: The bonds would have been recognized at their fair value plus transaction costs. The discount would be amortized to net income over the life of the bond.

Case 2: The accrued interest and discount or premium would have to be updated up to the date of disposal. The resulting gain or loss (difference between carrying value and sales proceeds) would be recognized in net income and the investment would be removed from the investor's books.

Case 3: Depending on whether ASPE or IFRS is followed, once the investment has been determined to be impaired, three different models are available to recognize the loss: the incurred loss impairment model, the expected loss impairment model, and the fair value loss impairment model.

Ex. 9-86 Cost and equity methods

Compare the cost and equity methods of accounting for investments in stocks subsequent to acquisition (when permitted by ASPE).

Solution 9-86

Under the cost method, the investment is originally recorded at fair value plus any direct transaction costs, i.e. cost. The investment remains at this value unless the investment becomes impaired. Dividends are reported as income.

Similarly, under the equity method, the investment is originally recorded at cost. Subsequently, however, the investment account is adjusted for the investor's share of the investee's net income or loss and this amount is recognized in the net income of the investor. Dividends received from the investee are recorded as reductions in the investment account.

Ex. 9-87 Cost and equity methods

Fill in the dollar changes caused in the Investment account and Dividend Income or Investment Income account by each of the following transactions, assuming Norah Corp. uses

- a) the fair value through net income (FV–NI) method and
- b) the equity method for accounting for its investments in Jessica Ltd.

Transaction	a) FV–NI Method		b) Equity Method	
	Investment Account	Dividend Income	Investment Account	Investment Income or Loss
1. At the beginning of Year 1, Norah bought 30% of Jessica's common shares at their book value. At this time, the book value of all Jessica's common shares was \$450,000.				
2. During Year 1, Jessica reported \$25,000 net income and paid a total of \$12,500 in dividends.				
3. During Year 2, Jessica reported \$10,000 net income and paid a total of \$12,500 in dividends.				
4. During Year 3, Jessica reported a net loss of \$6,000 and paid a total of \$2,500 in dividends.				
5. Indicate the Year 3 ending balance in the Investment account, and cumulative totals				

for Years 1, 2, and 3 for dividend income and investment income.

Solution 9-87

Transaction	a) FV–NI Method		b) Equity Method	
	Investment Account	Dividend Income	Investment Account	Investment Income or Loss
1.	135,000		135,000	
2.		3,750	7,500 (3,750)	7,500
3.		3,750	3,000 (3,750)	3,000
4.		750	(1,800) (750)	(1,800)
5.	135,000	8,250	135,450	8,700

Ex. 9-88 Sale of equity investment – fair value through other comprehensive income
Rowena Corp., a company that follows IFRS, holds 10,000 preferred shares of Tabitha Corp. The investment is *not* considered significant and has been accounted for under the fair value through other comprehensive income (FV–OCI) model. In previous years, Rowena had recorded a cumulative total of \$15,000 (Cr) in “Unrealized Gain or Loss–OCI” in connection with the Tabitha investment.
The shares are sold for \$275,000, which is \$12,000 more than the current carrying value of \$263,000.

Instructions

Prepare the following entries:

- the entry required to adjust this investment to its fair value at the date of sale.
- the sale of the investment.
- the reclassification entry assuming Rowena uses FV–OCI with recycling.
- the reclassification entry assuming Rowena uses FV–OCI without recycling.

Solution 9-88

a)	FV–OCI Investments	12,000	
	Unrealized Gain or Loss–OCI		12,000
b)	Cash	275,000	
	FV–OCI Investments		275,000
c)	Unrealized Gain or Loss–OCI (\$15,000 + \$12,000)....	27,000	
	Gain on Sale of Investments		27,000

d) Unrealized Gain or Loss—OCI.....	27,000	
Retained Earnings.....		27,000

Ex. 9-89 Significant influence

Describe how to determine if an investment results in significant influence.

Solution 9-89

If the ownership is less than 20%, it is presumed that the investor does not have significant influence. However, if there is evidence indicating that such influence exists, such as the investor having seats on the board of directors, then the investment should be accounted for as one with significant influence.

If the ownership is 20% or greater, then it is presumed the investor has significant influence. If the facts of the situation indicate that there is not significant influence, such as the existence of a larger shareholder and the investor having no seats on the board of directors, then the investment should be accounted for as one without significant influence.

Ex. 9-90 Investment in equity securities

On January 1, 2014, Sally Corp. acquired 30% of Wally Ltd.'s common shares for \$500,000. At that time, Wally had 1 million no par common shares issued and outstanding. During 2014, Wally paid total cash dividends of \$220,000, and later declared and issued a 5% common stock dividend when the market value was \$2 per share. Wally's net income for 2014 was \$480,000. Sally is using the equity method to account for this investment. What should be the balance in Sally's investment account at the end of 2014?

Solution 9-90

Cost	\$500,000
Share of net income ($.3 \times \$480,000$)	144,000
Share of dividends ($.3 \times \$220,000$)	<u>(66,000)</u>
Balance in investment account.....	<u>\$578,000</u>

Ex. 9-91 True-false questions

Mark T or F in the left margin opposite the question number.

When one entity (investor) acquires the shares of another entity (investee) and the investment results in significant influence:

- ___ 1. The investor may use the equity method to account for the investment if certain conditions are met and ASPE is followed.
- ___ 2. Under IFRS, the investment would generally require *more* extensive disclosures.
- ___ 3. The investor may use the cost method to account for the investment if certain conditions are met and IFRS is followed.

When an investor follows IFRS in accounting for its investments:

- ___ 4. Transaction costs must be capitalized except when the investment is accounted for under the fair value through net income model.
- ___ 5. Gains and losses are always recognized in net income.
- ___ 6. Investments in subsidiaries must be accounted for under the equity method.

___ 7. Reclassifications between measurement models are allowed in rare circumstances.

Solution 9-91

1. T
2. T
3. F
4. T
5. F
6. F
7. T

PROBLEMS

Pr. 9-92 Accounting for bonds – amortized cost model (IFRS)

On January 1, 2014, on their issue date, Diogenes Inc. purchased 9%, \$200,000, 10-year bonds. Interest is paid annually on December 31. Diogenes uses the amortized cost model and the effective interest method for amortizing premium or discount. The current market rate was 10% and as a result Diogenes paid \$187,711 for the bonds. On December 31, 2014, the bonds have a market value of \$185,000.

Instructions

- a) Record the receipt of interest and amortization of the discount for 2014.
- b) Record any year-end adjustment required.

Solution 9-92

a) Interest income = $\$187,711 \times .10$	\$18,771	
Actual interest	<u>18,000</u>	
Discount amortization.....	<u>\$ 771</u>	
 Cash	 18,000	
Bond Investment at Amortized Cost	771	
Interest Income		18,771

- b) No entry is required. Using the amortized cost model, an entry would only be required if there had been an impairment in value. Since this is not mentioned, we can assume there is no impairment. The investment is reported at amortized cost.

Pr. 9-93 Temporary investments – FV–NI model

During the course of your examination of the financial statements of Venus Corporation for the year ended December 31, 2014, you found a new account called "Investments." Your examination revealed that during 2014, Venus began a program of investments, and all investment-related transactions were entered in this account. Your analysis of this account for 2014 follows:

VENUS CORPORATION			
Analysis of Investments			
Year Ended December 31, 2014			
<u>Date—2014</u>		<u>Debit</u>	<u>Credit</u>
(i)	<u>Jupiter Ltd. Common Shares</u>		
Feb 14	Purchased 3,000 shares @ \$55 per share.....	\$165,000	
Jul 26	Received 300 Jupiter common shares as a stock dividend. (Memorandum entry)		
Sep 28	Sold the 300 Jupiter common shares received July 26 @ \$70 per share.....		\$21,000
(ii)			
	<u>Mars Ltd. Common Shares</u>	<u>Debit</u>	<u>Credit</u>

Apr 30	Purchased 5,000 shares @ \$40 per share.....	\$200,000	
Oct 28	Received dividend of \$1.20 per share.....		\$6,000

Additional information:

- The market values for each security during 2014 follow:

<u>Security</u>	<u>Feb 14</u>	<u>Apr 30</u>	<u>Jul 26</u>	<u>Sep 28</u>	<u>Dec 31</u>
Jupiter Ltd.	\$55		\$62	\$70	\$72
Mars Ltd.		\$40			32
Venus Corp.	25	28	30	33	35
- All of the investments of Venus are nominal in respect to percentage of ownership (five percent or less).
- Each investment is considered by Venus's management to be temporary.
- The company has adopted ASPE and intended to use the FV–NI method to account for these investments.
- Venus follows a policy of separately reporting dividend income.

Instructions

- Prepare any necessary correcting journal entries related to investments (i) and (ii).
- Prepare the entry, if necessary, to record the proper valuation of these investments at December 31, 2014.

Solution 9-93

- | | | |
|------------------|-------------------|---------------------|
| (i) Jupiter Ltd. | original purchase | 3,000 shares |
| | stock dividend | <u>300 shares</u> |
| | total holding | <u>3,300 shares</u> |

Total cost of \$165,000 ÷ Total shares of 3,300 = \$50 average cost per share

Sold 300 shares

Correct entry:

Cash (300 × \$70)	21,000	
FV–NI Investments—Jupiter (300 × \$50)		15,000
Investment Income or Loss		6,000

Entry made:

Cash	21,000	
Investments		21,000

Correction:

FV–NI Investments—Jupiter	6,000	
Investment Income or Loss		6,000

- Mars Ltd. - should record cash dividend as dividend income.

Correct entry:

Cash	6,000	
Dividend Income		6,000

Entry made:

Cash	6,000	
Investments		6,000

Correction:

FV–NI Investments—Mars	6,000	
Dividend Income.....		6,000

b) Valuation at year end:

	<u>Quantity</u>	<u>Cost</u>	<u>Market Value</u>	<u>Increase (Decrease)</u>
Jupiter	3,000 shares	\$150,000	\$216,000	\$66,000
Mars	5,000 shares	<u>200,000</u>	<u>160,000</u>	<u>(40,000)</u>
		<u>\$350,000</u>	<u>\$376,000</u>	<u>\$26,000</u>

Year-end Adjustment:

FV–NI investments—Jupiter.....	66,000	
Investment Income or Loss		66,000
Investment Income or Loss	40,000	
FV–NI Investments—Mars		40,000

Pr. 9-94 Year-end adjustments for temporary investments

Mercury Corp. has the following portfolio of common shares (without significant influence) at December 31, 2014:

<u>Investment</u>	<u>Cost</u>	<u>Fair value</u>
Albania Inc.	\$480,000	\$575,000
Bulgaria Ltd.	90,000	620,000
Czech Corp.	<u>120,000</u>	<u>220,000</u>
Total	<u>\$690,000</u>	<u>\$1,410,000</u>

Instructions

Provide the entry to record the year-end adjustment for these investments, assuming Mercury uses one control account and has adopted the FV–NI model.

Solution 9-94

FV–NI Investments.....	720,000	
Investment Income or Loss		720,000

Pr. 9-95 Accounting for debt investments purchased at a premium – FV–NI model

On January 1, 2014, Pluto Corp. acquired 8%, \$100,000 (face value) bonds of Uranus Ltd., to yield 6%. The bonds were dated January 1, 2014, and mature on December 31, 2018, with interest payable each January 1. Pluto intends to hold the bonds to maturity, and will use the FV–NI model and the effective interest method of amortization of bond premium or discount.

Instructions

Prepare the following entries in Pluto's books:

- Acquisition of bonds on January 1, 2014,
- Year-end adjusting entry at December 31, 2014,

c) Receipt of the first interest payment on January 1, 2015.

Round all values to the nearest dollar.

Solution 9-95

a) Acquisition of bonds on January 1, 2014

PV of principal: \$100,000 (PVF*5, 6%) = \$100,000 x 0.74726	\$74,726
PV of interest: (PVF*OA 5, 6%) = \$8,000 x 4.21236	<u>\$33,699</u>
Present value of bond	\$108,425

OR 5 N 6 I 8000 PMT 100000 FV CPT PV => 108,425

FV–NI Investment in Bonds.....	108,425	
Cash.....		108,425

b) Year-end adjusting entry at December 31, 2014

Interest receivable.....	8,000	
FV–NI Investment in Bonds.....		1,495
Interest income.....		6,505

\$100,000 x 8% = \$8,000

\$108,425 x 6% = \$6,505

\$8,000 – \$6,505 = \$1,495

c) Receipt of first interest payment on January 1, 2015

Cash	8,000	
Interest receivable		8,000

Pr. 9-96 Accounting for investments – FV–NI

On December 31, 2014, Hubble Corp. has the following securities in its portfolio of temporary investments:

	<u>Cost</u>	<u>Market</u>
5,000 common shares of Orion Corp.	\$ 80,000	\$ 69,500
10,000 common shares of Rigel Ltd.	<u>91,000</u>	<u>92,500</u>
	<u>\$171,000</u>	<u>\$162,000</u>

All of the securities had been purchased in 2014. In 2015, Hubble completed the following securities transaction:

Apr 1 Bought 300 common shares of Aries Corp. @ \$50 each, plus fees of \$550.

On December 31, 2015, Hubble's portfolio of trading equity securities appeared as follows:

	<u>Cost</u>	<u>Market</u>
5,000 common shares of Orion Corp.	\$ 80,000	\$ 78,000
10,000 common shares of Rigel Ltd.	91,000	99,250
600 common shares of Aries Corp.	<u>15,550</u>	<u>12,750</u>
	<u>\$186,550</u>	<u>\$190,000</u>

Instructions

Assuming Hubble uses the FV–NI model, prepare the general journal entries for:

- the 2014 year-end adjusting entry,
- the purchase of the Aries Corp. shares,

c) the 2015 year-end adjusting entry.

Solution 9-96

a) Dec 31, 2014		
Investment Income or Loss	9,000	
FV–NI Investments		9,000
(\$171,000 – \$162,000)		
b) Apr 1, 2015		
FV–NI Investments	15,550	
Cash [(300 ´ \$50) + \$550]		15,550
c) Dec 31, 2015		
FV–NI Investments	12,450	
Investment Income or Loss		12,450
190,000 – (162,000 + 15,550) = 12,450		

Pr. 9-97 Long-term investment – FV–NI method

Ceres Corporation is considering making a significant long-term investment in Pisces Ltd., a young and very promising company. Ceres decides to make a smaller investment first, and if Pisces turns out to be successful, Ceres intends to make an additional investment to reach significant influence. Pisces has 200,000 shares authorized, 110,000 shares issued and 90,000 shares outstanding.

On January 1, 2014, Pisces issues Ceres 10,000 shares for \$400,000 in cash (so now there are 120,000 shares issued, and 100,000 shares outstanding).

Additional information:

1. On November 1, 2014, Pisces declares a total cash dividend of \$180,000.
2. Pisces reports \$225,000 net income for 2014. Its stock price on December 31, 2014 is \$38.
3. On November 1, 2015, Pisces announces a total dividend of \$270,000 to be paid on January 2, 2016.
4. Pisces reports \$360,000 net income for 2015. Its stock price on December 31, 2015 is \$44.
5. On March 15, 2016, Ceres is approached by an investment fund which offers to buy all their Pisces shares for \$55 per share, a 25% premium over the current stock price of \$44. Ceres accepts the offer and sells the shares on that day.

Instructions

Assuming Ceres uses the fair value through net income model (FV–NI) to account for this investment:

- a) Prepare the journal entries in Ceres's books for the 2014 calendar year.
- b) Prepare the journal entries in Ceres's books for the 2015 calendar year.
- c) Prepare the journal entries in Ceres's books for the 2016 calendar year.

Solution 9-97

a) <u>2014 Entries</u>		
FV–NI Investment—Pisces	400,000	
Cash		400,000

To record the initial investment on January 1, 2014

Cash	18,000	
Dividend Income		18,000
To record Ceres's share of the dividend on November 1, 2014		
$\$180,000 \times 10,000 \div 100,000 = \$18,000$		
Investment Income or Loss	20,000	
FV-NI Investment—Pisces		20,000
To record holding loss on December 31, 2014		
$(\$38 - \$40) \times 10,000 = \$20,000$		

b) 2015 Entries

Dividend receivable.....	27,000	
Dividend Income.....		27,000
To record Ceres's share of the dividend declared on November 1, 2015		
$\$270,000 \times 10,000 \div 100,000 = \$27,000$		
FV-NI Investment—Pisces	60,000	
Investment Income or Loss.....		60,000
To record holding gain on December 31, 2015		
$(\$44 - \$38) \times 10,000 = \$60,000$		

c) 2016 Entries

Cash	27,000	
Dividend Receivable.....		27,000
To record receipt of dividend on January 2, 2016		
Cash	550,000	
FV-NI Investment—Pisces.....		440,000
Gain on sale of investment.....		110,000
To record gain on sale of Pisces shares on March 15, 2016		
$\$55 \times 10,000 = \$550,000$		
$(\$55 - \$44) \times 10,000 = \$110,000$		

Pr. 9-98 Equity method (ASPE)

On January 1, 2013, Titanic Corp. bought 30,000 shares of the available 100,000 common shares of Iceberg Inc., a publicly traded firm. This acquisition provided Titanic with significant influence. Titanic paid \$700,000 cash for the investment. At the time of the acquisition, Iceberg reported assets of \$2,500,000 and liabilities of \$1,200,000. Asset values reflected fair market value, except for capital assets that had a net book value of \$500,000 and a fair market value of \$730,000. These assets had a remaining useful life of five years. For 2013 Iceberg reported net income of \$400,000 and paid total cash dividends of \$100,000.

On May 16, 2014, Titanic sold 15,000 of its shares in Iceberg for \$425,000. Titanic has no immediate plans to sell its remaining investment in Iceberg.

Iceberg is actively traded, and stock price information follows:

January 1, 2013	\$23
December 31, 2013	\$25
January 1, 2014	\$26

Instructions

- Assuming Titanic is using ASPE, did the initial investment include a payment for goodwill? Provide support for your answer.
- At the end of 2013, what would appear on the income statement and balance sheet of Titanic in connection with its investment in Iceberg? Show supporting calculations.
- Provide the entry to account for Titanic's sale of the shares in May 2014. How should Titanic account for its remaining investment in Iceberg?

Solution 9-98

- Note that, even using ASPE, since Iceberg is quoted in an active market, Titanic must use the equity method.

Purchase price	\$700,000
Market value of identifiable assets*	\$2,730,000
Less: liabilities	(1,200,000)
Total market value of net assets acquired	1,530,000
Portion purchased (30% x \$1,530,000)	<u>(459,000)</u>
Goodwill	<u>\$241,000</u>
*\$2,500,000 + (\$730,000 – \$500,000)	

b)	
Share of net income (\$400,000 x 30%)	\$120,000
Less: amortization of fair value increment (\$730,000 – \$500,000) ÷ 5	\$ 46,000
Investor portion 30%	<u>(13,800)</u>
Investment income on income statement	<u>\$106,200</u>

Cost	\$700,000
Plus: investment income	106,200
Less: dividends received (\$100,000 x 30%)	<u>(30,000)</u>
Investment account on balance sheet	<u>\$776,200</u>

c)	
Cash	425,000
Investment in Associate	388,100
Gain on Sale of Investment	36,900

To record the sale of the shares
 $\$776,200 \times 50\% = \$388,100$

After this sale, Titanic will no longer have significant influence over Iceberg. As a result, the use of the equity method will no longer be appropriate. Under ASPE, Titanic can choose the cost or fair value through net income (FV–NI) model for its remaining investment in Iceberg.

Pr. 9-99 Equity method – IFRS

Capricorn Corporation decided to purchase 35% of the outstanding shares of Aquarius Ltd. Capricorn's CFO conducted an extensive evaluation of the financial statements of Aquarius and reported his findings to the Board of Directors in the following memo:

Dear Board of Directors,

Following your request, I conducted a detailed analysis of Aquarius Ltd. I found out that the liabilities reported in its books at December 31, 2013 in the amount of \$20M fairly represent their economic values. As for the assets, their book value is \$45M. The company owns an office building in downtown Toronto where its headquarters are located. The net book value of this building, including the land, is \$10M. Aquarius purchased the land for \$6M some 20 years ago and then constructed the building. I consulted with real estate experts and currently the fair value of the land is \$9M and the fair value of the building is \$8M. The remaining useful life of the building in Aquarius's books is 20 years and I find this estimate realistic.

The firm has developed a patent. According to my analysis, the fair value of the patent is \$12M. Given future advances in technology, I expect the value of the patent to decline and become worthless 6 years from now. The patent was developed by the company and all the related costs were recorded as research and development expenses.

Sincerely,
Jake Connor, CA

The Board of Directors of Capricorn Corporation adopted the report by Mr. Connor and on January 1, 2014 purchased 35% of the shares of Aquarius, based on its fair value according to Mr. Connor's analysis. After the acquisition of the shares, Capricorn was able to exercise significant influence over Aquarius.

In 2014, Aquarius reported net income of \$10M and distributed 40% of it as cash dividends. In 2015, the earnings of Aquarius doubled compared with 2014. Aquarius distributed 60% of its income as cash dividends.

On December 31, 2015, Capricorn sold its investment in Aquarius Ltd. for \$20M.

Instructions

Assuming Capricorn accounts for this investment using the method required under IFRS,

- Record the initial purchase by Capricorn Corp.
- Record the entries related to the investment in Aquarius Ltd. for 2014.
- Record the entries related to the investment in Aquarius Ltd. for 2015.

Solution 9-99

a) Calculation of amount paid

Net book value of Aquarius (45 – 20)	25M
Fair value of patent	12M
Excess value of land (9 – 6)	3M
Excess value of building (8 – (10 – 6))	<u>4M</u>
Fair value of Aquarius	44M
Shares held	35%
Amount paid	<u>15.4M</u>

b) Journal entries for 2014

Investment in Associate	15.4M	
Cash		15.4M
To record initial investment		

Calculation of income to be recorded by Capricorn:

Aquarius's net income	10M
Capricorn's ownership	<u>35%</u>

Capricorn's share of net income.....	3.5M	
Amortization of patent (12M ÷ 6) x 35%	(0.7M)	
Excess depreciation of the building (4M x 35%) ÷ 20	<u>(0.07M)</u>	
Capricorn's adjusted share in Aquarius's net income	<u>2.73M</u>	
Investment in Associate	2.73M	
Investment income		2.73M
Cash	1.4M	
Investment in Associate.....		1.4M
To record dividend distribution (10M x 40% x 35%)		

c) Journal entries for 2015

For recording its share in Aquarius's net income, the only adjustment to the 2014 calculations is that income now is 20M and Capricorn's share is \$7M, an increase of \$3.5M compared with 2014. Thus investment income increases to 6.23M (2.73 + 3.5).

Investment in Associate.....	6.23M	
Investment income.....		6.23M
Cash.....	4.2M	
Investment in Associate.....		4.2M
To record dividend distribution (10M x 2 x 60% x 35%)		

By the end of 2015, the value of the investment in Capricorn's books is as follows:

Initial investment	15.4	
Investment income 2014	2.73	
Dividend 2014	(1.4)	
Investment income 2015	6.23	
Dividend 2015	<u>(4.2)</u>	
Investment in Aquarius Dec 31/15.....	18.76M	
Selling price	<u>20.00M</u>	
Gain on sale of investment.....	<u>1.24M</u>	
Cash.....	20M	
Investment in Associate.....		18.76M
Gain on Sale of Investment.....		1.24M

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CHAPTER 10

PROPERTY, PLANT, AND EQUIPMENT: ACCOUNTING MODEL BASICS

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	2	E	9.	5	H	17.	6	M	25.	10	M
2.	2	M	10.	5	H	18.	6	H	*26.	12	M
3.	3	M	11.	5	H	19.	6	E	*27.	12	M
4.	3	M	12.	5	M	20.	6	E	*28.	12	M
5.	3	M	13.	5	H	21.	8	M	*29.	13	M
6.	4	M	14.	5	M	22.	8	M			
7.	4	M	15.	6	M	23.	9	M			
8.	5	M	16.	6	M	24.	10	H			
5Multiple Choice–Computational											
30.	4,6	H	37.	5	M	44.	7	M	*51.	12	M
31.	5	M	38.	5	M	45.	7	M	*52.	12	M
32.	5	M	39.	6	H	46.	8	M	*53.	12	M
33.	5	M	40.	6	H	47.	8	M	*54.	12	M
34.	5	H	41.	6	H	48.	8	M	*55.	12	M
35.	5	H	42.	6	H	49.	9	E	*56.	13	H
36.	5	M	43.	6	M	50.	10	M	*57.	13	H
5Multiple Choice–CPA Adapted											
58.	5	H	60.	5	E	62.	6	M	64.	10	H
59.	5	M	61.	6	M	63.	6	M	*65.	12	M
Exercises											
66.	3	M	70.	5	M	74.	7,8,9	M	*78.	12	M
67.	4,10,12	M	71.	5	M	75.	8	M			
68.	5	M	72.	6	M	76.	9	M			
69.	5	M	73.	6	M	*77.	12	H			
Problems											
79.	5	M	82.	5	M	85.	6,9	M	*88.	12	M
80.	5	H	83.	5	H	86.	8	M			
81.	5	M	84.	6	M	*87.	12	M			

Note: E = Easy M = Medium H = Hard

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 2											
1.	MC	2.	MC								
Learning Objective 3											
3.	MC	4.	MC	5.	MC	66.	Ex				
Learning Objective 4											
6.	MC	7.	MC	30.	MC	*67.	Ex				
Learning Objective 5											
8.	MC	13.	MC	34.	MC	58.	MC	70.	Ex	82.	Pr
9.	MC	14.	MC	35.	MC	59.	MC	71.	Ex	83.	Pr
10.	MC	31.	MC	36.	MC	60.	MC	79.	Pr		
11.	MC	32.	MC	37.	MC	68.	Ex	80.	Pr		
12.	MC	33.	MC	38.	MC	69.	Ex	81.	Pr		
Learning Objective 6											
15.	MC	19.	MC	40.	MC	61.	MC	73.	Ex		
16.	MC	20.	MC	41.	MC	62.	MC	84.	Pr		
17.	MC	30.	MC	42.	MC	63.	MC	85.	Pr		
18.	MC	39.	MC	43.	MC	72.	Ex				
Learning Objective 7											
44.	MC	45.	MC	74.	Ex						
Learning Objective 8											
21.	MC	46.	MC	48.	MC	75.	Ex				
22.	MC	47.	MC	74.	Ex	86.	Pr				
Learning Objective 9											
23.	MC	49.	MC	74.	Ex	76.	Ex	85.	Pr		
Learning Objective 10											
24.	MC	25.	MC	50.	MC	64.	MC	*67.	Ex		
Learning Objective 12											
*26.	MC	*51.	MC	*54.	MC	*67.	Ex	*87.	Pr		
*27.	MC	*52.	MC	*55.	MC	*77.	Ex	*88.	Pr		
*28.	MC	*53.	MC	*65.	MC	*78.	Ex				
Learning Objective 13											
*29.	MC	*56.	MC	*57.	MC						

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

CHAPTER STUDY OBJECTIVES

1. Understand the importance of depreciation, impairment, and disposition from a business perspective. The economic benefits of property, plant, and equipment are typically consumed as the items are used by the organization. Because the benefits are consumed over multiple periods, companies use depreciation to allocate the benefits of the PP&E to each period as the capacity of the assets is used up. By allocating the cost of property, plant, and equipment over its useful life, businesses are better able to match the costs and benefits of the assets to the revenues that they help generate. Companies also need to assess their PP&E each year under IFRS for indications of impairment, and if these indications are present they should re-estimate how much will be recoverable. Following GAAP should also help companies better understand their business.

2. Explain the concept of depreciation and identify the factors to consider when determining depreciation charges. Depreciation is the process of allocating the cost of property, plant, and equipment assets in a systematic and rational manner to the periods that are expected to benefit from their use. The allocation of the cost of intangible capital assets is termed “amortization” and the allocation of the costs of mineral resource assets is termed “depletion.” Four factors involved in determining depreciation expense are (1) the recognition of the appropriate asset components, (2) the amount to be depreciated (depreciable amount), (3) the estimated useful life, and (4) the pattern and method of depreciation.

3. Identify how depreciation methods are selected. The depreciation method chosen should amortize an asset in a pattern and at a rate that corresponds to the benefits received from that asset. The choice often involves the use of professional judgement. Tax reporting, simplicity, perceived economic consequences, and impact on ratios are examples of factors that influence such judgements in practice.

4. Calculate depreciation using the straight-line, decreasing charge, and activity methods and recognize the effects of using each. The straight-line method assumes that an asset provides its benefits as a function of time. As such, cost less residual value is divided by the useful life to determine the depreciation expense per period. The decreasing charge method provides for a higher depreciation charge in the early years and lower charges in later periods. For this method, a constant rate (such as double the straight-line rate) is multiplied by the net book value (cost less accumulated depreciation and accumulated impairment losses) at the start of the period to determine each period's expense. The main justification for this approach is that the asset provides more benefits in the earlier periods. The activity method assumes that the benefits provided by the asset are a function of use instead of the passage of time. The asset's life is considered in terms of either the output that it provides or an input measure, such as the number of hours it works. The depreciation charge per unit of activity (depreciable amount divided by estimated total units of output or input) is calculated and multiplied by the units of activity produced or consumed in a period to determine the depreciation.

5. Explain the accounting issues for depletion of mineral resources. After the depletion base has been established through accounting decisions related to the acquisition, exploration

and evaluation, development, and restoration obligations associated with mineral resources, these costs are allocated to the natural resources that are removed. Depletion is normally calculated using the units of production method. In this approach, the resource's cost less residual value, if any, is divided by the number of units that are estimated to be in the resource deposit, to obtain a cost per unit of product. The cost per unit is then multiplied by the number of units withdrawn in the period to calculate the depletion.

6. Explain and apply the accounting procedures for partial periods and a change in depreciation rate. Because all the variables in determining depreciation are estimates—with the exception, perhaps, of an asset's original cost—it is common for a change in those estimates to result in a change in the depreciation amount. When this occurs, there is no retroactive change and no catch-up adjustment. The change is accounted for in the current and future periods.

7. Explain the issues and apply the accounting standards for capital asset impairment under both IFRS and ASPE. A capital asset is impaired when its carrying amount is not recoverable. The cost recovery method (ASPE) defines recoverable as the undiscounted cash flows from the asset's use and later disposal. If impaired, the asset is written down to its fair value, and this loss cannot be reversed later if the asset's value recovers. The rational entity model (IFRS) defines recoverable amount as the higher of the asset's value in use and fair value less costs of disposal. Both these values are discounted cash flow amounts. If the recoverable amount subsequently improves, the impairment losses recognized are reversed.

8. Explain and apply the accounting standards for long-lived assets that are held for sale. Assets held for sale are no longer depreciated. They are remeasured to their fair value less costs of disposal at each statement of financial position date. Recoveries in value may be recognized to the extent of previous losses. Held-for-sale items of property, plant, and equipment are separately reported as non-current assets unless they meet the definition of current assets. Under ASPE, assets held for sale are only permitted to be reported in current assets if sold before the financial statements are completed and the proceeds on sale are expected within 12 months from the date of the statement of financial position (or operating cycle, if longer).

9. Account for derecognition of property, plant, and equipment. Depreciation continues for PP&E assets until they are classified as held for sale or derecognized. At the date of disposal, all accounts related to the retired asset are removed from the books. Gains and losses from the disposal of plant assets are shown on the income statement in income before discontinued operations, unless the conditions for reporting as a discontinued operation are met. For property, plant, and equipment donated to an organization outside the reporting entity, the donation is reported at its fair value with a gain or loss on disposal recognized.

10. Describe the types of disclosures required for property, plant, and equipment. The type of information required to be disclosed for property, plant, and equipment is governed by the information needs of users. Because users of private entities' financial information are often able to seek further specific information from a company, there are fewer required disclosures than for public companies reporting under IFRS. The required disclosures under IFRS include

those relating to measurement, changes in account balances and the reasons for the changes, information about how fair values are determined, and many others.

11. **Analyze a company's investment in assets.** The efficiency of use of a company's investment in assets may be evaluated by calculating and interpreting the asset turnover rate, the profit margin, and the rate of return on assets.

12. **Identify differences in accounting between ASPE and IFRS, and what changes are expected in the near future.** In most major ways, international and Canadian accounting standards for the depreciation of property, plant, and equipment are similar. Significant differences do exist, however, in the extent of componentization for depreciation, the impairment models applied, and the extent of disclosure. The impairment differences relate to how it is determined whether an asset is impaired, how the impairment is measured, and the ability to recognize recoveries in value.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
c	1.	Definition of PPE
b	2.	Examples of PPE
d	3.	Recognition of PPE acquisitions
c	4.	Items included in cost of PPE
c	5.	Capitalization of borrowing costs
b	6.	Treatment of restoration costs
b	7.	Accounting for PST
c	8.	Purchase of PPE on long-term contract
a	9.	PPE acquired by issuance of public company's shares
d	10.	PPE acquired by issuance of private company's shares
b	11.	Accounting for donated assets
b	12.	Valuation of donated assets
a	13.	Exchange of assets
b	14.	Accounting for asset exchanges
a	15.	Accounting for land costs
b	16.	Inclusion of land in PPE
d	17.	Costs of land improvements
d	18.	Accounting for land and building purchase
d	19.	Measurement of biological assets
c	20.	Features of the cost model
a	21.	Features of the revaluation model (asset adjustment method)
d	22.	Accounting with revaluation model
b	23.	Features of the fair value model
d	24.	Revenue expenditures
c	25.	Capital expenditures
d	*26.	Capitalization of borrowing costs
b	*27.	Weighted-average accumulated expenditures
d	*28.	Capitalization of borrowing costs
c	*29.	Features of the revaluation model (proportionate method)

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational

Answer	No.	Description
c	30.	Calculate cost of truck purchased
c	31.	Calculate cost of land acquired
d	32.	Allocation of cost of a lump sum purchase
d	33.	Acquisition of equipment by exchange of shares held as an investment
c	34.	Exchange of similar assets
c	35.	Exchange of similar assets
c	36.	Purchase of asset with long term note
b	37.	Purchase of asset with long term note
d	38.	Gain or loss with no commercial substance
b	39.	Calculate cost of land
a	40.	Calculate cost of building
d	41.	Calculate cost of land and building
b	42.	Calculate cost of machine purchased
c	43.	Calculate cost of machine purchased
c	44.	Application of the cost model
c	45.	Components of PP&E assets
a.	46.	Application of the revaluation model
d	47.	Application of the revaluation model
b	48.	Application of the revaluation model
a	49.	Application of the fair value model
b	50.	Components of PP&E assets
a	*51.	Calculate weighted-average accumulated expenditures
c	*52.	Calculate amount of interest to be capitalized
b	*53.	Calculate weighted-average accumulated expenditures
b	*54.	Calculate weighted-average accumulated expenditures
c	*55.	Calculate weighted-average accumulated expenditures
a	*56.	Revaluation model (proportionate method)
c	*57.	Revaluation model (proportionate method)

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
d	58.	Valuation of a nonmonetary exchange
c	59.	Exchange of similar assets
b	60.	Accounting for government grant
c	61.	Determine cost of land
b	62.	Classification of sale of building
c	63.	Valuation of replacement equipment
d	64.	Costs subsequent to acquisition
b	*65.	Calculate amount of interest to be capitalized

*This topic is dealt with in an Appendix to the chapter.

EXERCISES

Item	Description
E10-66	Componentization
*E10-67	Plant asset accounting
E10-68	Asset exchange with commercial substance
E10-69	Non-interest bearing note
E10-70	Nonmonetary transaction without commercial substance
E10-71	Asset exchange
E10-72	Acquisition cost
E10-73	Costs included in assets
E10-74	Measurement models
E10-75	Application of the revaluation model
E10-76	Application of the fair value model
*E10-77	Capitalization of interest
*E10-78	Capitalization of interest

PROBLEMS

Item	Description
P10-79	Purchase of asset by non-interest bearing note
P10-80	Asset exchanges
P10-81	Asset exchange – no commercial substance
P10-82	Asset exchange – no commercial substance
P10-83	Nonmonetary exchange
P10-84	Costs included in assets
P10-85	Fair value model
P10-86	Revaluation model
* P10-87	Capitalization of borrowing costs
*P10-88	Capitalization of borrowing costs

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. Which of the following is NOT included in the IAS16 definition of property, plant, and equipment (PPE)?
 - a. PPE will be used over more than one accounting period.
 - b. PPE is held for use in the production of goods and services.
 - c. PPE can be tangible or intangible.
 - d. PPE is tangible.

2. Examples of property, plant, and equipment include
 - a. land, equipment, goodwill.
 - b. equipment, apple trees, mineral resource property.
 - c. machinery, livestock, patents.
 - d. computers, cherry orchards, copyrights.

3. Which of the following statements applies to the recognition of property, plant and equipment acquisitions?
 - a. It is certain that the item's associated future benefits will flow to the entity.
 - b. It is probable that the item's associated future benefits will flow to the entity.
 - c. The cost can be measured reliably.
 - d. It is probable that the item's associated future benefits will flow to the entity, and the cost can be measured reliably.

4. Which of the following would NOT be included in the cost of an item of property, plant and equipment?
 - a. the purchase price net of any trade discounts and rebates
 - b. delivery costs
 - c. costs of training employees to use the asset
 - d. costs of obligations associated with the asset's eventual disposal

5. Which of the following does NOT apply to the capitalization of borrowing costs for the purchase of assets?
 - a. They can have a significant impact on a company's earnings.
 - b. This is allowed under both ASPE and IFRS.
 - c. This is not allowed under IFRS.
 - d. They must be disclosed in the notes to the financial statements.

6. Under ASPE, the costs for environmental clean-up at the end of an asset's useful life
 - a. are always expensed as incurred.
 - b. are recognized only if they represent a legal obligation.
 - c. are capitalized once they have become apparent.
 - d. include only costs related to the acquisition of the asset.

7. The debit for Provincial Sales Tax correctly calculated and paid on the purchase of machinery should be included in
- Provincial Sales Tax Expense.
 - Machinery.
 - Accumulated Depreciation—Machinery.
 - Provincial Sales Tax Refundable.
8. Property, plant, and equipment purchased on long-term credit contracts should be accounted for at the
- actual cash to be paid in the future.
 - future amount of the future payments.
 - present value of the future payments.
 - future value of the current payments.
9. When a plant asset is acquired by the issuance of a public company's common shares, the cost of the plant asset is properly measured by the
- market value of the plant asset.
 - stated value of the shares.
 - book value of the shares.
 - par value of the shares.
10. When a closely held corporation issues preferred shares for land, the land should be recorded at the
- total no par value of the shares issued.
 - total book value of the shares issued.
 - total liquidating value of the shares issued.
 - fair market value of the land.
11. When an enterprise is the recipient of a donated asset, the account credited would probably NOT be a(n)
- equity account.
 - revenue account.
 - deferred revenue account.
 - asset account.
12. A plant site donated by a city to a manufacturer that plans to open a new factory should be recorded on the manufacturer's books at
- the nominal cost of taking title to it.
 - its market value.
 - one dollar (since the site cost nothing but should be included in the balance sheet).
 - the value assigned to it by the company's directors.
13. Spock Inc. exchanged merchandise that cost \$19,000 and normally sold for \$27,000 for a new delivery truck with a list price of \$31,000. The delivery truck should be recorded on Spock's books at

- a. \$31,000.
 - b. \$27,000.
 - c. \$19,000.
 - d. \$12,000.
14. When accounting for asset exchanges,
- a. if a transaction lacks commercial substance, it is not recorded.
 - b. an asset cannot be recognized at more than its fair value.
 - c. if the fair values of either the asset given up or the asset received cannot be ascertained, then the Board of Directors may assign an arbitrary value.
 - d. when an exchange lacks commercial substance, either a gain or loss may be recognized.
15. Chiquita Corp. purchased a large area of land with the intention to transform it into a banana plantation. Before the new seedlings can be planted, the site, which is prone to flooding, must be drained. The cost of the draining should be
- a. capitalized as part of the cost of the land.
 - b. expensed only after the first crop of bananas has been harvested.
 - c. expensed immediately.
 - d. reported as loss from discontinued operations.
16. Land is generally included in property, plant and equipment EXCEPT when
- a. it is not yet ready for use.
 - b. it is held for resale by land developers.
 - c. it includes a building that must be demolished.
 - d. special amounts are assessed for local improvements such as sewers.
17. The costs of land improvements with limited lives, such as a parking lot, are
- a. added to the land account.
 - b. recorded in a separate account.
 - c. depreciated over their useful lives.
 - d. recorded in a separate account and depreciated over their useful lives.
18. If a corporation purchases a lot and building and subsequently tears down the building and uses the property as a parking lot, the proper accounting treatment of the cost of the building would depend on
- a. the significance of the cost allocated to the building in relation to the combined cost of the lot and building.
 - b. the length of time for which the building was held prior to its demolition.
 - c. management's plans for the property when the building was acquired.
 - d. the planned future use of the parking lot.
19. Under IFRS, biological assets should normally be measured at
- a. cost.
 - b. cost less accumulated depreciation.

- c. fair value.
 - d. fair value less costs to sell.
20. The cost model of accounting for PP&E assets
- a. should be applied to investment property only.
 - b. should be applied to other PP&E assets only.
 - c. can be applied to all classes of PP&E including investment property.
 - d. is not appropriate under ASPE.
21. The revaluation model of accounting for PP&E assets
- a. uses a revaluation surplus account to hold net increases in the asset's fair value.
 - b. may be applied to all classes of PP&E including investment property.
 - c. may be applied to investment property under ASPE.
 - d. is not allowed under IFRS.
22. When using the revaluation model of accounting for PP&E assets (asset-adjustment or elimination method)
- a. the related Accumulated Depreciation account is closed to OCI.
 - b. depreciation continues to be charged in the original pattern.
 - c. the difference between fair value and book value is always debited to Revaluation Surplus (OCI).
 - d. a new depreciation rate must be calculated.
23. The fair value model of accounting for PP&E assets
- a. recognizes changes in the asset's fair value in other comprehensive income.
 - b. should be applied to investment property only.
 - c. once chosen for one investment property does *not* have to be applied to all investment property.
 - d. is acceptable under both IFRS and ASPE.
24. Which of the following expenditures after acquisition would NOT be capitalized?
- a. adding a new wing to a hospital
 - b. replacing the air conditioning system in an office building
 - c. major overhaul of a fleet of trucks
 - d. replacing all the tires on an 18-wheel semi-trailer
25. A major overhaul made to a machine increased its fair value and its production capacity by 25% without extending the machine's useful life. The cost of the improvement should be
- a. expensed.
 - b. debited to accumulated depreciation.
 - c. capitalized.
 - d. allocated between accumulated depreciation and the machine account.
- *26. Borrowing costs incurred for the acquisition of assets may be capitalized if certain

conditions are met. Which of the following issues is *irrelevant* in making that determination?

- a. the capitalization period
- b. the avoidable borrowing costs
- c. whether the asset is a "qualifying asset"
- d. the depreciation period

*27. Construction of a qualifying asset is started on April 1 and finished on December 1. The fraction used to multiply an expenditure made on April 1 to find weighted-average accumulated expenditures is

- a. $8 \div 8$.
- b. $8 \div 12$.
- c. $9 \div 12$.
- d. $11 \div 12$.

*28. Borrowing costs that are capitalized should

- a. be written off over the remaining term of the debt.
- b. be accumulated in a separate deferred charge account and written off straight-line over a 40-year period.
- c. not be written off until the related asset is fully depreciated or disposed of.
- d. be amortized over the related asset's useful life.

*29. When using the revaluation model of accounting for PP&E assets (proportionate method)

- a. a Revaluation Surplus account is not used.
- b. depreciation continues to be charged in the original pattern.
- c. the asset account and its related contra-asset are both adjusted.
- d. over the life of the asset, it is possible that there can be a net increase in net income from revaluations.

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	c	6.	b	11.	b	16.	b	21.	a	*26.	d
2.	b	7.	b	12.	b	17.	d	22.	d	*27.	b
3.	d	8.	c	13.	a	18.	d	23.	b	*28.	d
4.	c	9.	a	14.	b	19.	d	24.	d	*29.	c
5.	c	10.	d	15.	a	20.	c	25.	c		

MULTIPLE CHOICE—Computational

30. Zambia Ltd. buys a lift truck with a list price of \$40,000. The dealer grants a 15% reduction in the list price, and an additional 2% cash discount on the net price if payment is made in 30 days. Provincial sales tax is \$2,380 and Zambia pays an extra \$500 to have a special horn installed. The recorded cost of the truck should be

- a. \$36,880.
- b. \$36,380.
- c. \$36,200.
- d. \$35,700.

31. Liberia Corporation exchanged 2,000 shares of its no par value common stock for a parcel of land to be held as a future plant site. The book value of the shares is currently \$90 per share, and their current market value is \$110 per share. Liberia received \$30,000 from the sale of scrap when an existing building on the property was removed from the site. Based on these facts, the land should be capitalized at

- a. \$150,000.
- b. \$180,000.
- c. \$190,000.
- d. \$220,000.

32. Chad Corporation purchased a tract of land for \$765,000, which included a warehouse and office building. The following data were collected concerning the property:

	<u>Current Assessed Valuation</u>	<u>Vendor's Original Cost</u>
Land	\$300,000	\$250,000
Warehouse	200,000	150,000
Office building	<u>400,000</u>	<u>300,000</u>
	<u>\$900,000</u>	<u>\$700,000</u>

What are the appropriate amounts that Chad should record for the land, warehouse, and office building, respectively?

- a. Land, \$250,000; warehouse, \$150,000; office building, \$300,000
- b. Land, \$300,000; warehouse, \$200,000; office building, \$400,000
- c. Land, \$273,214; warehouse, \$163,929; office building, \$327,857
- d. Land, \$255,000; warehouse, \$170,000; office building, \$340,000

33. Benin Ltd. exchanged 500 common shares of Lesotho Corp., which Benin was holding as an investment, for new equipment from Easter Sales. The Lesotho Corp. common shares, which had been purchased by Benin for \$100 per share, had a quoted market value of \$116 per share at the date of exchange. The equipment had a recorded amount on Easter's books of \$55,000, but the fair value was not available. The journal entry that Benin should make to record this exchange is

- a. Equipment 50,000
Investment in Lesotho Corp Common Shares..... 50,000
- b. Equipment 55,000
Investment in Lesotho Corp. Common Shares..... 50,000

Gain on Disposal of Investment		5,000
c. Equipment	55,000	
Loss on Disposal of Investment	3,000	
Investment in Lesotho Corp. Common Shares.....		58,000
d. Equipment	58,000	
Investment in Lesotho Corp. Common Shares.....		50,000
Gain on Disposal of Investment		8,000

34. On January 2, 2014, Congo Delivery Company traded in an old delivery truck for a newer model. Data relative to the old and new trucks follow:

Old Truck

Original cost	\$18,000
Accumulated Depreciation at January 2, 2014	12,000
Fair value	6,000

New Truck

List price	\$30,000
Cash price without trade-in.....	27,000
Cash paid with trade-in.....	22,000

The cost of the new truck for financial accounting purposes is

- \$18,000.
- \$22,000.
- \$27,000.
- \$30,000.

35. Tanzania Inc. acquired a new delivery truck in exchange for an old delivery truck that it had acquired several years earlier for \$40,000. On the date of the exchange, the old truck had a fair value of \$16,000, and its net book value (carrying value) was \$15,200. In addition, Tanzania paid \$52,000 cash for the new truck, which had a list price of \$72,000. At what amount should Tanzania record the new truck for financial accounting purposes?

- \$52,000
- \$67,200
- \$68,000
- \$72,000

36. On January 2, 2014, Zanzibar Corp. purchases a new machine. The company makes a \$2,000 cash down payment, and agrees to pay four annual instalments of \$4,000 each, starting December 31, 2014, signing a non-interest bearing note to this effect. The cash equivalent price of the machine is not known, but the appropriate interest rate for this type of transaction is 9% p.a. Rounding to the nearest dollar (if necessary), Zanzibar should record the cost of the machine at

- \$18,000.
- \$16,000.
- \$14,959.
- \$12,959.

37. On January 2, 2014, Zimbabwe Corp. purchases a new machine. The company makes a \$3,000 cash down payment, and agrees to pay eight semi-annual instalments of \$2,000 each, starting July 1, 2014, signing a non-interest bearing note to this effect. The cash equivalent price

of the machine is not known, but the appropriate interest rate for this type of transaction is 8% p.a. Rounding to the nearest dollar (if necessary), Zimbabwe should record the cost of the machine at

- a. \$15,413.
- b. \$16,465.
- c. \$16,000.
- d. \$19,000.

38. Algeria Inc. traded one of its used trailers (cost \$20,000, accumulated depreciation \$18,000) for another used trailer with a fair value of \$3,200. Algeria also paid \$300 to complete the transaction. Since the exchange will leave Algeria in the same economic position, this transaction lacks commercial substance. What is the gain or loss on the exchange?

- a. \$1,200 gain
- b. \$900 gain
- c. \$300 loss
- d. \$0 (no gain or loss)

Use the following information for questions 39–40.

Morocco Corp. purchased land as a factory site for \$250,000. They paid \$10,000 to tear down two buildings on the land, and the salvage from these old buildings was sold for \$1,350. Legal fees of \$870 were paid for title investigation and making the purchase. Architect's fees were \$10,300. Title insurance cost \$600, and liability insurance during construction cost \$650. Excavation costs were \$2,610. A contractor was paid \$600,000 to construct the new building. An assessment made by the city for pavement was \$1,600. Interest costs during construction were \$42,500.

39. The cost of the land should be recorded at

- a. \$260,120.
- b. \$261,720.
- c. \$262,470.
- d. \$264,070.

40. The cost of the building should be recorded at

- a. \$656,060.
- b. \$655,800.
- c. \$653,710.
- d. \$653,450.

41. On February 1, 2014, Sudan Corp. purchased a parcel of land for \$300,000 as a factory site. An old building on the property was demolished, and construction began on a new building which was completed on November 1, 2014. Costs incurred during this period are listed below:

Demolition of old building	\$ 25,000
Architect's fees.....	35,000
Legal fees for title investigation and purchase contract	5,000
Construction costs.....	990,000
(Salvaged materials resulting from demolition were sold for \$10,000.)	

Sudan should record the cost of the land and new building, respectively, at

- a. \$330,000 and \$1,015,000.
- b. \$315,000 and \$1,030,000.
- c. \$315,000 and \$1,025,000.
- d. \$320,000 and \$1,025,000.

42. On August 1, 2014, Dahomey Corp. purchases a new machine. The company makes a \$6,000 cash down payment, and agrees to pay four monthly instalments of \$9,000 each, starting September 1, 2014, signing a non-interest bearing note to this effect. The cash equivalent price of the machine is \$36,000. As well, Dahomey pays installation costs of \$1,000. The recorded cost of the machine should be

- a. \$7,000.
- b. \$37,000.
- c. \$42,000.
- d. \$43,000.

43. On August 1, 2014, Volta Corp. purchases a new machine. The company makes a \$2,000 cash down payment, and agrees to pay four annual instalments of \$3,000 each, starting August 1, 2015, signing a non-interest bearing note to this effect. The cash equivalent price of the machine is \$12,500. Due to an employee strike, Volta could not install the machine immediately, and thus incurred \$300 of storage costs. As well, Volta pays installation costs of \$400. The recorded cost of the machine should be

- a. \$14,000.
- b. \$13,200.
- c. \$12,900.
- d. \$12,500.

44. Mali Corporation uses the cost model to account for its property, plant and equipment, which were acquired on January 1, 2014 for \$175,000. Mali uses straight-line depreciation and estimates the assets will have a ten year life with no residual value. Assuming Mali did not experience any impairment losses, the December 31, 2015 net book value of the assets is

- a. \$175,000.
- b. \$157,500.
- c. \$140,000.
- d. \$136,000.

45. Nigeria Ltd. acquires a new machine. It is comprised of two different components (A and B) that are expected to be overhauled at different times.

The acquisition costs of the machine are as follows:

- Component A: \$198,000
- Component B: \$240,000

Component A is expected to have a useful life of 5 years and a residual value of \$20,000 before the first major overhaul is required. Component B is expected to have a useful life of 7 years and a residual value of \$15,000 before its first overhaul. Nigeria uses straight-line depreciation for all its equipment. What is the net book value of component A after 5 years?

- a. \$0
- b. \$19,000

- c. \$20,000
- d. \$55,600

Use the following information for questions 46–48.

Tunisia Inc. owns assets to which it applies the revaluation model (asset-adjustment method). The following additional information is available:

1. Accumulated Depreciation at December 31, 2015 (prior to any fair value adjustments) was \$12,000.
2. Between December 31, 2014 and December 31, 2015, the property's fair value had increased by \$30,000.
3. The December 31, 2015 balance in the revaluation surplus account (prior to any fair value adjustments) was \$2,000.

46. The *adjusted* December 31, 2015 balance in the related contra-asset account will be
- a. \$0.
 - b. \$10,000.
 - c. \$12,000.
 - d. \$14,000.

47. The *adjusted* December 31, 2015 balance in the revaluation surplus account will be
- a. \$0.
 - b. \$28,000.
 - c. \$30,000.
 - d. \$32,000.

48. Assume the same facts as indicated above, except that, between December 31, 2014 and December 31, 2015, the property's fair value had *decreased* by \$10,000. As a result, Tunisia's 2015 income statement will include a
- a. \$10,000 loss.
 - b. \$ 8,000 loss.
 - c. \$ 8,000 gain (other comprehensive income).
 - d. \$ 2,000 loss.

49. Uganda Corporation uses the fair value model of accounting for its investment property. The fair values of its property were: December 31, 2014, \$225,000 and December 31, 2015, \$233,000. At December 31, 2015 Uganda should
- a. recognize a gain of \$8,000 in income.
 - b. report a gain of \$8,000 in other comprehensive income.
 - c. defer the gain until the property is sold.
 - d. do nothing (ignore it).

50. Nigeria Ltd. acquires a new machine. It is comprised of two different components (A and B) that are expected to be overhauled at different times. The acquisition costs of the machine are as follows:

Component A: \$198,000

Component B: \$240,000

Component A is expected to have a useful life of 5 years and a residual value of \$20,000 before the first major overhaul is required. Component B is expected to have a useful life of 7 years and a residual value of \$15,000 before its first overhaul. Nigeria uses straight-line depreciation for all its equipment. At the beginning of year 6, component A undergoes a major overhaul at a cost of 100,000. The work is expected to extend its life by 3 years, but the residual value will then be zero. What is the net book value of component A one year after the overhaul?

- a. \$120,000
- b. \$ 80,000
- c. \$ 66,667
- d. \$ 40,000

*51. On May 1, 2014, Ethiopia Ltd. began construction of a new building for its own use. Expenditures of \$75,000 were incurred monthly for five months beginning on May 1. The building was completed and ready for occupancy on September 1, 2014. For the purpose of determining the amount of interest cost to be capitalized, the weighted-average accumulated expenditures on the building during 2014 were

- a. \$62,500.
- b. \$75,000.
- c. \$187,500.
- d. \$375,000.

*52. During calendar 2014, Somalia Corp. incurred weighted-average accumulated expenditures of \$800,000 during construction of assets that qualified for capitalization of interest. The only debt outstanding during 2014 was a \$900,000, 8%, five-year note payable dated January 1, 2012. The amount of interest that should be capitalized during calendar 2014 is

- a. \$0.
- b. \$32,000.
- c. \$64,000.
- d. \$72,000.

*53. On March 1, Senegal Inc. began construction of a small building for its own use. Payments of \$150,000 were made monthly for three months beginning March 1. The building was completed and ready for occupancy on June 1. In determining the amount of interest cost to be capitalized, the weighted-average accumulated expenditures are

- a. \$0.
- b. \$75,000.
- c. \$150,000.
- d. \$450,000.

Use the following information for questions *54–*55.

On March 1, 2014, Mauritania Ltd. purchased land for \$270,000 cash, which they intend to use for their new head office. Construction on the office building began on March 1. The following expenditures were incurred for construction:

<u>Date</u>	<u>Expenditures</u>
March 1, 2014	\$450,000
April 1, 2014	252,000
May 1, 2014	450,000
June 1, 2014	720,000

The office building was completed and ready for occupancy on July 1. To help pay for construction, Mauritania borrowed \$360,000 on March 1, 2014 on a 9%, three-year note payable. Other than this note, the only other debt outstanding during 2014 was a \$150,000, 10%, six-year note payable dated January 1, 2013.

*54. The weighted-average accumulated expenditures on the construction project during 2014 were

- a. \$1,467,000.
- b. \$348,000.
- c. \$258,000.
- d. \$156,000.

*55. The actual interest cost incurred during 2014 was

- a. \$27,000.
- b. \$39,500.
- c. \$42,000.
- d. \$47,400.

Use the following information for questions *56–*57.

Egypt Corp. owns equipment that originally cost \$100,000. At December 31, 2014, the equipment's book value (after 2014 depreciation was booked) is \$60,000. It is determined that the fair value of the equipment at this date is \$90,000. Although Egypt's policy is to apply the revaluation model using the proportionate method, this is the first time the company has done it.

*56. By how much must the accumulated depreciation account be increased (decreased) at December 31, 2014?

- a. \$20,000
- b. \$40,000
- c. \$60,000
- d. \$(60,000)

*57. The adjusting entry to record the revaluation will include a

- a. debit to Accumulated Depreciation of \$20,000.
- b. credit to Equipment of \$10,000.
- c. credit to Revaluation Surplus (OCI) of \$30,000.
- d. debit to Revaluation Surplus (OCI) of \$10,000.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
30.	c	34.	c	38.	d	42.	b	46.	a	50.	b	*54.	b
31.	c	35.	c	39.	b	43.	c	47.	d	*51.	a	*55.	c
32.	d	36.	c	40.	a	44.	c	48.	b	*52.	c	*56.	a
33.	d	37.	b	41.	d	45.	c	49.	a	*53.	b	*57.	c

DERIVATIONS—Computational

No.	Answer	Derivation
30.	c	$(\$40,000 \times .85 \times .98) + \$2,380 + \$500 = \$36,200$
31.	c	$(\$2,000 \times \$110) - \$30,000 = \$190,000$
32.	d	Warehouse: $2 \div 9 \times \$765,000 = \$170,000$ Land: $3/9 \times \$765,000 = \$255,000$ Office Building: $4 \div 9 \times \$765,000 = \$340,000$
33.	d	Gain = $500 \times (\$116 - \$100) = \$8,000$
34.	c	\$27,000 (fair value of new truck, since this is known)
35.	c	$\$16,000 + \$52,000 = \$68,000$
36.	c	PV of note: 4 N 9 I 4000 PMT PV = \$12,959 plus DP of \$2,000 = \$14,959
37.	b	PV of note: 8 N 8 I (2P ÷ Y) 2000 PMT PV = \$12,413 plus DP of \$3,000 = \$15,413
38.	d	No gain or loss. Asset is recorded at BV of old plus cash paid
39.	b	$\$250,000 + \$10,000 - \$1,350 + \$870 + \$600 + \$1,600 = \$261,720$
40.	a	$\$10,300 + \$650 + \$2,610 + \$600,000 + \$42,500 = \$656,060$
41.	d	Land: $\$300,000 + \$25,000 + \$5,000 - \$10,000 = \$320,000$ Building: $\$35,000 + \$990,000 = \$1,025,000$
42.	b	$\$36,000 + \$1,000 = \$37,000$
43.	c	$\$12,500 + \$400 = \$12,900$
44.	c	$\$175,000 - (\$175,000 \times 2 \div 10) = \$140,000$
45.	c	\$20,000 (residual value)
46.	a	$\$12,000 - \$12,000 = 0$ (Acc. Dep. is eliminated)
47.	d	$\$2,000 + \$30,000 = \$32,000$
48.	b	$\$10,000 - \$2,000 = \$8,000$ loss
49.	a	$\$233,000 - \$225,000 = \$8,000$
50.	b	$\$20,000 + \$100,000 = \$120,000$; $\$120,000 - (\$120,000 \div 3) = \$80,000$
*51.	a	$\$75,000 \times \frac{(4 + 3 + 2 + 1)}{12} = \$75,000 \times 10 \div 12 = \$62,500$
*52.	c	$\$800,000 \times .08 = \$64,000$
*53.	b	$\$150,000 \times \frac{(3 + 2 + 1)}{12} = \$150,000 \times 6 \div 12 = \$75,000$
*54.	b	$(\$450,000 \times 4 \div 12) + (\$252,000 \times 3 \div 12) + (\$450,000 \times 2 \div 12) +$

- $(\$720,000 \times 1 \div 12) = \$348,000$
- *55. c $(\$360,000 \times 9\% \times 10 \div 12) + (\$150,000 \times 10\%) = \$42,000$
- *56. a Increase in FV over BV = $(\$90,000 - \$60,000) \div \$60,000 = 50\%$
Acc Dep = $\$100,000 - \$60,000 = \$40,000$;
therefore Acc Dep S ÷ B increased by $\$40,000 \times 50\% = \$20,000$
- *57. c AJE is Dr Equipment \$50,000, Cr Acc Dep \$20,000, Cr Revaluation \$30,000

MULTIPLE CHOICE—CPA Adapted

58. Ghana Football Club had a player contract with Mowgli that is recorded in its books at \$300,000 on July 1, 2014. Ivory Coast Football Club had a player contract with Eeyore that is recorded in its books at \$375,000 on July 1, 2014. On this date, Ghana traded Mowgli to Ivory Coast for Eeyore and paid a cash difference of \$37,500. The fair value of the Eeyore contract was \$450,000 on the exchange date. After the exchange, the Eeyore contract should be recorded in Ghana's books at

- a. \$337,500.
- b. \$375,000.
- c. \$412,500.
- d. \$450,000.

59. Libya Corp. exchanged similar pieces of equipment with Kenya Corp. No cash was exchanged. Since this exchange will not significantly change the economic position of either company, this transaction lacks commercial substance. At this time, the net book value of Libya's asset is \$40,000, while the net book value of Kenya's asset on their books is \$37,000. However, it has been reliably determined that the fair value of Libya's asset is \$41,000, while the fair value of Kenya's asset is \$38,000. Given these facts, at what amount should Libya record the asset it receives from Kenya?

- a. \$41,000
- b. \$40,000
- c. \$38,000
- d. \$37,000

60. Transvaal Ltd. received a \$250,000 grant from the federal government to help buy equipment as an incentive for them to establish manufacturing operations in Ottawa. Assuming that Transvaal uses the cost reduction method for such transactions, they should record this transaction as a

- a. memo entry only.
- b. credit to Equipment for \$250,000.
- c. credit to Deferred Revenue for \$250,000.
- d. credit to Contribution Revenue for \$250,000.

61. On December 1, 2014, Guinea Corp. purchased a tract of land as a factory site for \$500,000. The old building on the property was razed, and salvaged materials resulting from demolition were sold. Additional costs incurred and salvage proceeds realized during December 2014 were as follows:

Cost to raze old building	\$25,000
Legal fees for purchase contract and to record ownership	5,000
Property purchase tax	8,000
Proceeds from sale of salvaged materials	4,000

On Guinea's December 31, 2014 balance sheet, what amount should be reported for the land?

- a. \$513,000
- b. \$521,000
- c. \$534,000

d. \$538,000

62. Land was purchased to be used as the site for the construction of a plant. A building on the property was sold and removed by the buyer so that construction on the plant could begin. The proceeds from the sale of the building should be

- classified as other income.
- deducted from the cost of the land.
- netted against the costs to clear the land and expensed as incurred.
- netted against the costs to clear the land and amortized over the life of the plant.

63. On January 2, 2014, Botswana Inc. replaced its boiler with a more efficient one. The following information was available on that date:

Purchase price of new boiler	\$45,000
Carrying amount of old boiler	5,000
Fair value of old boiler	3,000
Installation cost of new boiler	4,000

The old boiler was sold for \$3,000. At what amount should Botswana capitalize the cost of the new boiler?

- \$47,000
- \$48,000
- \$49,000
- \$50,000

64. On September 10, 2014, Angola Printing incurred the following costs for one of its printing presses:

Purchase of stapling attachment	\$84,000
Installation of attachment	10,000
Replacement parts for renovation of press	36,000
Labour and overhead in connection with renovation of press	14,000

Neither the attachment nor the renovation increased the estimated useful life of the press. However, the renovation resulted in significantly increased productivity. What amount of the costs should be capitalized?

- \$0
- \$108,000
- \$130,000
- \$144,000

*65. A company is constructing an asset for its own use. Construction began in 2014. The asset is being financed entirely with a specific new borrowing. Construction expenditures were made in 2014 and 2015 at the end of each quarter. The total amount of interest cost capitalized in 2015 should be determined by applying the interest rate on the specific new borrowing to the

- total accumulated expenditures for the asset in 2014 and 2015.
- weighted-average accumulated expenditures for the asset in 2014 and 2015.
- weighted-average expenditures for the asset in 2015.
- total expenditures for the asset in 2015.

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
58.	d	60.	b	62.	b	64.	d
59.	c	61.	c	63.	c	*65.	b

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
58.	d	\$450,000 FV of asset received
59.	c	\$38,000 (FV of asset received). Record a loss of \$2,000
60.	b	Conceptual
61.	c	$\$500,000 + \$25,000 + \$5,000 + \$8,000 - \$4,000 = \$534,000$
62.	b	Conceptual
63.	c	$\$45,000 + \$4,000 = \$49,000$
64.	d	$\$84,000 + \$10,000 + \$36,000 + \$14,000 = \$144,000$
*65.	b	Conceptual

EXERCISES

Ex. 10-66 Componentization

Explain the concept of componentization as it applies to the recognition of PP&E assets.

Solution 10-66

Componentization refers to recognizing major parts of an asset as separate assets for accounting purposes, such as the separate parts of a building (roof, heating system, flooring, elevators, foundation). Each part is then depreciated separately to reflect differing useful lives and different patterns of delivering economic benefits to the organization. The extent of componentization is left to professional judgment, with the primary consideration being the significance of the "parts" to the "whole."

***Ex. 10-67** Plant asset accounting

During 2014 and 2015, Mauritius Corporation experienced several transactions involving plant assets. A number of errors were made in recording some of these transactions. For each item listed below, indicate the effect of the error (if any) in the blanks provided by using the following codes:

O = Overstate; U = Understate; NE = No Effect

If no error was made, write NE in each of the four columns.

<u>Transaction</u>	<u>2014</u>		<u>2015</u>	
	Net Book Value of Plant Assets at <u>Dec 31/2014</u>	2014 Net <u>Income</u>	Net Book Value of Plant Assets at <u>Dec 31/2015</u>	2015 Net <u>Income</u>
1. The cost of installing a new computer system in 2014 was not recorded in 2014. It was charged to expense in 2015.	_____	_____	_____	_____
2. In 2015, clerical workers were trained to use the new computer system at a cost of \$15,000, which was incorrectly capitalized. The cost is to be written off over the expected life of the new computer system.	_____	_____	_____	_____
3. A major overhaul of factory machinery in 2014, which extended its useful life by five years, was charged to accumulated depreciation in 2014.	_____	_____	_____	_____
4. Interest cost qualifying for capitalization in 2014 was charged to interest expense in 2014.	_____	_____	_____	_____

5. In 2014, land was bought for an employee parking lot. The \$2,000 title search fee was charged to expense in 2014.

6. The cost of moving several manufacturing facilities from metropolitan locations to suburban areas in 2014 was capitalized. The cost was written off over a 10-year period beginning in 2014.

Solution 10-67

	Net Book Value of Plant Assets at <u>Dec 31/2014</u>	2014 Net <u>Income</u>	Net Book Value of Plant Assets at <u>Dec 31/2015</u>	2015 Net <u>Income</u>
1.	U	O	U	U
2.	NE	NE	O	O
3.	NE	NE	NE	NE
4.	U	U	U	O
5.	U	U	U	O
6.	NE	NE	NE	NE

Ex. 10-68 Asset exchange with commercial substance

In 2015, Malawi Inc. exchanged equipment for two delivery trucks. The equipment had been purchased for \$95,000 ten years ago and has since been fully depreciated. While the equipment was recently appraised at \$22,000, a reliable valuation for the trucks was not available. This transaction has commercial substance.

Instructions

Prepare the journal entry to record the exchange.

Solution 10-68

Trucks	22,000	
Accumulated depreciation – equipment.....	95,000	
Equipment.....		95,000
Gain on disposal of equipment		22,000

Ex. 10-69 Non-interest bearing note

Togo Auto purchased several trucks by issuing a \$40,000, 4 year, non interest bearing note to Rabat Motors. The market interest rate for this type of transaction is 8%.

Instructions

Prepare the journal entry to record the purchase of these trucks.

Solution 10-69

Truck ($\$40,000 \times .0.73503$)*	\$ 29,401	
Notes Payable		\$ 29,401

* OR $4N8I FV 40000 CPT PV = 29,401$

Ex. 10-70 Nonmonetary transaction without commercial substance

Malawi Auto traded one of its used trailers (cost \$40,000, accumulated depreciation \$36,000) for another used trailer with a fair value of \$6,400. Malawi also paid \$600 to complete the transaction.

Instructions

Assuming the transaction lacks commercial substance, prepare the journal entry to record the exchange.

Solution 10-70

Trailer (new)	\$ 4,600	
Accumulated Depreciation	36,000	
Trailer (old)		\$40,000
Cash		600

Note: Since the transaction lacks commercial substance, no gain is recognized, and the new asset is recognized at the book value of the old asset plus the cash paid.

Ex. 10-71 Asset exchange

Arabia Inc. traded its fleet of rental cars for a new fleet. Two thirds of the old fleet's original cost of \$375,000 had been depreciated. The new fleet is valued at \$500,000 and Arabia was required to make a cash payment of \$400,000.

Instructions

Prepare the required entr(ies) to record the exchange.

Solution 10-71

Fleet (new)	500,000	
Accumulated depreciation	250,000	
Loss on disposal of fleet	25,000	
Fleet (old)		375,000
Cash		400,000

Ex. 10-72 Acquisition Cost

Gabon Corporation purchased land at a cost of \$100,000. Closing costs were \$3,800, plus Gabon paid \$48,000 for site preparation so they could construct a building on the site.

Instructions

Calculate the amount that should be recorded as the cost of the land.

Solution 10-72

$$\$100,000 + \$3,800 + \$48,000 = \$151,800$$

Ex. 10-73 Costs included in assets

Burkina Ltd. is expanding its operations. Due to the expansion, they incurred the following costs during the fiscal period when they constructed a new factory:

Direct labour	70,000
Loan Interest to finance expansion.....	3,000
Architectural drawings.....	15,000
Purchase of company car for the new plant manager.....	44,000
Direct material for factory	81,000
Allocation of overhead based on labour hours worked on factory.....	58,000
Imputed interest on lost opportunity costs	9,000

Instructions

Which of these costs should be included in the cost of the new factory?

Solution 10-73

Direct labour	\$ 70,000
Loan interest to finance expansion.....	3,000
Architectural drawings.....	15,000
Direct material for factory	81,000
Allocation of overhead based on labour hours worked on factory.....	<u>58,000</u>
Total.....	\$227,000

Ex. 10-74 Measurement models

Identify and briefly describe the three main models to accounting for PP&E assets.

Solution 10-74

The following three models are available and may be used subject to the asset type and whether IFRS or ASPE is used:

1. The cost model: This model can be used for all types of PP&E assets, and is acceptable under both ASPE and IFRS. The assets, after acquisition, are measured at cost less accumulated depreciation and adjusted for impairment as necessary.
2. The revaluation model: This model can be used for all types of PP&E assets except for investment property, and is only used under IFRS. Net increases in fair value are accumulated in a separate account, Revaluation Surplus, and reported in other comprehensive income. There are two accounting methods allowed, the proportionate method and the asset-adjustment or elimination method.
3. The fair value model: This model can only be used for investment property, and again, is only used under IFRS. Assets are not depreciated and all changes in fair value are recognized in net income.

Ex. 10-75 Application of the revaluation model

Aden Motels Inc. owns a motel that it had purchased on January 1, 2014 for \$1.5 Million cash and is accounted for in a separate account, classified as "Structures." The company is using the revaluation model to account for its structures and revalues them annually. Aden uses straight-line depreciation over the asset's 15-year useful life with no residual value.

The asset's fair values were as follows:

Dec 31, 2014: Equal to its book value,

Dec 31, 2015: \$1,450,000.

Instructions

Assuming Aden uses the asset adjustment (elimination) method for revaluation, prepare all required journal entries for 2014 and 2015.

Solution 10-75Journal Entries – 2014:

January 1:

Structures.....	1,500,000	
Cash.....		1,500,000
To account for acquisition		

December 31

Depreciation expense	100,000	
Accumulated depreciation – Structures		100,000
To record 2014 depreciation $(\$1,500,000 - 0) \div 15 = \$100,000$		

Journal Entries – 2015:

December 31:

Depreciation expense	100,000	
Accumulated depreciation – Structures		100,000
To record 2015 depreciation (prior to revaluation)		
$(\$1,500,000 - 0) \div 15 = \$100,000$		

December 31:

Accumulated depreciation – Structures	200,000	
Structures.....		200,000
To eliminate accumulated depreciation		
(as part of the revaluation process)		
$(\$100,000 \times 2 = \$200,000)$		

December 31:

Structures.....	150,000	
Revaluation Surplus (OCI).....		150,000
To adjust the Structures account to fair value		
$\$1,450,000 - (\$1,500,000 - \$200,000) = \$150,000$		

Ex. 10-76 Application of the fair value model

On January 20, 2015, Trail Corp. purchased a luxury apartment complex in British Columbia for

\$10 Million cash. In addition to the purchase price, Trail paid transfer fees of \$150,000, and legal fees of \$20,000.

Wages paid to maintenance staff during each of the following three years:

2015: \$103,000

2016: \$107,000

2017: \$110,000

Fair value information:

Dec 31, 2015: \$9.1 Million

Dec 31, 2016: \$10.9 Million

Dec 31, 2017: \$11.7 Million

Other information:

The complex qualifies as investment property.

Trail applies the fair value method to all its investment property.

Instructions

Prepare all required journal entries for 2015, 2016, and 2017.

Solution 10-76

Journal Entries – 2015

Investment Property – Apartment Complex	10,170,000	
Cash.....		10,170,000
To account for acquisition on January 20		
(\$10,000,000 + \$150,000 + \$20,000 = \$10,170,000)		
Wages expense	103,000	
Cash.....		103,000
To account for wages paid during 2015		
Loss in value of investment property	1,070,000	
Investment property – Apartment Complex.....		1,070,000
To adjust the value of the investment property to fair value at Dec 31, 2015		
(\$10,170,000 – \$9,100,000 = \$1,070,000)		

Journal Entries – 2016

Wages expense	107,000	
Cash.....		107,000
To account for wages paid during 2016		
Investment property – Apartment Complex	1,800,000	
Gain in value of investment property		1,800,000
To adjust the value of the investment property		
to fair value at Dec 31, 2016		
(\$10,900,000 – \$9,100,000 = \$1,800,000)		

Journal Entries – 2017

Wages expense	110,000	
---------------------	---------	--

Cash.....	110,000
To account for wages paid during 2017	
Investment property – Apartment Complex	800,000
Gain in value of investment property	800,000
To adjust the value of the investment property to fair value at Dec 31, 2017 (\$11,700,000 – \$10,900,000 = \$800,000)	

***Ex. 10-77 Capitalization of interest**

In February 2015, Quorum Corp. began the construction of a 10 story building. The construction is expected to be completed by January 2016.

During 2015, the following payments were made:

Apr 1:	\$1,000,000
Jun 1:	\$1,500,000
Aug 1:	\$900,000
Oct 1:	\$950,000

No asset specific debt was incurred.

During 2015, Quorum's general debt consisted of the following:

\$2 Million, 5%, 2-year note,
\$1.2 Million, 4.5%, 2-year note,
\$0.75 Million, 3%, 5-year note.

Instructions

- Calculate the weighted-average accumulated expenditures for the year ended December 31, 2015.
- Calculate the weighted-average capitalization rate on Quorum's general-purpose debt for the year ended December 31, 2015.
- Calculate the avoidable borrowing costs.
- Calculate the amount of Quorum's borrowing costs that should be capitalized.

Solution 10-77

- Weighted-average accumulated expenditures for the year ended December 31, 2015:

Date	Amount	Capitalization Period	Weighted Average Accumulated Expenditures
Apr 1	1,000,000	9 ÷ 12	750,000
Jun 1	1,500,000	7 ÷ 12	875,000
Aug 1	900,000	5 ÷ 12	375,000
Oct 1	950,000	3 ÷ 12	237,500
Total	4,350,000		2,237,500

- b) Weighted-average capitalization rate on Quorum's general-purpose debt for the year ended December 31, 2015:

Description	Principal	Borrowing Costs
\$2 Mill. 5%. 2-year note	2,000,000	100,000
\$1.2 Mill. 4.5% 2-year note	1,200,000	54,000
\$0.75 Mill. 3% 5-year note	750,000	22,500
Total	3,950,000	176,500

Weighted average rate = $\$176,500 \div \$3,950,000 = 4.47\%$

- c) Avoidable borrowing costs:
 $(\$2,237,500 - \$0) \times 4.47\% = \$100,016$
- d) Borrowing costs to be capitalized:
 $\$0 + \$100,016 = \$100,016$

***Ex. 10-78 Capitalization of interest**

On March 1, Dubai Corp. began construction of a small building. The following expenditures were incurred for construction:

Mar 1	\$ 75,000	Jun 1	\$300,000
Apr 1	84,000	Jul 1	100,000
May 1	180,000		

The building was completed and occupied on July 1. To help pay for construction, \$60,000 was borrowed on March 1 on a 10%, three-year note payable. The only other debt outstanding during the year was a \$500,000, 8% note issued two years ago.

Instructions

- a) Calculate the weighted-average accumulated expenditures.
 b) Calculate avoidable interest.

Solution 10-78

Date	Expenditures	Capitalization Period	Weighted-Average Accum. Expend.
March 1	\$ 75,000	4 ÷ 12	\$ 25,000
April 1	84,000	3 ÷ 12	21,000
May 1	180,000	2 ÷ 12	30,000
June 1	300,000	1 ÷ 12	25,000
July 1	100,000	0	0
			<u>\$101,000</u>

b)	Weighted-Average Accum. Expend.	Rate	Avoidable Interest
	\$ 60,000	.10	\$6,000

<u>41,000</u>	.08	<u>3,280</u>
<u>\$101,000</u>		<u>\$9,280</u>

PROBLEMS

Pr. 10-79 Purchase of asset by non-interest bearing note

Lebanon Corporation is a Calgary-based manufacturer of automobile parts. In early January 2014, the company acquired land and a building to be used as the company's new head office. Lebanon issued a \$2M, five-year non-interest bearing note to the seller. Payment is to be made in five equal instalments of \$400,000 at the end of each year. As a result of a depressed real estate market, the fair value of the building cannot be readily determined. However, it has been ascertained that, given Lebanon's credit rating and market conditions, an interest rate of 9% would properly reflect the substance and credit risk of the negotiated payment schedule.

Other information:

1. One third of the total value of the acquisition is attributable to the land.
2. The building is expected to have a useful life of 25 years.
3. Throughout the year, Lebanon incurred maintenance costs of \$87,000 and paid them in cash.
4. A parking lot was built at a cost of \$100,000 cash. The work was completed on July 1 and is expected to have a useful life of 10 years.
5. Lebanon uses straight-line depreciation for all its PP&E assets.

Instructions

Prepare all journal entries that are required to record the above events and transactions. Round all values to the nearest dollar.

Solution 10-79

Land.....	518,620	
Building	1,037,240	
Note Payable.....		1,555,860
To record the acquisition of land and building		
$\$400,000 \times 3.88965 = \$1,555,860$ OR 5 N 9 I 400000 PMT CPT PV = 1,555,860		
Land: $\$1,555,860 \times 1 \div 3 =$	\$518,620	
Building: $\$1,555,860 \times 2 \div 3 =$	\$1,037,240	
 Maintenance expense	87,000	
Cash.....		87,000
To record maintenance costs		
 Land improvements – parking lot	100,000	
Cash.....		100,000
To record creation of parking lot		
 Depreciation expense	46,490	
Accumulated depreciation – building		41,490
Accumulated depreciation – land improvements.....		5,000
To record annual depreciation		
Building: $\$1,037,240 \div 25 =$	\$41,490	
Land improvements: $(\$100,000 \div 10) \times 6 \div 12 =$	\$5,000	

Pr. 10-80 Asset exchanges

Bahrain Corporation follows a policy of a 10% depreciation charge per year on machinery and a 5% depreciation charge per year on buildings.

The following transactions occurred in 2014:

- March 31, 2014 A warehouse which Bahrain had purchased on January 1, 2005 for \$1.7 million (with a current fair value of \$1 million) was exchanged for another warehouse which also had a current fair value of \$1 million. Depreciation has been properly charged from Jan 1, 2005 through Dec 31, 2013. Both parcels of land on which the warehouses were located were equal in value, and had a fair value equal to book value.
- June 30, 2014 Machinery with a cost of \$120,000 and accumulated depreciation through December 31, 2013 of \$90,000 was exchanged, along with \$75,000 cash, for a parcel of land with a fair market value of \$115,000.

Instructions

Prepare all appropriate journal entries for Bahrain Corporation for the above dates.

Solution 10-80

Mar 31, 2014	Depreciation Expense.....	21,250	
	Accumulated Depreciation—Warehouse.....		21,250
	(\$1,700,000 × 5% × 3 ÷ 12)		
	Warehouse (“new”)	913,750	
	Accumulated Depreciation—Warehouse	786,250	
	Warehouse (“old”).....		1,700,000
	(\$1,700,000 × 5% × 9 3 ÷ 12 = \$786,250)		

Note: Since this transaction would leave Bahrain in basically the same economic position as before, the transaction lacks commercial substance; therefore the “new” warehouse is recorded at the book value of the old one. Recording it at its fair value would create a gain, which is not correct when there is no commercial substance.

June 30, 2014	Depreciation Expense.....	6,000	
	Accumulated Depreciation—Machinery		6,000
	(\$120,000 × 10% × 1 ÷ 2)		
	Land	115,000	
	Accumulated Depreciation—Machinery	96,000	
	Gain on Exchange		16,000
	Machinery		120,000
	Cash		75,000
	[\$40,000 – (\$120,000 – \$96,000)] = \$16,000		

Note: Since the assets involved are sufficiently dissimilar, this transaction will change Bahrain’s economic position, and the transaction has commercial substance. Therefore a gain on exchange can be recorded. Note the new asset cannot be recorded at higher than fair value.

Pr. 10-81 Asset exchange – no commercial substance

Turkey Corp. has a computer that they purchased on March 30, 2010 for \$106,000. This computer had an estimated life of ten years and a residual value of \$6,000. On December 31, 2014, the old computer is exchanged for a similar computer with a fair value of \$58,000. Turkey also received \$2,000 cash. Assume that the last fiscal period ended on December 31, 2013, and that straight-line depreciation is used.

Instructions

Prepare all entries that are necessary on December 31, 2014.

Solution 10-81

Depreciation Expense $(\$106,000 - \$6,000) \div 10$	10,000	
Accumulated Depreciation—Computer.....		10,000
Accumulated Depreciation—Computer $(\$10,000 \times 4 \frac{3}{4})$	47,500	
Computer (“new”).....	56,500	
Cash	2,000	
Computer (“old”).....		106,000

Note: Since this transaction would leave Turkey in basically the same economic position as before, the transaction lacks commercial substance; therefore the “new” computer is recorded at the book value of the old one *minus the cash received* $(\$106,000 - \$47,500 = \$58,500 - \$2,000 = \$56,500)$. Recording it at the fair value of the new computer would create a gain, which is not correct when there is no commercial substance.

Pr. 10-82 Asset exchange – no commercial substance

Syria Corp. exchanged Building 24, which has an appraised value of \$1,700,000, a cost of \$2,800,000 and accumulated depreciation of \$1,300,000, for Building M which belongs to Russia Ltd. Building M has an appraised value of \$1,620,000, a cost of \$3,100,000, and accumulated Depreciation of \$1,750,000. Russia paid Syria the difference between the appraised values of the two buildings. Assume depreciation has been updated to the date of exchange.

Instructions

Prepare the entries on both companies' books, assuming the buildings are similar assets.

Solution 10-82Syria Corp.:

Accumulated Depreciation	1,300,000	
Building M	1,420,000	
Cash	80,000	
Building 24		2,800,000
$(\$1,700,000 - \$1,620,000 = \$80,000 \text{ cash received})$		

Cost of Building M = book value of Building 24 less cash received.

Russia Ltd.:

Accumulated Depreciation	1,750,000	
Building 24	1,430,000	
Building M		3,100,000
Cash.....		80,000

Cost of Building 24 = book value of Building M plus cash paid.

Note: Since this transaction would leave both companies in basically the same economic position as before, the transaction lacks commercial substance; therefore the “new” buildings are recorded at the book value of the old one, less cash received, or plus cash paid. Recording them at fair value would create a gain, which is not correct when there is no commercial substance.

Pr. 10-83 Nonmonetary exchange

Athens Inc. exchanged machinery with an appraised value of \$1,170,000, a recorded cost of \$1,800,000 and accumulated depreciation of \$900,000, for machinery that Sparta Corp. owns. Sparta's machinery has an appraised value of \$1,140,000, a recorded cost of \$2,160,000, and accumulated depreciation of \$1,188,000. Sparta also gave Athens \$30,000 in the exchange. Assume depreciation has been updated to the date of exchange.

Instructions

- Prepare the entries on both companies' books assuming that the transaction has commercial substance.
- Prepare the entries on both companies' books assuming that the transaction lacks commercial substance.

Solution 10-83

- Commercial substance

Athens Inc.

Machinery	1,140,000	Cost	\$1,800,000
Cash	30,000	A/D	<u>900,000</u>
Accum. Depreciation—		BV	900,000
Machinery.....	900,000	FV	<u>1,170,000</u>
Gain on Exchange of		Gain	<u>\$ 270,000</u>
Plant Assets	270,000		
Machinery.....	1,800,000		

Sparta Corp.

Machinery	1,170,000	Cost	\$2,160,000
Accum. Depreciation—		A/D	<u>1,188,000</u>
Machinery.....	1,188,000	BV	972,000
Gain on Exchange of		FV	<u>1,140,000</u>
Plant Assets	168,000	Gain	<u>\$ 168,000</u>
Machinery.....	2,160,000		
Cash.....	30,000		

- No commercial substance

Athens Inc.

Machinery	870,000		
Cash	30,000		
Accumulated Depreciation—Machinery.....	900,000		
Machinery.....			1,800,000

Sparta Corp.

Machinery	1,002,000	
Accumulated Depreciation—Machinery	1,188,000	
Machinery.....		2,160,000
Cash.....		30,000

Note: When there is no commercial substance, no gain is recorded. Instead, the asset is recorded at its book value plus any cash paid or less any cash received. For Athens, the value would be \$900,000 – \$30,000 cash received = \$870,000. For Sparta, the value would be \$972,000 + \$30,000 cash paid = \$1,002,000.

Note also that the “new” asset cannot be recorded at higher than fair value.

Pr. 10-84 Costs included in assets

Below is a list of various expenditures that an organization could make. In the columns marked Land, Building, Equipment and Expensed, indicate by a “+” or “–” which columns the expenditure would be added to or subtracted from. The first has been done for you as an example.

Item	Land	Building	Equipment	Expensed
0. Construction costs		+		
1. Title search				
2. Property transfer tax				
3. Installation of equipment				
4. Soil decontamination costs				
5. Transportation costs of equipment				
6. Labour to construct building				
7. Special foundation for machinery				
8. Damage to machinery while uncrating				
9. Proceeds from salvage of old building on land purchased for factory site				
10. Property taxes in arrears paid on purchase				
11. Insurance on building after occupancy				
12. Clearing land for factory site				

Solution 10-84

Item	Land	Building	Equipment	Expensed
0. Construction costs		+		
1. Title search	+			
2. Property transfer tax	+			
3. Installation of equipment			+	
4. Soil decontamination costs	+			
5. Transportation costs of equipment			+	
6. Labour to construct building		+		
7. Special foundation for machinery			+	
8. Damage to machinery while uncrating				+
9. Proceeds from salvage of old building	+			

on land purchased for factory site				
10. Property taxes in arrears paid on purchase	+			
11. Insurance on building after occupancy				+
12. Clearing land for factory site	+			

Pr. 10-85 Fair value model

In February 2014, Jordan Corp. purchased a vineyard in southern Ontario for \$7.5 Million cash. This amount included legal fees of \$18,000 and property taxes of \$40,000 (of that amount, \$30,000 were in arrears). Based on appraisals, the property's year-end fair values were \$8.2 Million at the end of 2014, and \$8 Million at the end of 2015.

Other information:

1. The vineyard qualifies as investment property.
2. Jordan applies the fair value method to all its investment property.

Instructions

Prepare all required journal entries for 2014 and 2015.

Solution 10-85Journal Entries – 2014

Investment Property—vineyard	7,490,000	
Property tax expense	10,000	
Cash.....		7,500,000
To account for acquisition in February 2014		
\$7,500,000 – (\$40,000 – \$30,000) = \$7,490,000		
Investment property—vineyard.....	710,000	
Gain in value of investment property		710,000
To adjust the value of the investment property		
to fair value at Dec 31, 2014		
(\$8,200,000 – \$7,490,000 = \$710,000)		

Journal Entry – 2015

Loss in value of investment property	200,000	
Investment property—vineyard.....		200,000
To adjust the value of the investment property		
to fair value at Dec 31, 2015		
(\$8,200,000 – \$8,000,000 = \$200,000)		

Note that the gain/loss is booked through net income, not OCI.

Pr. 10-86 Revaluation model

Mongolia Inc. owns equipment that it purchased on January 1, 2015 for \$4 Million.

The following additional information is available:

Dec 31, 2015 – Book value (after recording 2015 depreciation): \$3,600,000

Dec 31, 2015 – Fair value: \$4,100,000

The company uses the revaluation model (asset adjustment method) to account for its property,

plant and equipment.

Instructions

Assuming the entry for the current year's depreciation has *already* been recorded, prepare the entr(ies) to adjust the asset's carrying amount to fair value.

Solution 10-86

Accumulated Depreciation—Equipment	400,000	
Equipment		400,000
To eliminate accumulated depreciation (\$4,000,000 ÷ 10 = \$400,000)		
Equipment.....	100,000	
Revaluation Surplus (OCI).....		100,000
To adjust the equipment account to fair value \$4,100,000 – (\$3,600,000 + \$400,000) = \$100,000		

*Pr. 10-87 Capitalization of borrowing costs

During 2014, Tibet Building Company constructed various assets at a total cost of \$4.2 million. The weighted-average accumulated expenditures on assets qualifying for capitalization of interest during 2014 were \$2.8 million. The company had the following debts outstanding at December 31, 2014:

- | | |
|--|-------------|
| 1. 8%, five-year note to finance construction of various assets,
dated January 1, 2014, with interest payable annually on January 1 | \$1,800,000 |
| 2. 10%, ten-year bonds issued at par on December 31, 2009, with interest
payable annually on December 31 | 2,000,000 |
| 3. 7%, three-year note payable, dated January 1, 2013, with interest payable
annually on January 1 | 1,000,000 |

Instructions

Calculate the amounts of the following for 2014 (show calculations):

- avoidable interest,
- total interest to be capitalized.

Solution 10-87

a) Weighted-Average		
Accumulated	Applicable	Avoidable
Expenditures	Interest Rate	Interest
\$1,800,000	.08	\$144,000
<u>1,000,000</u>	.09*	<u>90,000</u>
<u>\$2,800,000</u>		<u>\$234,000</u> = Avoidable Interest

*Calculation of weighted-average interest rate:

	Principal	Interest
10% ten-year bonds	\$2,000,000	\$200,000
7% three-year note	<u>1,000,000</u>	<u>70,000</u>
	<u>\$3,000,000</u>	<u>\$270,000</u>

Weighted-average interest rate = $\$270,000 \div \$3,000,000 = 9\%$.

b) Actual interest cost during 2014:	
Construction note, $\$1,800,000 \times .08$	\$144,000
10% ten-year bonds, $\$2,000,000 \times .10$	200,000
7% three-year note, $\$1,000,000 \times .07$	70,000
	<u>\$414,000</u>

The interest cost to be capitalized is \$234,000 (the lesser of the \$234,000 avoidable interest and the \$414,000 actual interest).

***Pr. 10-88 Capitalization of borrowing costs**

Early in 2014, Qatar Corporation engaged Emirate Ltd. to design and construct a complete modernization of Qatar's manufacturing facility. Construction began on June 1, 2014 and was completed on December 31, 2014. Qatar made the following payments to Emirate Ltd. during 2014:

<u>Date</u>	<u>Payment</u>
June 1, 2014	\$3,300,000
August 31, 2014	4,800,000
December 31, 2014	4,000,000

In order to help finance the construction, Qatar issued the following during 2014:

- \$2,000,000, ten-year, 9% bonds payable, issued at par on May 31, 2014, with interest payable annually on May 31,
- 1,000,000 no-par common shares, issued at \$10 per share on October 1, 2014.

In addition to the 9% bonds payable, the only other debt outstanding during 2014 was a \$700,000, 12% note payable dated January 1, 2013 and due January 1, 2016, with interest payable annually on January 1.

Instructions

Calculate the amounts of each of the following (show calculations):

- weighted-average accumulated expenditures qualifying for capitalization of interest cost,
- avoidable interest incurred during 2014,
- total amount of interest cost to be capitalized during 2014.

Solution 10-88

a)			Weighted-Average
	Capitalization		Accumulated
<u>Date</u>	<u>Expenditures</u>	<u>Period</u>	<u>Expenditures</u>
June 1	\$3,300,000	$7 \div 12$	\$1,925,000
August 31	4,800,000	$4 \div 12$	1,600,000
December 31	4,000,000	0	0
			<u>\$3,525,000</u>

b) Weighted-Average		
Accumulated	Appropriate	Avoidable
<u>Expenditures</u>	<u>Interest Rate</u>	<u>Interest</u>

\$2,000,000	.09	\$180,000
<u>1,525,000</u>	.12	<u>183,000</u>
<u>\$3,525,000</u>		<u>\$363,000</u>

c) Actual interest incurred during 2014:	
9% bonds payable, $\$2,000,000 \times .09 \times 7 \div 12$	\$105,000
12% note payable, $\$700,000 \times .12$	<u>84,000</u>
	<u>\$189,000</u>

The interest cost to be capitalized is \$189,000 (the lesser of the \$363,000 avoidable interest and the \$189,000 actual interest cost).

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CHAPTER 11

DEPRECIATION, IMPAIRMENT, AND DISPOSITION

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	10.	4	E	19.	7	M	28.	10	M
2.	2	E	11.	4	E	20.	7	M	29.	10	M
3.	2	E	12.	5	E	21.	7	H	30.	11	M
4.	2	E	13.	5	E	22.	7	M	31.	11	M
5.	2	E	14.	5	M	23.	7	M	*32.	13	H
6.	4	E	15.	6	M	24.	7	M	*33.	13	M
7.	4	M	16.	6	M	25.	8	M			
8.	4	E	17.	6	M	26.	9	M			
9.	4	E	18.	6	M	27.	9	E			
Multiple Choice–Computational											
34.	2,4	M	42.	4	M	50.	7	E	58.	9	M
35.	4	M	43.	4	M	51.	7	M	59.	9	H
36.	4	M	44.	4	H	52.	7	E	60.	9	H
37.	4	H	45.	4	H	53.	8	M	61.	9	H
38.	4	M	46.	5	H	54.	8	M	62.	11	E
39.	4	H	47.	5	M	55.	9	H	63.	11	M
40.	4	M	48.	6	H	56.	9	H	*64.	13	M
41.	4	E	49.	6	H	57.	9	M			
Multiple Choice–CPA Adapted											
65.	2	H	68.	4	H	71.	11	M	*74.	13	M
66.	4	M	69.	5	M	72.	11	H			
67.	4	M	70.	11	M	*73.	13	M			
Exercises											
75.	2	M	77.	2-4,6,7	M	*79.	4,13	M	81.	7	M
76.	2	M	78.	4,9	M	80.	7	M	*82.	13	M
Problems											
83.	4	H	*84.	4,13	H	85.	6,7	M	86.	11	M

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC										
Learning Objective 2											
2.	MC	4.	MC	34.	MC	75.	Ex	77.	Ex		
3.	MC	5.	MC	65.	MC	76.	Ex				
Learning Objective 3											
77.	Ex										
Learning Objective 4											
6.	MC	11.	MC	38.	MC	43.	MC	68.	MC	84.	Pr
7.	MC	34.	MC	39.	MC	44.	MC	77.	Ex		
8.	MC	35.	MC	40.	MC	45.	MC	78.	Ex		
9.	MC	36.	MC	41.	MC	66.	MC	79.	Ex		
10.	MC	37.	MC	42.	MC	67.	MC	83.	Pr		
Learning Objective 5											
12.	MC	13.	MC	14.	MC	46.	MC	47.	MC	69.	MC
Learning Objective 6											
15.	MC	17.	MC	48.	MC	77.	Ex				
16.	MC	18.	MC	49.	MC	85.	Pr				
Learning Objective 7											
19.	MC	22.	MC	50.	MC	77.	Ex	85.	Pr		
20.	MC	23.	MC	51.	MC	80.	Ex				
21.	MC	24.	MC	52.	MC	81.	Ex				
Learning Objective 8											
25.	MC	53.	MC	54.	MC						
Learning Objective 9											
26.	MC	55.	MC	57.	MC	59.	MC	61.	MC		
27.	MC	56.	MC	58.	MC	60.	MC	78.	Ex		
Learning Objective 10											
28.	MC	29.	MC								
Learning Objective 11											
30.	MC	62.	MC	70.	Ex	72.	Ex				
31.	MC	63.	MC	71.	Ex	86.	Pr				
Learning Objective 13											
*32.	MC	*64.	MC	*74.	MC	*82.	Ex				
*33.	MC	*73.	MC	*79.	Ex	*84.	Pr				

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. Understand the importance of depreciation, impairment, and disposition from a business perspective. The economic benefits of property, plant, and equipment are typically consumed as the items are used by the organization. Because the benefits are consumed over multiple periods, companies use depreciation to allocate the benefits of the PP&E to each period as the capacity of the assets is used up. By allocating the cost of property, plant, and equipment over its useful life, businesses are better able to match the costs and benefits of the assets to the revenues that they help generate. Companies also need to assess their PP&E each year under IFRS for indications of impairment, and if these indications are present they should re-estimate how much will be recoverable. Following GAAP should also help companies better understand their business.

2. Explain the concept of depreciation and identify the factors to consider when determining depreciation charges. Depreciation is the process of allocating the cost of property, plant, and equipment assets in a systematic and rational manner to the periods that are expected to benefit from their use. The allocation of the cost of intangible capital assets is termed “amortization” and the allocation of the costs of mineral resource assets is termed “depletion.” Four factors involved in determining depreciation expense are (1) the recognition of the appropriate asset components, (2) the amount to be depreciated (depreciable amount), (3) the estimated useful life, and (4) the pattern and method of depreciation.

3. Identify how depreciation methods are selected. The depreciation method chosen should amortize an asset in a pattern and at a rate that corresponds to the benefits received from that asset. The choice often involves the use of professional judgement. Tax reporting, simplicity, perceived economic consequences, and impact on ratios are examples of factors that influence such judgements in practice.

4. Calculate depreciation using the straight-line, decreasing charge, and activity methods and recognize the effects of using each. The straight-line method assumes that an asset provides its benefits as a function of time. As such, cost less residual value is divided by the useful life to determine the depreciation expense per period. The decreasing charge method provides for a higher depreciation charge in the early years and lower charges in later periods. For this method, a constant rate (such as double the straight-line rate) is multiplied by the net book value (cost less accumulated depreciation and accumulated impairment losses) at the start of the period to determine each period's expense. The main justification for this approach is that the asset provides more benefits in the earlier periods. The activity method assumes that the benefits provided by the asset are a function of use instead of the passage of time. The asset's life is considered in terms of either the output that it provides or an input measure, such as the number of hours it works. The depreciation charge per unit of activity (depreciable amount divided by estimated total units of output or input) is calculated and multiplied by the units of activity produced or consumed in a period to determine the depreciation.

5. Explain the accounting issues for depletion of mineral resources. After the depletion base has been established through accounting decisions related to the acquisition, exploration and evaluation, development, and restoration obligations associated with mineral resources, these

costs are allocated to the natural resources that are removed. Depletion is normally calculated using the units of production method. In this approach, the resource's cost less residual value, if any, is divided by the number of units that are estimated to be in the resource deposit, to obtain a cost per unit of product. The cost per unit is then multiplied by the number of units withdrawn in the period to calculate the depletion.

6. Explain and apply the accounting procedures for partial periods and a change in depreciation rate. Because all the variables in determining depreciation are estimates—with the exception, perhaps, of an asset's original cost—it is common for a change in those estimates to result in a change in the depreciation amount. When this occurs, there is no retroactive change and no catch-up adjustment. The change is accounted for in the current and future periods.

7. Explain the issues and apply the accounting standards for capital asset impairment under both IFRS and ASPE. A capital asset is impaired when its carrying amount is not recoverable. The cost recovery method (ASPE) defines recoverable as the undiscounted cash flows from the asset's use and later disposal. If impaired, the asset is written down to its fair value, and this loss cannot be reversed later if the asset's value recovers. The rational entity model (IFRS) defines recoverable amount as the higher of the asset's value in use and fair value less costs of disposal. Both these values are discounted cash flow amounts. If the recoverable amount subsequently improves, the impairment losses recognized are reversed.

8. Explain and apply the accounting standards for long-lived assets that are held for sale. Assets held for sale are no longer depreciated. They are remeasured to their fair value less costs of disposal at each statement of financial position date. Recoveries in value may be recognized to the extent of previous losses. Held-for-sale items of property, plant, and equipment are separately reported as non-current assets unless they meet the definition of current assets. Under ASPE, assets held for sale are only permitted to be reported in current assets if sold before the financial statements are completed and the proceeds on sale are expected within 12 months from the date of the statement of financial position (or operating cycle, if longer).

9. Account for derecognition of property, plant, and equipment. Depreciation continues for PP&E assets until they are classified as held for sale or derecognized. At the date of disposal, all accounts related to the retired asset are removed from the books. Gains and losses from the disposal of plant assets are shown on the income statement in income before discontinued operations, unless the conditions for reporting as a discontinued operation are met. For property, plant, and equipment donated to an organization outside the reporting entity, the donation is reported at its fair value with a gain or loss on disposal recognized.

10. Describe the types of disclosures required for property, plant, and equipment. The type of information required to be disclosed for property, plant, and equipment is governed by the information needs of users. Because users of private entities' financial information are often able to seek further specific information from a company, there are fewer required disclosures than for public companies reporting under IFRS. The required disclosures under IFRS include those relating to measurement, changes in account balances and the reasons for the changes, information about how fair values are determined, and many others.

11. **Analyze a company's investment in assets.** The efficiency of use of a company's investment in assets may be evaluated by calculating and interpreting the asset turnover rate, the profit margin, and the rate of return on assets.

12. **Identify differences in accounting between ASPE and IFRS, and what changes are expected in the near future.** In most major ways, international and Canadian accounting standards for the depreciation of property, plant, and equipment are similar. Significant differences do exist, however, in the extent of componentization for depreciation, the impairment models applied, and the extent of disclosure. The impairment differences relate to how it is determined whether an asset is impaired, how the impairment is measured, and the ability to recognize recoveries in value.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
d	1.	Knowledge of depreciation accounting
c	2.	Factors in depreciation accounting
b	3.	Definition of componentization
c	4.	Asset's useful life
b	5.	Depreciation commencement or continuation
c	6.	Graphic depiction of straight-line and declining-balance methods
b	7.	Disadvantage of using straight-line method
a	8.	Depreciation as variable expense
d	9.	Units of production depreciation
a	10.	Units of production depreciation
b	11.	Time based depreciation
a	12.	Classification of depletion expense
d	13.	Depletion expense method
b	14.	Definition of liquidating dividend
d	15.	Knowledge of double declining-balance method
c	16.	Effect of accelerated depreciation on the income statement
c	17.	Revision of depreciation
a	18.	Disclosure of changes in depreciation
c	19.	ASPE requirements for impairment
b	20.	IFRS requirements for impairment
d	21.	Indicators of asset impairment
a	22.	Cost recovery impairment model
d	23.	Rational entity impairment model
b	24.	Definition of cash generating unit (CGU)
d	25.	Assets held for sale
b	26.	Discontinuation of depreciation
a	27.	Loss on sale of asset
c	28.	PP&E disclosures
d	29.	Depreciation cessation
b	30.	Asset turnover ratio
c	31.	Rate of return on assets
c	*32.	Objectives of CCA method
d	*33.	Factors to consider for CCA

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational

Answer	No.	Description
c	34.	Componentization of assets
b	35.	Calculate depreciation using double declining-balance.
c	36.	Calculate depreciation using double declining-balance.
b	37.	Calculate accumulated depreciation using straight-line.
b	38.	Calculate depreciation using double declining-balance.
b	39.	Double declining-balance method
d	40.	Calculate book value of asset.
c	41.	Calculate depreciation using straight-line.
a	42.	Calculate depreciation using double declining-balance.
a	43.	Calculate acquisition cost from straight-line depreciation.
d	44.	Calculate acquisition cost from units of production.
d	45.	Calculate depreciation expense.
c	46.	Calculate units-of-production depletion expense.
c	47.	Calculate depletion expense.
c	48.	Calculate revised depreciation expense.
a	49.	Calculate revised depreciation expense after major overhaul.
b	50.	Calculate recoverable amount.
d	51.	Proper accounting treatment for impairment loss
a	52.	Journal entry for impairment loss under ASPE
a	53.	Depreciation on asset held for sale
b	54.	Fair value adjustment on equipment held for sale
d	55.	Calculate depreciation expense from change in contra-asset account.
b	56.	Calculate depreciation expense from change in contra-asset account.
c	57.	Calculate gain for held for sale assets.
b	58.	Accounting treatment for gain under involuntary conversion
b	59.	Calculate loss on sale.
c	60.	Calculate gain on sale.
a	61.	Calculate loss on disposal.
c	62.	Calculate asset turnover ratio.
b	63.	Calculate rate of return on assets.
c	*64.	Calculate CCA for the year.

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
d	65.	Calculate depreciation expense using double declining-balance.
b	66.	Calculate depreciation using double declining-balance.
c	67.	Calculate accumulated depreciation using units of production.
c	68.	Calculate accumulated depreciation using double declining-balance.
c	69.	Units-of-production depletion expense
a	70.	Calculate asset turnover ratio.
b	71.	Calculate profit margin ratio.
c	72.	Calculate rate of return on assets.
b	*73.	Calculate CCA for the year.
d	*74.	Calculate recapture or terminal loss on sale.

EXERCISES

Item	Description
E11-75	Definitions
E11-76	Componentization and depreciation of PP&E assets
E11-77	True or false
E11-78	Asset depreciation and disposition
*E11-79	Calculate depreciation and CCA.
E11-80	Rational entity impairment model
E11-81	Impairment
*E11-82	Calculate depreciation and CCA.

PROBLEMS

Item	Description
P11-83	Asset overhaul
*P11-84	Calculate depreciation and CCA.
P11-85	Cost recovery impairment model, revision of depreciation
P11-86	Calculation of ratios.

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. Which of the following is INCORRECT regarding depreciation?
 - a. It is not a matter of valuation.
 - b. It is part of the matching of revenues and expenses.
 - c. It is a means of cost allocation.
 - d. It is an attempt to reflect the fair market values of the related assets.

2. Factors to consider in the depreciation process do NOT include
 - a. the asset's depreciable amount.
 - b. the period over which to depreciate the asset.
 - c. the asset's fair market value.
 - d. which asset components should be depreciated separately.

3. Deciding which PPE components to depreciate separately is called
 - a. separate depreciation.
 - b. componentization.
 - c. group depreciation.
 - d. individual asset depreciation.

4. An asset's useful life
 - a. remains unchanged once it has been determined.
 - b. is the same as its physical life.
 - c. is affected by physical and economic factors.
 - d. is not affected by physical and economic factors.

5. Depreciation commences or continues when
 - a. The asset has been paid for.
 - b. The asset is available for use.
 - c. The asset's fair value can be recovered.
 - d. The asset is taken out of service.

6. A graph is set up with "yearly depreciation expense" on the vertical axis and "time" on the horizontal axis. Assuming linear relationships, how would the graphs for straight-line and declining-balance depreciation, respectively, be drawn?
 - a. vertically and sloping down to the right
 - b. vertically and sloping up to the right
 - c. horizontally and sloping down to the right
 - d. horizontally and sloping up to the right

7. A principal objection to the straight-line method of depreciation is that it
 - a. provides for the declining productivity of an aging asset.
 - b. ignores variations in the rate of asset use.
 - c. tends to result in a constant rate of return on a diminishing investment base.

- d. gives smaller periodic write-offs than decreasing charge methods.
8. For income statement purposes, depreciation is a variable expense if the depreciation method used is
- a. units of production.
 - b. straight-line.
 - c. increasing charge.
 - d. declining-balance.
9. If a company uses the units of production method for calculating depreciation on its factory machinery, the credit to accumulated depreciation from period to period during the life of the firm will
- a. be constant.
 - b. vary with unit sales.
 - c. vary with sales revenue.
 - d. vary with production.
10. When the units of production method of depreciation is used, which of the following best describes depreciation expense?
- a. Depreciation expense will vary directly with output.
 - b. Depreciation expense will vary directly with sales.
 - c. Depreciation rate per unit will vary directly with output.
 - d. Depreciation rate per unit will vary directly with sales.
11. Which of the following is NOT a time-based depreciation method?
- a. straight-line
 - b. units of production
 - c. double-declining balance
 - d. any diminishing balance method
12. Depletion expense
- a. is usually part of cost of goods sold.
 - b. includes tangible equipment costs in the depletion base.
 - c. excludes intangible development costs from the depletion base.
 - d. excludes restoration costs from the depletion base.
13. The most common method of recording depletion for accounting purposes is the
- a. single-declining method.
 - b. double-declining method.
 - c. straight-line method.
 - d. units of production method.
14. When all of, or a portion of, shareholders' capital investments are returned to them, this is called a
- a. return dividend.

- b. liquidating dividend.
 - c. stock dividend.
 - d. investment dividend.
15. Which of the following does NOT apply to the double declining-balance method?
- a. It results in a decreasing charge to depreciation expense.
 - b. Residual value is not deducted in calculating the depreciation base.
 - c. The book value should not be reduced below residual value.
 - d. In certain circumstances, the book value may be reduced below residual value.
16. If income tax effects are ignored, accelerated depreciation methods
- a. provide funds for the earlier replacement of assets.
 - b. increase funds provided by operations.
 - c. tend to offset the effect of steadily increasing repair and maintenance costs on the income statement.
 - d. tend to decrease the current ratio.
17. On January 1, 2009, Rabbit Corp. acquired machinery which it depreciated using the straight-line method with an estimated useful life of fifteen years and no residual value. On January 1, 2014, Rabbit estimated that the remaining life of this machinery was six years with no residual value. This change should be accounted for
- a. as a prior period adjustment.
 - b. as the cumulative effect of a change in accounting principle in 2014.
 - c. by setting future annual depreciation equal to one-sixth of the book value on January 1, 2014.
 - d. by continuing to depreciate the machinery over the original fifteen year life.
18. Changes in the depreciation rate are accounted for as a(n)
- a. adjustment to current and future periods.
 - b. adjustment to the current period only.
 - c. adjustment to future periods only.
 - d. catch-up adjustment to prior periods.
19. ASPE requires that assets must be assessed for indications of impairment
- a. at the end of each reporting period.
 - b. at the end of every quarter.
 - c. when events and circumstances indicate that asset's carrying amount may not be recoverable.
 - d. whenever the method of depreciation has changed.
20. IFRS require that assets must be assessed for indications of impairment
- a. at the end of every quarter.
 - b. at the end of each reporting period.
 - c. when events and circumstances indicate that asset's carrying amount may not be recoverable.
 - d. whenever the method of depreciation has changed.

21. Which of the following is NOT likely to be an indicator of possible asset impairment?
- a. evidence of obsolescence or physical damage
 - b. a significant decrease in the asset's market value
 - c. the book value of the entity's net assets is greater than the entity's market capitalization
 - d. costs incurred for asset acquisition or construction are significantly lower than originally expected
22. The cost recovery impairment model
- a. uses undiscounted cash flows in its determination of impairment.
 - b. uses discounted cash flows in its determination of impairment.
 - c. is the method used under IFRS.
 - d. requires the calculation of value in use.
23. The rational entity impairment model
- a. does not allow the reversal of previously recognized impairment losses.
 - b. is the method used under ASPE.
 - c. uses undiscounted cash flows in its determination of impairment.
 - d. compares the asset's carrying value with its recoverable amount.
24. Which of the following best describes the concept of cash-generating units (CGU)?
- a. Their cash flows are dependent on those of other CGU's.
 - b. The individual assets that are included in the CGU do not generate cash flows on their own.
 - c. A CGU is the largest identifiable group of assets that generate cash inflows predominantly independent from other CGUs.
 - d. IFRS does not recognize the concept of cash-generating units (CGU).
25. Long-lived assets that are held for sale
- a. continue to be depreciated.
 - b. are carried at the higher of book value and fair values less costs of disposal.
 - c. are generally not remeasured at each balance sheet date.
 - d. are reported separately from other assets.
26. Depreciation should be discontinued when an asset has been
- a. derecognized or taken out of service.
 - b. derecognized or classified as held for sale.
 - c. taken out of service.
 - d. taken out of service or classified as held for sale.
27. The sale of a depreciable asset resulting in a loss indicates that the proceeds from the sale were
- a. less than book value.
 - b. greater than cost.
 - c. greater than book value.

- d. less than current market value.
28. Disclosures relating to PP&E assets are
- a. identical under IFRS and ASPE.
 - b. less extensive under IFRS.
 - c. less extensive under ASPE.
 - d. more extensive under ASPE.
29. A general description of the depreciation methods applicable to major classes of depreciable assets
- a. is not a current practice in financial reporting.
 - b. is not essential to a fair presentation of financial position.
 - c. is needed in financial reporting when company policy differs from income tax policy.
 - d. should be included in corporate financial statements or notes thereto.
30. The asset turnover ratio is calculated by dividing
- a. net income by ending total assets.
 - b. net sales by average total assets.
 - c. net sales by ending total assets.
 - d. net income by average total assets.
31. The rate of return on assets (ROA) is calculated by dividing
- a. average total assets by net income.
 - b. net revenue by average total assets.
 - c. net income by average total assets.
 - d. net income by net revenue.
- *32. A major objective of capital cost allowance for tax depreciation is to
- a. reduce the amount of depreciation expense claimed for income tax purposes.
 - b. assure that the amount of depreciation for income tax and book purposes will be the same.
 - c. help taxpayers achieve a faster write-off of their capital assets.
 - d. require taxpayers to use the actual economic lives of assets in calculating tax depreciation.
- *33. Under the capital cost allowance system, which of the following is NOT relevant?
- a. the capital cost of the asset
 - b. the asset class
 - c. the half-year rule
 - d. the asset's residual value

MULTIPLE CHOICE ANSWERS—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	d	6.	c	11.	b	16.	c	21.	d	26.	b	31.	c
2.	c	7.	b	12.	a	17.	c	22.	a	27.	a	*32.	c
3.	b	8.	a	13.	d	18.	a	23.	d	28.	c	*33.	d
4.	c	9.	d	14.	b	19.	c	24.	b	29.	d		
5.	b	10.	a	15.	d	20.	b	25.	d	30.	b		

MULTIPLE CHOICE—Computational

34. Consider an asset that was separated into its main components (A, B and C). The \$1,200,000 purchase price was allocated to these components in equal proportions. The useful lives are 12, 4, and 7 years for components A, B and C respectively. Components A and B are not expected to have any residual value, but Component C is expected to have a residual value of \$18,000. Assuming straight-line depreciation, total annual depreciation expense, to the nearest dollar, relating to these assets is

- a. \$100,100.
- b. \$125,120.
- c. \$187,905.
- d. \$190,476.

35. On July 1, 2014, Buffalo Corporation purchased factory equipment for \$600,000. Residual value was estimated to be \$16,000. The equipment will be depreciated over ten years using the double declining-balance method. Counting the year of acquisition as one-half year, Buffalo should record depreciation expense on this equipment for the calendar year 2015 of

- a. \$120,000.
- b. \$108,000.
- c. \$105,120.
- d. \$96,000.

36. Marmoset Corporation purchased factory equipment that was installed and put into service on January 2, 2014, at a total cost of \$110,000. Residual value was estimated at \$6,000. The equipment is being depreciated over four years using the double declining-balance method. For the calendar year 2015, Marmoset should record depreciation expense on this equipment of

- a. \$55,000.
- b. \$48,000.
- c. \$27,500.
- d. \$21,000.

37. On April 10, 2014, Tiger Corp. purchased machinery for \$240,000. Residual value was estimated at \$10,000. The machinery will be depreciated over ten years using the straight-line method. If depreciation is calculated on the basis of the nearest full month, the related Accumulated Depreciation account at December 31, 2015 will be

- a. \$46,000.
- b. \$40,250.
- c. \$23,000.
- d. \$17,250.

38. Mink Inc. purchased machinery that was installed and ready for use on January 3, 2014, at a total cost of \$230,000. Residual value was estimated at \$30,000. The machinery will be depreciated over five years using the double declining-balance method. For the calendar year 2015, Mink should record depreciation expense on this machinery of

- a. \$48,000.
- b. \$55,200.

- c. \$60,000.
 - d. \$92,000.
39. A machine has a cost of \$24,000, a residual value of \$6,000, and an estimated three-year life. If depreciation in the second year was \$2,000, which depreciation method was used?
- a. straight-line
 - b. double declining-balance
 - c. units of production
 - d. cannot tell from information given
40. On January 1, 2014, Leopard Corp. purchased a new machine for \$700,000. The new machine has an estimated useful life of nine years and the residual value was estimated to be \$50,000. Depreciation was calculated using the double declining-balance method. To the nearest dollar, what amount should be shown in Leopard's balance sheet at December 31, 2015, net of accumulated depreciation, for this machine?
- a. \$550,000
 - b. \$445,000
 - c. \$427,778
 - d. \$423,457
41. On April 1, 2009, Bear Ltd. purchased equipment for \$80,000. The equipment was estimated to have a residual value of \$10,000 and is being depreciated over eight years using the straight-line method. What should be the depreciation expense for this equipment for the year ended December 31, 2014?
- a. \$5,250
 - b. \$7,000
 - c. \$8,750
 - d. \$10,000
42. On September 25, 2014, Panther Corp. purchased machinery for \$336,000. Residual value was estimated to be \$15,000. The machinery will be depreciated over eight years using the double declining-balance method. If depreciation is calculated on the basis of the nearest full month, Panther should record depreciation expense for calendar 2015 on this machinery of
- a. \$78,750.
 - b. \$63,000.
 - c. \$60,000.
 - d. \$42,000.
43. On January 3, 2014, Coyote Corp. purchased machinery. The machinery has an estimated useful life of nine years and an estimated residual value of \$45,000. Coyote uses straight-line depreciation for all their machinery, and recorded \$77,000 depreciation expense for 2016. The acquisition cost of the machinery was
- a. \$738,000.
 - b. \$710,000.
 - c. \$693,000.
 - d. \$685,000.

44. On January 2, 2014, Zebra Ltd. purchased equipment to be used in its manufacturing operations. The equipment has an estimated useful life of ten years, and an estimated residual value of \$22,000. It was also estimated that the equipment would be used a total of 42,000 hours over its useful life. The depreciation expense for this equipment was \$104,000 for calendar 2015, using the units of production method. The machine was used for 5,000 hours in 2015. The acquisition cost of the equipment was

- a. \$815,600.
- b. \$872,400.
- c. \$873,600.
- d. \$895,600.

45. Consider an asset for which the following information is available:

Carrying value at Dec 31, 2014 before depreciation...	\$9,000
Calculated depreciation for 2014.....	\$2,400
Original cost.....	\$24,000
Residual value	\$8,500
Remaining useful life	3 years

The depreciation expense for 2014 is

- a. \$3,100.
- b. \$3,000.
- c. \$2,400.
- d. \$500.

46. In January, 2014, Camel Corporation purchased a mineral mine for \$2,550,000 with removable ore estimated by geological surveys at 1 million tons. The property has an estimated (residual) value of \$150,000 after the ore has been extracted. The company incurred \$750,000 in development costs preparing the mine for production. During 2014, 250,000 tons were removed and 200,000 tons were sold. What is the amount of depletion that Camel should *expense* for 2014?

- a. \$480,000
- b. \$600,000
- c. \$787,500
- d. \$840,000

47. In 2014, Elk Corporation purchased a mine for \$200 million (of this, \$30 million was applicable to the land). An independent evaluation estimated the mine's reserves at 7.5 million tons. During 2014, Elk extracted 900,000 tons. Elk's depletion expense for 2014 is

- a. \$200,000.
- b. \$18,000,000.
- c. \$20,400,000.
- d. \$24,000,000.

48. On July 1, 2011, Puppy Corp. purchased a machine for \$500,000. The machine was estimated to have a useful life of ten years with an estimated residual value of \$28,000. During 2014, it became apparent that the machine would become uneconomical after December 31, 2018, and that the machine would have no salvage value. Accumulated depreciation on this machine at December 31, 2013, was \$118,000, using the straight-line method. The depreciation

expense for 2014 should be

- a. \$95,500.
- b. \$82,000.
- c. \$76,400.
- d. \$70,800.

49. On January 3, 2007, Hippo Corp. purchased a machine for \$600,000. The machine was being depreciated using the straight-line method over an estimated useful life of ten years, with no residual value. At the beginning of 2014, the company paid \$150,000 to overhaul the machine. As a result of this improvement, the company estimated that the useful life of the machine would be extended an additional five years (15 years total). The depreciation expense for 2014 should be

- a. \$41,250.
- b. \$50,000.
- c. \$60,000.
- d. \$66,000.

50. Monkey Shines Ltd., a Canadian public corporation, owns equipment for which the following year-end information is available:

Carrying amount (book value)	\$120,000
Value in use	\$102,000
Fair value less disposal costs	\$108,000

The recoverable amount to be used in the determination of impairment is

- a. \$102,000.
- b. \$108,000.
- c. \$120,000.
- d. Cannot be determined from the information given.

51. Gibbon Corp., a Canadian public corporation, owns equipment for which the following year-end information is available:

Carrying amount (book value)	\$59,000
Recoverable amount	\$52,000
Fair value less disposal costs	\$55,000

Which of the following *best* describes the proper accounting treatment for Gibbon's equipment?

- a. It is not impaired and a loss should not be recognized.
- b. It is impaired and a loss must be recognized.
- c. It is not impaired, but a loss must be recognized.
- d. It is impaired and a loss must be recognized, but the loss but may be reversed in future periods.

52. For a company that uses ASPE, the required year-end journal entry to record an impairment loss includes

- a. A debit to Loss on Impairment and a credit to Accumulated Impairment Losses.
- b. A debit to Other Comprehensive Income and a credit to Accumulated Impairment Losses.
- c. A debit to Loss on Impairment and a credit to the related asset.
- d. A debit to Other Comprehensive Income and a credit to the related asset.

53. On January 1, 2004, Antelope Ltd. purchased a building for \$800,000. At this time, the

building had an estimated residual value of \$300,000 and an estimated useful life of twenty years. The company has recorded monthly depreciation using the straight-line method. On January 1, 2014, it is decided to put the building up for sale at for \$1,200,000. At December 31, 2014, the building is still for sale. The correct depreciation to record for 2014 is

- a. \$0.
- b. \$25,000.
- c. \$40,000.
- d. \$60,000.

54. Golden Goose Corp. has a piece of equipment, which is being held for sale, and has a carrying value of \$100,000. When the decision to sell had been made, the equipment had been written down from a carrying value of \$180,000. At December 31, 2014, it is estimated that the fair value less disposal costs (net realizable value) is \$130,000. For the calendar year 2014, Golden Goose should recognize a recovery (gain) of

- a. \$0.
- b. \$30,000.
- c. \$50,000.
- d. \$80,000.

55. On January 1, 2014, the Accumulated Depreciation—Machinery account of Bonobo Corp. showed a balance of \$760,000. At the end of 2014, after the adjusting entries were posted, it showed a balance of \$820,000. During 2014, one of the machines which cost \$240,000 was sold for \$118,000 cash. This resulted in a loss of \$7,000. Assuming that no other assets were disposed of during the year, depreciation expense for 2014 was

- a. \$189,000.
- b. \$182,000.
- c. \$180,000.
- d. \$175,000.

56. During 2014, Jersey Ltd. sold equipment that had originally cost \$206,000 for \$127,600. This resulted in a gain of \$9,600. The balance in the Accumulated Depreciation—Equipment was \$660,000 on January 1, 2014, and \$630,000 on December 31, 2014. No other equipment was disposed of during 2014. Depreciation expense for 2014 was

- a. \$20,000.
- b. \$58,000.
- c. \$59,600.
- d. \$101,000.

57. The following information is available for an asset that is classified as held for sale:

Accumulated Depreciation (at March 31, 2014).....	\$24,300
Asset cost	\$50,000

If the asset were sold on April 1, 2014 for \$27,600, there would be

- a. a loss of \$1,900.
- b. a gain of \$1,400.
- c. a gain of \$1,900.
- d. a loss of \$22,400.

58. One of Cheetah Corp.'s assets was expropriated by government authorities. The following additional information is available:

Book value at the time of expropriation.....	\$1,200,000
Cash received	\$3,000,000

Under ASPE, this situation would be reflected in the company's financial statements as a \$1,800,000

- a. gain that would be included in other comprehensive income.
- b. gain that would be included in net income.
- c. gain from discontinued operations.
- d. gain that would appear on the Statement of Shareholders Equity.

59. On May 1, 2005, Platypus Ltd. purchased a new machine for \$132,000. At the time of acquisition, the machine was estimated to have a useful life of ten years and an estimated residual value of \$6,000. The company has recorded monthly depreciation using the straight-line method. On March 1, 2014, the machine was sold for \$18,000. The loss to be recognized from the sale is

- a. \$0.
- b. \$2,700.
- c. \$6,000.
- d. \$8,700.

60. On January 1, 2006, Owl Corporation purchased equipment for \$76,000, having a useful life of ten years and an estimated residual value of \$4,000. Owl has recorded monthly depreciation using the straight-line method. On December 31, 2014, the equipment was sold for \$14,000. The gain to be recognized from the sale is

- a. \$14,000.
- b. \$6,800.
- c. \$2,800.
- d. \$0.

61. On June 1, 2013 Morgan Manufacturing acquired a machine for \$100,000 with an estimated useful life of 5 years and an estimated residual value of \$10,000. The company uses the double declining method of depreciation and takes a full year's depreciation in the year of acquisition and none in the year of disposition. If the machine were disposed of for \$16,000 on May 1, 2015, the loss on disposal would be

- a. \$20,000.
- b. \$26,400.
- c. \$24,000.
- d. \$36,000.

62. For 2014, Walrus Company reported net revenues, average total assets, and net income of \$180,000, \$24,000, and \$100,000 respectively. Walrus Company's asset turnover ratio for 2014 was

- a. 1.8.
- b. 3.8.
- c. 7.5.
- d. 8.0.

63. In 2014, Elephant Corporation's financial statements included the following information:

Net income.....	\$19,000
Sales.....	\$98,000
Total assets, beginning of year.....	\$85,000
Total assets, end of the year	\$112,000
Inventory	\$70,000

To one decimal, Elephant's return on assets (ROA) for 2014 was

- a. 21.0%.
- b. 19.3%.
- c. 17.2%.
- d. 0.99%.

*64. On January 1, 2014, Seal Corp. purchased a machine costing \$250,000. The machine is in an asset class for tax purposes with a 30% CCA rate. It has an estimated \$40,000 residual value at the end of its five year useful life. The CCA deduction for tax purposes for the year 2014 is

- a. \$25,000.
- b. \$31,500
- c. \$37,500.
- d. \$75,000.

MULTIPLE CHOICE ANSWERS—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
34.	c	39.	b	44.	d	49.	a	54.	b	59.	b	*64.	c
35.	b	40.	d	45.	d	50.	b	55.	d	60.	c		
36.	c	41.	c	46.	c	51.	d	56.	b	61.	a		
37.	b	42.	a	47.	c	52.	a	57.	c	62.	c		
38.	b	43.	a	48.	c	53.	a	58.	b	63.	b		

DERIVATIONS—Computational

No.	Answer	Derivation
34.	c	$\$1,200,000 \div 3 = \$400,000$ $(400,000 \div 12) + (400,000 \div 4) + (400,000 - 18,000) \div 7 = \$187,905$
35.	b	$[\$600,000 - (\$600,000 \times 2 \div 10 \times 50\%)] \times 2 \div 10 = \$108,000$
36.	c	$[\$110,000 - (\$110,000 \times 2 \div 4)] \times 2 \div 4 = \$27,500$
37.	b	$\$240,000 - (\$10,000 \div 10 \times 1.75 \text{ years}) = \$40,250$
38.	b	$[\$230,000 - (\$230,000 \times 2 \div 5)] \times 2 \div 5 = \$55,200$
39.	b	$\$24,000 \times 2 \div 3 = \$16,000$; $\$24,000 - \$16,000 = \text{BV of } \$8,000$ $\$8,000 \times 2 \div 3 = \$5,333$, but only need \$2,000 to arrive at residual value of \$6,000
40.	d	$\$700,000 \times 2 \div 9 = \$155,556$; $(\$700,000 - \$155,556) \times 2 \div 9 = \$120,987$ $\$700,000 - (\$155,556 + \$120,987) = \$423,457$
41.	c	$(\$80,000 - \$10,000) \div 8 = \$8,750$
42.	a	$\$336,000 \times 2 \div 8 \times 3 \div 12 = \$21,000$; $(\$336,000 - \$21,000) \times 2 \div 8 = \$78,750$
43.	a	Original cost = $(\$77,000 \times 9) + \$45,000 \text{ residual} = \$738,000$
44.	d	UOP rate = $\$104,000 \div 5,000 \text{ hours} = \20.80 ; $\$20.80 \times 42,000 \text{ hours} = \$873,600$ (depreciable amount) + $\$22,000 \text{ residual} = \$895,600$ original cost
45.	d	$\$9,000 - \$8,500 = \$500$ (maximum)
46.	c	$[(\$2,550,000 - \$150,000 + \$750,000) \div 1,000,000] \times 250,000 = \$787,500$
47.	c	$[(\$200 \text{ million} - \$30 \text{ million}) \div 7.5 \text{ million}] \times 900,000 = \20.4 million
48.	c	$(\$500,000 - \$118,000) \div 5 = \$76,400$
49.	a	Acc Dep to end 2013 = $(\$600,000 \div 10) \times 7 = \$420,000$ BV = $\$600,000 - \$420,000 + \$150,000 = \$330,000$; $\$330,000 \div 8 = \$41,250$
50.	b	Higher of value in use and FV less disposal costs
51.	d	Since recoverable amount (higher of value in use and FV less disposal costs) is lower than BV, there is impairment
52.	a	Conceptual
53.	a	\$0 (no depreciation on property held for sale)
54.	a	\$0. Assets held for sale are reported at lower of amortized cost (BV) and NRV
55.	d	$(\$820,000 - \$760,000) + [\$240,000 - (\$118,000 + \$7,000)] = \$175,000$
56.	b	$\$630,000 - \{\$660,000 - [\$206,000 - (\$127,600 - \$9,600)]\} = \$58,000$
57.	c	$\$27,600 - (\$50,000 - \$24,300) = \$1,900 \text{ gain}$
58.	b	Conceptual

59. b $(\$132,000 - \$6,000) \div (10 \times 12) = \$1,050$ per month
 $\$18,000 - [\$132,000 - (\$1,050 \times 106 \text{ mo.})] = \$2,700$ loss
60. c $(\$76,000 - \$4,000) \div (10 \times 12) = \600 per month
 $\$14,000 - [\$76,000 - (\$600 \times 108 \text{ mo.})] = \$2,800$
61. a 2013 $-\$100,000 \times 2 \div 5 = \$40,000$; 2014 $(\$100,000 - \$40,000) \times 2 \div 5 = \$24,000$
BV now $\$100,000 - \$40,000 - \$24,000 = \$36,000$
Loss on disposal is $\$36,000 - \$16,000 = \$20,000$
62. c $\$180,000 \div \$24,000 = 7.5$
63. b $\$19,000 \div [(\$85,000 + \$112,000) \div 2] = 19.3\%$
- *64. c $\$250,000 \times 30\% \times 1 \div 2 = \$37,500$

MULTIPLE CHOICE—CPA Adapted

65. Swallow Ltd. takes a full year's depreciation expense in the year of an asset's acquisition and no depreciation expense in the year of disposition. Data relating to one of Swallow's pieces of equipment at December 31, 2013 are as follows:

Acquisition year	2011
Cost.....	\$280,000
Residual value	40,000
Accumulated depreciation	219,520
Estimated useful life	5 years

Using the same depreciation method that was used in 2011, 2012, and 2013, how much depreciation expense should be recorded in 2014 for this asset?

- a. \$60,480
- b. \$48,000
- c. \$32,000
- d. \$20,480

66. On July 1, 2014, Eland Corp. purchased a machine for \$375,000. The machine has an estimated useful life of five years and a residual value of \$50,000. The machine is being depreciated using the double declining-balance method. For the year ended December 31, 2014, Eland should record depreciation expense on this machine of

- a. \$65,000.
- b. \$75,000.
- c. \$130,000.
- d. \$150,000.

67. On March 24, 2014, Lion Ltd. purchased a new machine for \$100,000. This machine has an eight-year estimated useful life, an estimated residual value of \$5,000, and is expected to produce 190,000 units over its useful life. The machine produced 11,000 units in 2014 and 13,000 units in 2015. Using the units of production method, to the nearest dollar, the related Accumulated Depreciation account on the adjusted trial balance at December 31, 2015 would be

- a. \$5,500.
- b. \$6,500.
- c. \$12,000.
- d. \$12,632.

68. On April 1, 2012, Chickadee Corp. purchased new machinery for \$400,000. The machinery has an estimated useful life of ten years, a residual value of \$20,000, and depreciation is calculated using the double declining-balance method. Chickadee's year end is December 31. The accumulated depreciation on this machinery at March 31, 2014, should be

- a. \$102,500.
- b. \$131,200.
- c. \$141,600.
- d. \$182,400.

69. Roan Corp. acquired a tract of land containing an extractable natural resource. The company

is required by the government to restore the land to a condition suitable for recreational use after it has extracted the natural resource. Geological surveys estimate that the recoverable reserves will be 6.2 million tons, and that the land will have a value of \$1.2 million after restoration.

Relevant cost information follows:

Land.....	\$8,000,000
Estimated restoration costs	2,100,000

If Roan maintains no inventories, what is the depletion charge per ton of extracted resource?

- a. \$1.00
- b. \$1.32
- c. \$1.44
- d. \$1.63

Use the following data for questions 70–72.

Wren Corp. reported the following data on its most recent financial statements:

Net revenues:.....	\$312,500
Net income.....	\$ 58,200
Total assets, Jan 1.....	\$174,280
Total assets, Dec 31	\$168,420

70. To two decimals, what is Wren Corp.'s asset turnover ratio?

- a. 1.82
- b. 1.79
- c. 0.35
- d. 0.34

71. To two decimals, what is Wren Corp.'s profit margin ratio?

- a. 33.97%
- b. 18.62%
- c. 18.24%
- d. 5.37%

72. To two decimals, what is Wren Corp.'s rate of return on assets (ROA)?

- a. 18.24%
- b. 18.62%
- c. 33.97%
- d. 34.56%

Use the following information to answer questions *73–*74.

Tarantula Corp. reported the following information about the only machine that it owns:

Date of purchase.....	March 31, 2014
Capital cost	\$200,000
Estimated useful life	10 years
Estimated residual value	\$20,000
CCA Class	Class 10 (30%)

Tarantula uses straight-line depreciation to the nearest month for accounting purposes.

- *73. Assuming Tarantula always takes the maximum CCA, what is the CCA for calendar 2014?
- a. \$22,500
 - b. \$30,000
 - c. \$45,000
 - d. \$60,000
- *74. Assume that at the end of calendar 2016, the UCC for this machine is \$83,300. Tarantula sells the machine on January 2, 2017 for \$90,000, and does not replace it. The recapture of CCA or terminal loss would be
- a. \$60,500 terminal loss.
 - b. \$56,000 recapture.
 - c. \$6,700 terminal loss.
 - d. \$6,700 recapture.

MULTIPLE CHOICE ANSWERS—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
65.	d	67.	c	69.	c	71.	b	*73.	b
66.	b	68.	c	70.	a	72.	c	*74.	d

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
65.	d	$\$280,000 \times .6 \times .6 \times .6 = \$60,480$ $\$60,480 - \$40,000 = \$20,480$ maximum
66.	b	$\$375,000 \times 2 \div 5 \times 1 \div 2 = \$75,000$
67.	c	UOP rate = $(\$100,000 - \$5,000) \div 190,000 = \$0.50$ per unit; Acc Dep to end 2015 = $\$0.50 \times ((11,000 + 13,000)) = \$12,000$
68.	c	2012 $(\$400,000 \times 2 \div 10 \times 9 \div 12) = \$60,000$ 2013 $(\$400,000 - \$60,000) \times 2 \div 10 = \$68,000$ 2014 $(\$400,000 - \$60,000 - \$68,000) \times 2 \div 10 \times 3 \div 12 = \$13,600$ Acc Dept = $\$60,000 + \$68,000 + \$13,600 = \$141,600$
69.	c	$(\$8,000,000 + \$2,100,000 - \$1,200,000) \div 6,200,000 = \1.44
70.	a	$\$312,500 \div (\$174,280 + \$168,420) \div 2 = 1.82$
71.	b	$(\$58,200 \div \$312,500) \times 100 = 18.62\%$
72.	c	$[\$58,200 \div (\$174,280 + \$168,420) \div 2] \times 100 = 33.97\%$
*73.	b	$\$200,000 \times 30\% \times \frac{1}{2} = \$30,000$
*74.	d	$\$83,000$ (UCC) – $\$90,000$ (sale price) = $\$6,700$ recapture

EXERCISES

Ex. 11-75 Definitions

Provide clear, concise answers for the following:

1. Define depreciation.
2. Define depreciation accounting.
3. Does depreciation accounting provide cash? If not, what does provide cash? In relation to cash, what does depreciation accounting do?

Solution 11-75

1. Depreciation is the decline in service potentials or in future economic benefits of a PP&E asset due to physical or economic factors.
2. Depreciation accounting is the systematic and rational allocation of the cost of PP&E assets to the periods benefited from the use of the assets.
3. Depreciation accounting does not provide cash. Revenues provide cash. Depreciation accounting retains cash by reducing income taxes and dividends.

Ex. 11-76 Componentization and depreciation of PP&E assets

You are the accountant for a manufacturing company. You have just been advised of the acquisition of a new machine. You have received a memo which only gives you the following information:

Grinding Equipment

Model: XZ-1-1000

Cost: \$1,250,000

Instructions

To be able to properly account for this asset, list and briefly describe what additional information you require.

Solution 11-76

The information should include details on the machine's

- Components
- Depreciable amount
- Depreciation period (useful life)
- Usage pattern

The machine may include different parts that may have different usage and maintenance patterns. If so, and if these parts are significant, they should be accounted for separately, so these patterns can be captured in the depreciation process.

The depreciable amount will likely not be the same as the given cost of \$1,250,000, since it will have to be adjusted for residual value(s), if any.

The depreciation period will be affected by the date that the machine is installed and ready for use.

Finally, the usage pattern will drive the decision of which depreciation method to use: straight-line, declining balance, or units of production.

Ex. 11-77 True or false?

Place T or F in front of each of the following statements.

1. The choice of depreciation method is specified in GAAP and does not require the use of professional judgment.
2. Depreciation is the process of allocating the cost of assets in a manner that is consistent with the desired effect on income.
3. Changes in the depreciation rate due to changes in the estimate of the asset's useful life are accounted for in the current and future periods.
4. Gains and losses from the disposal of property, plant and equipment are always reported as part of other comprehensive income.
5. The term "recoverable amount" with respect to a capital asset's impairment has the *same* definition under ASPE and IFRS.
6. Once a loss has been recognized, IFRS prohibits the subsequent reversal of that loss.
7. Only assets with cash flows that are independent from those of other assets are included in a cash-generating unit (CGU).
8. When using the straight-line method, an asset's residual value is deducted in the calculation of depreciation expense.
9. An asset that has been depreciated to its residual value can continue to be depreciated until it reaches a net book value of zero.

Solution 11-77

1. F
2. F
3. T
4. F
5. F
6. F
7. T
8. T
9. F

Ex. 11-78 Asset depreciation and disposition

Answer each of the following questions.

1. On January 2, 2014, a machine was purchased for \$180,000. It has an estimated useful life of ten years and an estimated residual value of \$14,000. Depreciation for 2015, using the double declining-balance method, is \$_____.
2. A vehicle purchased for \$50,000 has an estimated useful life of five years and a residual value of \$3,800. It is expected to be driven 210,000 kilometres over its useful life. The asset was driven 45,000 kilometres in the second year. Depreciation for the *second* year, using the units of production method is \$_____.

3. Equipment costing \$43,000 and accumulated depreciation of \$12,000, is given together with cash of \$16,000 in exchange for similar equipment with a fair value of \$44,000. The gain or loss recognized on the exchange (indicate by "G" or "L") is \$_____. Assume this transaction has commercial substance.
4. A machine costing \$72,000, estimated useful life of five years, and residual value of \$12,000, is depreciated by the straight-line method. This asset is sold for \$50,000 at the end of the *second year of use*. The gain or loss on the disposal (indicate by "G" or "L") is \$_____.

Solution 11-78

1. Year 1 depreciation = $\$180,000 \times 2 \div 10 = \$36,000$; NBV now \$144,000
Year 2 depreciation = $\$144,000 \times 2 \div 10 = \$28,800$
2. Depreciation per km = $(\$50,000 - \$3,800) \div 210,000 = \$0.22$
Year 2 depreciation = $\$0.22 \times 45,000 = \$9,900$
3. \$3,000 L
Journal Entries are:

New asset	44,000(max is FV)
Acc Dep, old asset.....	12,000
Loss on exchange	3,000
Old asset	43,000
Cash	16,000
4. \$2,000 G
Annual depreciation is $(\$72,000 - \$12,000) \div 5 = \$12,000$
BV at time of sale = $\$72,000 - (2 \times \$12,000) = \$48,000$
Gain on sale = $\$50,000 - \$48,000 = \$2,000$

***Ex. 11-79** Calculate depreciation and CCA

Five identical vehicles which cost \$500,000 (total) are acquired on April 1, 2014. Their estimated residual value is \$20,000 and expected life is eight years. These assets are Class 10 with a maximum CCA rate of 30%. The company has a December 31 year end.

Instructions

Calculate the depreciation expense/CCA (to the nearest dollar) by each of the following methods:

- a) Straight-line for 2014
- b) Double declining-balance for 2015
- c) Maximum Capital cost allowance for 2015

Solution 11-79

- a) $(\$500,000 - \$20,000) \div 8 \times 9 \div 12 = \$45,000$
- b) 2014: $25\% \times \$500,000 \times 9 \div 12 = \$93,750$
2015: $25\% \times \$406,250 = \$101,562$
- c) 2014: $30\% \times \$500,000 \times 1 \div 2 = \$75,000$
2015: $30\% \times \$425,000 = \$127,500$

Ex. 11-80 Rational entity impairment model

Cougar Corp.'s balance sheet includes the following asset:

Equipment.....	\$95,000
Less: accumulated depreciation	<u>(25,000)</u>
Book value (carrying amount).....	\$70,000

After performing its annual review for impairment, Cougar obtains the following data:

Asset's value in use	\$58,000
Fair value less disposal costs.....	62,000

Instructions

Assuming Cougar uses the rational entity impairment model,

- Calculate the recoverable amount.
- Calculate the impairment loss.
- Prepare the entry to record the impairment loss.

Solution 11-80

- Recoverable amount: \$62,000, the higher of the asset's value in use of \$58,000 and its fair value less disposal costs of \$62,000.

- Impairment loss:

Carrying amount.....	\$70,000
Recoverable amount	\$62,000
Impairment loss.....	\$8,000

- Journal entry:

Loss on impairment.....	8,000	
Accumulated impairment loss—equipment.....		8,000

Ex. 11-81 Impairment

Assume the same information as in Ex. 11-79 above, except for the following:

Cougar's review for impairment indicates the following:

Asset's value in use	\$64,000
Fair value less disposal costs.....	\$73,000

Instructions

- Calculate the recoverable amount.
- Calculate the impairment loss.

Solution 11-81

- Recoverable amount: \$73,000, the higher of the asset's value in use of \$64,000 and its fair value less disposal costs of \$73,000.

- Impairment loss:

Carrying amount.....	\$70,000
Recoverable amount	\$73,000
Impairment loss.....	none

Because the recoverable amount is higher than the asset's carrying amount, there is no

impairment loss.

***Ex. 11-82** Calculate depreciation and CCA

A machine costing \$400,000 is acquired on October 1, 2014. Its estimated residual value is \$40,000 and its expected life is eight years. The company has a calendar year end. The asset is a Class 8 asset with a maximum CCA rate of 20%.

Instructions

Calculate depreciation expense for 2014 and 2015 by each of the following methods:

- a) Double declining-balance
- b) Capital cost allowance

Solution 11-82

- a) 2014: $25\% \times \$400,000 \times 3 \div 12 = \$25,000$
2015: $25\% \times \$375,000 = \$93,750$
- b) 2014: $20\% \times \$400,000 \times 1 \div 2 = \$40,000$
2015: $20\% \times \$360,000 = \$72,000$

PROBLEMS

Pr. 11-83 Asset overhaul

Swift Corporation is an international provider of freight services that follows IFRS. Its fleet of vehicles includes a truck that is carried in its books as "VC1-016." This truck was purchased two years ago for \$150,000 and has been depreciated on a straight-line basis. By December 31, 2014, its book value (carrying value) is \$97,000.

As part of its commitment to safety and as required by its insurer, the company has a policy to overhaul its trucks after every 50,000 kms. The associated costs of the overhauls are tracked in separate accounts.

At December 31, 2014 the balances for VC1-016 are as follows:

Overhauls # 1 - 5:

Accumulated Depreciation:	\$0
---------------------------------	-----

Overhaul # 6:

Cost	\$20,000
Less accumulated depreciation:	<u>(16,400)</u>
Book value	\$3,600

On January 1, 2015, after the driver had reported problems with the truck's engine, a decision was made to do an early overhaul (i.e. 9,000 km prior to the next scheduled overhaul). The overhaul was completed on January 7, 2015 for \$28,000 cash.

Because of a slowdown in the economy, the truck only operated for 21,000 km for the remainder of 2015.

Instructions

Prepare the appropriate journal entries for 2015 relating to the truck's overhaul.

Solution 11-83

Truck overhaul (VC1-016 #7)	28,000	
Cash.....		28,000
To account for costs of January 2015 overhaul		
Accumulated depreciation (VC1-016 #6)	16,400	
Loss on overhaul.....	3,600	
Truck overhaul (VC1-016 #6)		20,000
To remove costs relating to previous overhaul and recognize loss		
Depreciation expense - overhauls	11,760	
Accumulated depreciation (VC1-016 #7)		11,760
To record 2015 depreciation expense for current overhaul		
\$28,000 ÷ 50,000 km x 21,000 km = \$11,760		

*Pr. 11-84 Calculate depreciation and CCA

On July 2, 2014, Vicuna Inc. purchased equipment for \$720,000. This equipment has an estimated useful life of six years and an estimated residual value of \$30,000. Depreciation is

taken for the portion of the year the asset is used. The asset is a Class 8 asset with a maximum CCA rate of 20%. Vicuna has a December year end.

Instructions

- a) Complete the form below by determining the depreciation expense/CCA and year-end book values/UCC for 2014 and 2015 using the
1. double declining-balance method.
 2. capital cost allowance method (using maximum rate).

<u>Double Declining-Balance Method</u>	<u>2014</u>	<u>2015</u>
Depreciation expense for year		
Accumulated depreciation		
Year-end book value		
<u>Capital Cost Allowance Method</u>	<u>2014</u>	<u>2015</u>
CCA for year		
End of year UCC		
Total CCA claimed		

- b) Instead, assume Vicuna had used straight-line depreciation during 2014 and 2015. During 2016, the company determined that the equipment would be useful to the company for only one more year beyond 2016. Residual value is estimated at \$40,000. Calculate the amount of depreciation expense for the 2016 income statement.

Solution 11-84

a) <u>Double Declining-Balance Method</u>	<u>2014</u>	<u>2015</u>
Depreciation expense for year	\$120,000	\$200,000
Accumulated depreciation, end of year	120,000	320,000
Year-end book value	600,000	400,000
 <u>Capital Cost Allowance Method</u>	 <u>2014</u>	 <u>2015</u>
CCA for year	\$ 72,000	\$129,600
End of year UCC	648,000	518,400
Total CCA claimed.....	72,000	201,600
 b) Cost.....	 \$720,000	
Depreciation	(172,500)	
Residual	<u>(40,000)</u>	
2016 depreciation.....	\$507,500 × 1/2 = \$253,750	

Pr. 11-85 Cost recovery impairment model, revision of depreciation

Rhino Corporation is a manufacturer of automobile parts. Its capital assets include specialized equipment that is being used in the finishing stage of its manufacturing process.

The equipment was purchased in 2014 and is being depreciated using the units-of-production method. By December 31, 2015, the book (carrying) value was \$430,000 (after depreciation expense had been recorded). However, at that time, Rhino became aware of new technology that would make the equipment obsolete within the next five years. An appraisal puts the equipment's future undiscounted net cash flows at \$390,000 and its fair value at \$300,000. While considering its options for the eventual replacement, Rhino will continue using the equipment, but will change to straight-line depreciation.

Instructions

Assuming Rhino is a private Canadian corporation,

- Prepare the journal entry, if any, to record the impairment loss at December 31, 2015.
- Prepare the journal entries to record 2016 and 2017 depreciation.

Solution 11-85

a)

Recoverability test: Carrying value \$430,000 – undiscounted net cash flows \$390,000 = -40,000, therefore asset impaired.

Loss on impairment.....	130,000	
Accumulated impairment losses—equipment.....		130,000
(Carrying value \$430,000 – fair value \$300,000 = \$130,000 impairment loss)		

b)

2016 depreciation:

Depreciation expense	60,000	
Accumulated depreciation-equipment.....		60,000
(\$300,000 ÷ 5 years = \$60,000)		

2017 Depreciation:

Depreciation expense	60,000	
Accumulated depreciation-equipment.....		60,000
(\$300,000 ÷ 5 years = \$60,000)		

Pr. 11-86 Calculation of ratios

Vulture Ltd. provides the following selected information for the calendars years 2014 and 2013:

	<u>2014</u>	<u>2013</u>
Net revenues.....	\$320,000	
Net income.....	75,000	
Accounts receivable	33,000	\$26,000
Inventory	61,000	55,000
Total assets.....	210,000	176,000
Total liabilities	84,000	74,000

Instructions

For 2014, calculate the following ratios to two decimals:

- Asset turnover ratio
- Profit margin ratio
- Rate of return on assets

Solution 11-86

a) Asset turnover ratio = net revenue ÷ average total assets

Average total assets = (\$210,000 + \$176,000) ÷ 2 = \$193,000

ATR = \$320,000 ÷ \$193,000 = 1.66

b) Profit margin ratio = net income ÷ net revenue x 100

PMR = \$75,000 ÷ \$320,000 x 100 = 23.44%

c) Rate of return on assets = net income ÷ average total assets x 100

ROA = \$75,000 ÷ \$193,000 x 100 = 38.86%

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CHAPTER 12

GOODWILL AND OTHER INTANGIBLE ASSETS

SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
Multiple Choice–Conceptual											
1.	1	E	9.	5	H	17.	6	M	25.	8	M
2.	2	M	10.	5	M	18.	6	M	26.	8	H
3.	4	E	11.	5	H	19.	7	H	27.	8	M
4.	4	M	12.	6	M	20.	7	H	28.	8	M
5.	4	M	13.	6	H	21.	7	M	29.	8	H
6.	5	M	14.	6	H	22.	8	H	30.	8	M
7.	5	M	15.	6	H	23.	8	M	31.	8	H
8.	5	M	16.	6	H	24.	8	M	*32.	11	M
Multiple Choice–Computational											
33.	3,6	M	36.	5	M	*39.	11	M	*42.	11	H
34.	4	M	37.	7	M	*40.	11	M	*43.	11	H
35.	4	H	38.	8	H	*41.	11	M	*44.	11	M
Multiple Choice–CPA Adapted											
45.	3,5	M	48.	5	H	51.	6	H			
46.	4	H	49.	6	M	52.	7	M			
47.	5	M	50.	6	H	53.	8	M			
Exercises											
54.	2,4-7	H	57.	3,5,6	H	60.	8	H	*63.	11	H
55.	3	M	58.	3,7	H	61.	8	M	*64.	11	M
56.	3,4,6,8	M	59.	4	H	*62.	11	H			
Problems											
65.	3-5	H	66.	4,7	M						

Note: E = Easy M = Medium H = Hard

*This topic is dealt with in an Appendix to the chapter.

SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
Learning Objective 1											
1.	MC										
Learning Objective 2											
2.	MC	54.	MC								
Learning Objective 3											
33.	MC	55.	Ex	57.	Ex	65.	Pr				
45.	MC	56.	Ex	58.	Ex						
Learning Objective 4											
3.	MC	5.	MC	35.	MC	54.	Ex	59.	Ex	66.	Pr
4.	MC	34.	MC	46.	MC	56.	Ex	65.	Pr		
Learning Objective 5											
6.	MC	9.	MC	36.	MC	48.	MC	65.	Pr		
7.	MC	10.	MC	45.	MC	54.	Ex				
8.	MC	11.	MC	47.	MC	57.	Ex				
Learning Objective 6											
12.	MC	15.	MC	18.	MC	50.	MC	56.	Ex		
13.	MC	16.	MC	33.	MC	51.	MC	57.	Ex		
14.	MC	17.	MC	49.	MC	54.	Ex				
Learning Objective 7											
19.	MC	21.	MC	52.	MC	58.	Ex				
20.	MC	37.	MC	54.	Ex	66.	Pr				
Learning Objective 8											
22.	MC	25.	MC	28.	MC	31.	MC	56.	Ex		
23.	MC	26.	MC	29.	MC	38.	MC	60.	Ex		
24.	MC	27.	MC	30.	MC	53.	MC	61.	Ex		
Learning Objective 11											
*32.	MC	*40.	MC	*42.	MC	*44.	MC	*63.	Ex		
*39.	MC	*41.	MC	*43.	MC	*62.	Ex	*64.	Ex		

Note: MC = Multiple Choice Ex = Exercise Pr = Problem

*This topic is dealt with in an Appendix to the chapter.

CHAPTER STUDY OBJECTIVES

1. *Understand the importance of intangible assets and goodwill from a business perspective.*

We have an economy that is increasingly dominated by information and service providers, and their major assets are often intangible in nature. Identifying and measuring intangible assets tends to be difficult, and as a result many intangibles are not captured on companies' statements of financial position. However, intangible assets and goodwill remain critically important for companies, and are a key focus of standard setters in North America and internationally.

2. *Define and describe the characteristics of intangible assets.* Intangible assets have three characteristics: (1) they are identifiable, (2) they lack physical substance, and (3) they are nonmonetary in nature.

3. *Identify and apply the recognition and measurement requirements for purchased intangible assets.*

A purchased intangible asset is recognized when it is probable that the entity will receive the expected future economic benefits and when its cost can be measured reliably. It is measured initially at cost. When several intangibles, or a combination of intangibles and other assets, are acquired in a business combination, the cost of each intangible asset is its fair value. When acquired in a business combination, the identifiable intangibles are recognized separately from the goodwill component.

4. *Identify and apply the recognition and measurement requirements for internally developed intangible assets.*

No costs are capitalized unless they meet the general recognition criteria concerning future benefits and measurability. Costs incurred in the research phase of developing an intangible asset internally are expensed. Costs incurred in the development phase of a project are also expensed unless the entity can demonstrate that it meets six stringent criteria. These criteria are designed to provide evidence that the asset is technically and financially feasible and that the company has the intent and ability to generate future economic benefits from it. Under ASPE, entities have a choice whether to capitalize or expense costs that meet the six criteria.

5. *Explain how intangible assets are accounted for after initial recognition.* Under ASPE, intangible assets are accounted for using the cost model, whereas IFRS also allows the revaluation model to be used if the asset's fair value is determined in an active market. This is not often used. An intangible with a finite or limited useful life is amortized over its useful life to the entity. Except in unusual and specific circumstances, the residual value is assumed to be zero. The amount to report for amortization expense should reflect the pattern in which the asset is consumed or used up if that pattern can be reliably determined. Otherwise a straight-line approach is used. An intangible with an indefinite life is not amortized until its life is determined to no longer be indefinite. All intangibles are tested for impairment.

6. *Identify and explain the accounting for specific types of intangible assets.* Major types of intangibles include the following: (1) marketing-related intangibles that are used in the marketing or promotion of products or services, (2) customer-related intangibles that result from interactions

with outside parties, (3) artistic-related intangibles that involve ownership rights to such items as plays and literary works, (4) contract related intangibles that represent the value of rights that arise from contractual arrangements, and (5) technology-related intangible assets that relate to innovations or technological advances.

7. Explain and account for impairment of limited life and indefinite-life intangible assets.

Under ASPE, impairment is determined and applied by using the cost recovery impairment model. Impairment for *limited-life* intangible assets is based first on a recoverability test. If the carrying amount is higher than its net recoverable amount (undiscounted), then an impairment loss must be measured and recognized, based on the asset's fair value. No reversals of such losses are permitted. The procedures are the same as for property, plant, and equipment. *Indefinite-life* intangibles use only a impairment model is used. An intangible asset is impaired only if its carrying amount is higher than its recoverable amount. The recoverable amount is defined as the greater of the asset's value in use and its fair value less costs to sell. The impairment loss is the difference between the carrying amount and the recoverable amount, if lower. The loss is reversed subsequently if economic conditions change and the recoverable amount increases. The same approach is used for both limited-life and indefinite-life intangible assets.

8. Explain the concept of goodwill and how it is measured and accounted for after acquisition.

Goodwill is unique because, unlike all other assets, it can be identified only with the business as a whole. It is not an identifiable asset. Goodwill is recorded only when a business is purchased. To calculate goodwill in a 100% acquisition, the fair value of the identifiable assets that are acquired and liabilities that are assumed is compared with the fair value of the consideration transferred for the acquired business. The difference is goodwill. After acquisition, it is not amortized but is regularly assessed for impairment. The goodwill has to be assigned to a cash-generating group or reporting unit and the group is tested for impairment. Under ASPE, a goodwill impairment loss is recognized if the fair value of the asset group is lower than the group's carrying amount, and the loss is equal to the difference. Under IFRS, there is a goodwill impairment loss if the recoverable amount of the cash generating unit is less than its carrying amount. The loss is equal to the difference and is applied to goodwill first. Under **both**, goodwill impairment losses are not reversed.

9. Identify the types of disclosure requirements for intangible assets and goodwill and explain the issues in analyzing these assets.

Disclosures under ASPE are limited because users can access additional information. Under IFRS, significant details are required to be disclosed. The disclosures allow a reader to determine how amounts invested in classes of intangibles (and goodwill) have changed over the period, with substantial information provided when fair values are used, such as under the revaluation model and all impairment calculations. For intangibles that are not amortized, companies must indicate the amount of any impairment losses that have been recognized as well as information about the circumstances that led to the writedown. Goodwill must be separately reported, as are the major classes of intangible assets. Because it is difficult to measure intangibles, some resources, such as intellectual capital and other internally developed intangible assets, do not get captured on the statement of financial position. Other intangibles are recognized, but with a relatively high level of measurement uncertainty. For these reasons and because of recent changes in the accounting policy related to intangibles, care must be taken in the analysis of financial statement information related to earnings and total assets.

10. **Identify differences in accounting between ASPE and IFRS.** There are few, but significant, differences between ASPE and IFRS regarding intangible assets and goodwill. One major difference relates to the accounting treatment for costs incurred in the development phase of internally generated intangible assets that meet the six stringent criteria for capitalization. Under ASPE, entities can choose a policy of whether to capitalize these costs or expense all costs associated with internally generated intangibles. Under IFRS, these costs are capitalized. The other major difference relates to the impairment models applied: the cost recovery model for ASPE, and the rational entity model for IFRS.

MULTIPLE CHOICE—Conceptual

Answer	No.	Description
b	1.	Intangible assets and goodwill
c	2.	Characteristics of intangible assets
d	3.	Recognition of internally developed intangibles
a	4.	Amortization of laboratory building used in R & D
a	5.	Capitalization of certain R & D costs
c	6.	Use of revaluation model
d	7.	Definition of “indefinite life”
a	8.	Amortization method for intangibles
d	9.	Accounting for a change in amortization rate
b	10.	Post-acquisition accounting for intangibles – ASPE
c	11.	Post-acquisition accounting for intangibles – IFRS
b	12.	Accounting for computer software costs
d	13.	Patent amortization
b	14.	Legal fees associated with trademark infringement
c	15.	Accounting for internally developed trademark
d	16.	Example of artistic-related intangible
a	17.	Example of technology-related intangible
a	18.	Accounting for limited life franchises or licenses
b	19.	Impairment of intangibles under ASPE
d	20.	Impairment test for indefinite-life intangibles
a	21.	Rational entity impairment model
d	22.	Impairment of intangibles under IFRS
a	23.	Methods of accounting for goodwill
c	24.	Internally generated goodwill
d	25.	Accounting for purchased goodwill
b	26.	Definition of negative goodwill
a	27.	Goodwill impairment under ASPE
c	28.	Goodwill impairment under IFRS
d	29.	Reversal of goodwill impairment
b	30.	Treatment of goodwill impairment
d	31.	Negative goodwill
d	*32.	Methods of measuring goodwill

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Computational

Answer	No.	Description
a	33.	Calculate total intangible assets.
d	34.	Capitalization of research expense
a	35.	Calculate development costs.
d	36.	Calculate trademark amortization.
b	37.	Calculate amount of worthless patent to be written off.
b	38.	Proper accounting when fair value of net assets acquired exceeds cost.
a	*39.	Calculate goodwill.
b	*40.	Calculate goodwill.
c	*41.	Calculate goodwill.
c	*42.	Calculate goodwill.
b	*43.	Calculate goodwill.
b	*44.	Calculate goodwill.

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—CPA Adapted

Answer	No.	Description
c	45.	Capitalization of legal fees
b	46.	Calculate R & D expense.
b	47.	Calculate amortization of a trademark.
a	48.	Calculate amortization of a trademark.
c	49.	Calculate patent costs to capitalize.
b	50.	Valuation of patent exchanged for an investment in shares
d	51.	Valuation of copyright exchanged for common shares
c	52.	Calculate impairment loss.
d	53.	Capitalization of goodwill costs

EXERCISES

Item	Description
E12-54	Definitions
E12-55	Intangible assets theory
E12-56	Terminology
E12-57	Carrying value of patent
E12-58	Intangible asset impairment
E12-59	Criteria for capitalization of development costs
E12-60	Alternative treatments of goodwill after recognition
E12-61	Acquisition of tangible and intangible assets
*E12-62	Calculation of goodwill
*E12-63	Goodwill calculation
*E12-64	Calculate goodwill.

PROBLEMS

Item	Description
P12-65	Intangible assets
P12-66	Journal entries for impairment of intangible assets

*This topic is dealt with in an Appendix to the chapter.

MULTIPLE CHOICE—Conceptual

1. Which of the following is NOT generally true of intangible assets and goodwill?
 - a. Many major public companies have significant amounts of intangible assets and goodwill listed on their balance sheets.
 - b. The major assets of today's information and service providers are likely to be tangible.
 - c. The major assets of today's information and service providers are likely to be intangible.
 - d. Since identifying and measuring intangibles and goodwill is often difficult, they are not always reported on the balance sheet.

2. Which of the following is NOT a characteristic of intangible assets?
 - a. They must be individually identifiable.
 - b. They are non-monetary in nature.
 - c. They are monetary in nature.
 - d. They lack physical substance.

3. When determining whether an internally developed intangible asset should be recognized, the process of generating the intangible is usually broken down into the
 - a. research and financing elements.
 - b. acquisition and disposal stages.
 - c. exploitation and disposal stages.
 - d. research and development phases.

4. If a company constructs a laboratory building to be used as a research and development facility, the cost of the laboratory building is matched against earnings as
 - a. amortization deducted as part of research and development costs.
 - b. research and development expense in the period(s) of construction.
 - c. amortization or immediate write-off, depending on company policy.
 - d. an expense at such time as productive research and development has been obtained from the facility.

5. Which of the following research and development related costs should be capitalized and amortized over current and future periods?
 - a. research and development general laboratory building which can be put to alternative uses in the future
 - b. inventory used for a specific research project
 - c. administrative salaries allocated to research and development
 - d. research findings purchased from another company to aid a particular research project currently in process

6. The reason that the revaluation model is NOT widely used for measuring intangible assets after initial recognition is that
 - a. it is not allowed under IFRS.
 - b. the cost method is easier to use.

- c. it can be applied only to intangible assets with a fair value determined in an active market.
 - d. it requires an extensive internal investigation to determine fair value.
7. An “indefinite life” for an intangible asset means that
- a. the asset will last forever.
 - b. unlimited amortization may be recorded for the asset.
 - c. amortization is only recorded if future economic benefits can be determined.
 - d. there appears to be no foreseeable limit to how long the asset will generate positive future cash flows.
8. If the pattern in which an intangible asset's benefits will be used up CANNOT be determined, the amortization method most likely to be used is
- a. straight-line.
 - b. capital cost allowance.
 - c. units of production.
 - d. double declining-balance.
9. A change in the amortization rate for an intangible asset should be accounted for as a
- a. change in accounting principle.
 - b. change in reporting entity.
 - c. correction of an error.
 - d. change in accounting estimate.
10. Under ASPE, which of the following statements *best* describes the accounting for intangible assets *after* acquisition?
- a. They may be accounted for under the cost model *or* the revaluation model.
 - b. They should be accounted for under the cost model.
 - c. They should be accounted for under the revaluation model.
 - d. They must be amortized over a very short period, usually less than five years.
11. Under IFRS, which of the following statements *best* describes the accounting for intangible assets *after* acquisition?
- a. They may be accounted for under either the cost model or the revaluation model.
 - b. They should be accounted for under the cost model.
 - c. They should be accounted for under the revaluation model if an active market exists for the asset.
 - d. They should always be accounted for under the revaluation model.
12. The proper accounting for the costs incurred in creating computer software products that are to be sold, leased, or otherwise marketed to external parties, is to
- a. capitalize all costs until the software is sold to external parties.
 - b. charge research and development expense when incurred until technological feasibility has been established for the product.
 - c. charge research and development expense only if the computer software has alternative future uses.

- d. capitalize all costs as incurred until a detailed program design or working model is created.
13. The cost of purchasing patent rights for a product that might otherwise have seriously competed with one of the purchaser's patented products should be
- expensed in the current period.
 - amortized over the legal life of the purchased patent.
 - added to factory overhead and allocated to production of the purchaser's product.
 - amortized over the remaining estimated life of the original patent covering the product whose market would have been impaired by competition from the newly patented product.
14. This year, Bentine Ltd. went to court and successfully defended its trade-marked product, "Hot Gum," from infringement by a competitor. Legal costs of this defence should be charged to
- Trademarks and amortized over the legal life of the trademark.
 - Trademarks and amortized over the same period of time as the "Hot Gum" trademark.
 - Legal Expense and amortized over five years or less.
 - Legal Expense of the period.
15. If a trademark is developed by the enterprise itself, the costs should be
- capitalized but not amortized.
 - capitalized only if future benefits are reasonably assured.
 - capitalized, but only from the point in time when all six capitalization criteria are met in the development phase.
 - capitalized as soon as the development phase starts.
16. A copyright is an example of a(n)
- customer-related intangible asset.
 - marketing-related intangible asset.
 - contract-based intangible asset.
 - artistic-related intangible asset.
17. A patent is an example of a(n)
- technology-based intangible asset.
 - marketing-related intangible asset.
 - contract-based intangible asset.
 - artistic-related intangible asset.
18. A franchise or licence with a limited life is
- amortized over the lesser of its legal or useful life.
 - expensed.
 - not amortized.
 - always amortized over its legal life.
19. Under ASPE, to determine if there is an impairment loss, compare the
- fair value of the identifiable assets to the book value of the assets.

- b. fair value of the reporting unit to the carrying value of the reporting unit.
 - c. imputed current fair value of the assets with the carrying value of the assets.
 - d. imputed carrying value of the assets with the fair value of the assets.
20. Which of the following is the impairment test for indefinite-life intangibles?
- a. recoverability test and then fair value test
 - b. fair value test and then recoverability test
 - c. recoverability test
 - d. fair value test
21. Which of the following is correct regarding the rational entity impairment model?
- a. For limited-life intangibles, IFRS requires that the rational entity impairment model be applied.
 - b. For limited-life intangibles, ASPE requires that the rational entity impairment model be applied.
 - c. For indefinite-life intangibles, ASPE requires that the rational entity impairment model be applied.
 - d. Neither ASPE nor IFRS allow the use of the rational entity impairment model.
22. Under IFRS, to determine if there is an impairment loss, compare the
- a. fair value of the identifiable assets to the book value of the assets.
 - b. fair value of the reporting unit to the carrying value of the reporting unit.
 - c. imputed current fair value of goodwill with the carrying value of goodwill.
 - d. carrying amount of the CGU with the recoverable amount.
23. Goodwill may be
- a. capitalized only when purchased.
 - b. capitalized either when purchased or created internally.
 - c. capitalized only when created internally.
 - d. written off directly to retained earnings.
24. Internally generated goodwill
- a. is not possible.
 - b. may be capitalized or expensed.
 - c. is not capitalized.
 - d. is capitalized but not amortized.
25. Purchased goodwill should be
- a. expensed as soon as possible against retained earnings.
 - b. expensed as soon as possible to other comprehensive income.
 - c. amortized over the period benefited, but not more than 40 years.
 - d. not expensed or amortized, but rather reduced only if impairment occurs.
26. Negative goodwill arises when

- a. the book value of identifiable net assets acquired exceeds the purchase price.
- b. the fair value of identifiable net assets acquired exceeds the purchase price.
- c. the fair value of identifiable net assets acquired is less than the purchase price.
- d. the fair value of identifiable net assets acquired exceeds the book value.

27. Under ASPE, which of the following statements *best* describes when goodwill should be tested for impairment?

- a. Goodwill should be tested for impairment when events or changes in circumstances indicate that impairment may have occurred.
- b. Goodwill should be tested annually for impairment regardless of the circumstances.
- c. Goodwill should be tested for impairment annually *and* whenever events or changes in circumstance indicate that impairment may have occurred.
- d. Goodwill should only be tested for impairment when the company follows a policy to amortize its goodwill.

28. Under IFRS, which of the following statements *best* describes when goodwill should be tested for impairment?

- a. Goodwill should be tested for impairment when events or changes in circumstance indicate that impairment may have occurred.
- b. Goodwill should be tested annually for impairment regardless of the circumstances.
- c. Goodwill should be tested for impairment annually *and* whenever events or changes in circumstance indicate that impairment may have occurred.
- d. Goodwill should only be tested for impairment when the company follows a policy to amortize its goodwill.

29. Which of the following statements *best* describes when previously recognized goodwill impairment may be reversed?

- a. Reversals are permitted under both ASPE and IFRS.
- b. Reversals are permitted under ASPE but not IFRS.
- c. Reversals are permitted under IFRS but not ASPE.
- d. Reversals are *not* permitted under either IFRS or ASPE.

30. Goodwill was purchased when a business was acquired. When it is determined that the goodwill is impaired, the credit is usually made to

- a. the Goodwill account.
- b. an Accumulated Impairment Loss account.
- c. a Deferred Credit account.
- d. a shareholders' equity account.

31. If the fair value of the net assets acquired in a business combination is greater than the purchase price, the difference is called

- a. organizational costs.
- b. contributed surplus.
- c. purchased goodwill.
- d. negative goodwill or bargain purchase.

- *32. Which of the following is NOT a method of calculating goodwill?
- a. excess earnings approach
 - b. total earnings approach
 - c. discounted free cash flow method
 - d. undiscounted free cash flow method

Multiple Choice Answers—Conceptual

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	b	7.	d	13.	d	19.	b	25.	d	31.	d
2.	c	8.	a	14.	b	20.	d	26.	b	*32.	d
3.	d	9.	d	15.	c	21.	a	27.	a		
4.	a	10.	b	16.	d	22.	d	28.	c		
5.	a	11.	c	17.	a	23.	a	29.	d		
6.	c	12.	b	18.	a	24.	c	30.	b		

MULTIPLE CHOICE—Computational

33. At December 31, 2014, Duluth Corp.'s general ledger includes the following account balances:

Copyrights.....	\$ 50,000
Deposits with advertising agency (will be used to promote goodwill)	32,000
Discount on bonds payable	72,700
Excess of cost over fair value of identifiable net assets of acquired subsidiary	578,000
Trademarks.....	102,000

In the preparation of Duluth's balance sheet as of December 31, 2014, what should be reported as total intangible assets?

- a. \$152,000
- b. \$730,000
- c. \$762,000
- d. \$802,700

34. In 2014, Laredo Corporation incurred research costs as follows:

Materials and supplies.....	\$120,000
Personnel.....	130,000
Indirect costs—allocated	<u>160,000</u>
	<u>\$410,000</u>

These costs relate to a product that Laredo expects to market in 2015. It is estimated that these costs will be recouped by December 31, 2017. How much of these costs could be capitalized in 2014?

- a. \$410,000
- b. \$250,000
- c. \$160,000
- d. \$0

35. Albany Inc. incurred the following costs during the year ended December 31, 2014:

Laboratory research aimed at discovery of new knowledge	\$240,000
Design of new products involving new technology.....	87,000
Testing of new products	58,000
Construction of research and development facilities.....	360,000

Assuming the 6 specific conditions have been demonstrated, the total amount to be classified as development costs (either deferred or capitalized) in 2014 is

- a. \$145,000.
- b. \$240,000.
- c. \$327,000.
- d. \$600,000.

36. On January 2, 2014, Sacramento Corp. bought a trademark from Francisco Inc. for \$150,000. An independent research company estimated that the remaining useful life of the trademark was 30 years. At this time, the trademark's net book value in Francisco's records was \$210,000. Because the trademark had a demonstrated limited life beyond 20 years, Sacramento decided to

amortize the trademark over the maximum period, straight-line with no residual. In Sacramento's (calendar) 2014 income statement, what amount should be reported as amortization expense for this trademark?

- a. \$7,500
- b. \$7,000
- c. \$6,000
- d. \$5,000

37. In January, 2009, Tampa Corp. purchased a patent for a new consumer product for \$900,000. At the time of purchase, the patent was valid for fifteen years. Due to the competitive nature of the product, however, the patent was estimated to have a useful life of only ten years. During 2014, the product was permanently removed from the market because of a potential health hazard. What amount should Tampa recognize as an impairment loss for calendar 2014, assuming amortization has been recorded annually using the straight-line method with no residual value?

- a. \$600,000
- b. \$450,000
- c. \$90,000
- d. \$60,000

38. During 2014, Spokane Ltd. purchased the net assets of Tacoma Corp. for \$635,000. On the date of the transaction, Tacoma reported \$200,000 in liabilities. As well, the fair value of Tacoma's assets were:

Current assets.....	\$ 360,000
Noncurrent assets.....	<u>840,000</u>
	\$1,200,000

How should the difference between the fair value of the net assets acquired and the cost be accounted for by Spokane?

- a. The difference should be credited to retained earnings.
- b. The difference should be recognized as a gain in net income.
- c. The noncurrent assets should be reduced appropriately.
- d. The difference should be prorated between the current and the noncurrent assets.

Use the following information for questions *39–*40.

Casper Corp. is planning to acquire a controlling interest in the outstanding shares of Frosty Inc. for \$9.2 million in cash.

*39. Assuming the fair value of Frosty's net assets is \$10.2 million, and Casper acquires a 75% share, goodwill can be calculated as

- a. \$1,550,000.
- b. \$1,243,000.
- c. \$1,000,000.
- d. \$750,000.

*40. Assuming the fair value of Frosty's net assets is \$12.5 million, and Casper acquires a 75% share, goodwill can be calculated as

- a. \$375,000.
- b. \$175,000 negative.
- c. \$175,000.
- d. \$ 0.

*41. Frosty Corp.'s average annual net income is \$75,000 above the average for Frosty's industry. Casper is interested in purchased Frosty. Assuming Casper estimates goodwill by capitalizing excess earnings at 14%, the estimated goodwill (to the nearest dollar) is

- a. \$1,050,000.
- b. \$954,333.
- c. \$535,714.
- d. \$ 0.

*42. The owners of Dallas Electronics Store are contemplating selling the business. The cumulative earnings for the past 5 years totalled \$900,000, including a gain on discontinued operations of \$30,000. The annual earnings based on an average rate of return on investment for this industry would have been \$138,000. If excess earnings are to be capitalized at 15%, then implied goodwill should be

- a. \$210,000.
- b. \$280,000.
- c. \$240,000.
- d. \$870,000.

Use the following information for questions *43–*44.

Jeremiah Inc. is being targeted for acquisition by Argo Corporation. As an analyst for Argo, you are asked to determine the goodwill that, pending various assumptions, may be inherent in this potential transaction.

The available information relating to Jeremiah includes the following:

Current net assets: \$5.1 million
Expected return on net assets for industry: 10%

Reported net income for the previous six consecutive years:

<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
2009	\$710,000	2012	\$745,000
2010	\$680,000	2013	\$815,000
2011	\$980,000	2014	\$835,000

Net income for 2011 included a \$200,000 gain from the sale of a discontinued operation.

*43. Estimated goodwill by capitalizing average excess earnings at 14% is

- a. \$2,029,762.
- b. \$1,791,667.
- c. \$1,654,331.
- d. \$ 760,833.

*44. Assuming that excess earnings are expected to continue for 8 years, and ignoring the time value of money, estimated goodwill is

- a. \$2,273,000.
- b. \$2,006,667.
- c. \$1,854,333.
- d. \$1,531,733

Multiple Choice Answers—Computational

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
33.	a	36.	d	*39.	a	*42.	c
34.	d	37.	b	*40.	b	*43.	b
35.	a	38.	b	*41.	c	*44.	b

DERIVATIONS—Computational

No.	Answer	Derivation
33.	a	$\$50,000 + \$102,000 = \$152,000$
34.	d	\$0. Research costs must be expensed
35.	a	$\$87,000 + \$58,000 = \$145,000$
36.	d	$\$150,000 / 30 = \$5,000$
37.	b	$(\$900,000 \div 10) \times 5 = \$450,000$ amortization already recorded carrying value is $\$900,000 - \$450,000 = \$450,000$ impairment is $\$0 - \$450,000 = \$450,000$
38.	b	Conceptual
*39.	a	$\$9,200,000 - (75\% \times \$10,200,000) = \$1,550,000$
*40.	b	$\$9,200,000 - (75\% \times \$12,500,000) = \$175,000$ negative
*41.	c	$\$75,000 / 0.14 = \$535,714$ $\$900,000 - \$30,000$
*42.	c	$\left(\frac{\quad}{5} \right) - \$138,000 = \$36,000$ $\frac{\$36,000}{.15} = \$240,000.$
*43.	b	$\$710,000 + \$680,000 + \$980,000 + \$745,000 + \$815,000 + \$835,000 = \$4,765,000$ $[(\$4,765,000 - \$200,000) \div 6] - (\$5,100,000 \times .10) = \$250,833$ $\$250,833 \div .14 = \$1,791,667$
*44.	b	$\$250,833 \times 8 = \$2,006,667$

MULTIPLE CHOICE—CPA Adapted

45. Which of the following legal fees should be capitalized?

	<u>Legal fees to obtain a franchise</u>	<u>Legal fees to successfully defend a trademark</u>
a.	No	No
b.	No	Yes
c.	Yes	Yes
d.	Yes	No

46. During 2014, Pomona Inc. incurred the following costs:

Research Expense for process alternatives	\$360,000
Routine design of tools, jigs, moulds, and dies	250,000
Modification of the formulation of a process	610,000
Development services performed by Chicago Corp. for Pomona ..	325,000

Assuming the 6 specific conditions have been demonstrated, in 2014, Pomona Corp. would report development costs of

- a. \$1,545,000.
- b. \$1,295,000.
- c. \$935,000.
- d. \$610,000.

47. On January 1, 2014, Boston Corp. bought a trademark from Yarmouth Corp. for \$160,000. An independent consultant retained by Boston estimated that the remaining useful life is 50 years. The trademark's carrying value on Yarmouth's books was \$61,000. Boston decided to write off the trademark over the maximum period allowed. How much should be amortized for the year ended December 31, 2014?

- a. \$1,220
- b. \$3,200
- c. \$4,000
- d. \$8,000

48. On January 1, 2010, Richmond Corp. purchased a trademark for \$400,000, which had an estimated useful life of 16 years. In January 2014, Richmond paid \$60,000 for legal fees in a successful defence of the trademark. The amortization expense for this asset for calendar 2014, should be

- a. \$30,000.
- b. \$28,750.
- c. \$25,000.
- d. \$0.

49. Bremerton Corp. incurred \$160,000 of basic research and \$50,000 of development costs to develop a product for which a patent was granted on January 2, 2009. Legal fees and other costs associated with registration of the patent totalled \$60,000. On March 31, 2014, Bremerton paid

\$90,000 for legal fees in a successful defence of the patent. The total amount capitalized for the patent through March 31, 2014 should be

- a. \$360,000.
- b. \$270,000.
- c. \$200,000.
- d. \$150,000.

50. On June 30, 2014, Helena Ltd. exchanged 3,000 Butte Corp. common shares for a patent owned by Montana Corp. The Butte shares were acquired in 2012 for \$160,000. At the exchange date, Butte common shares have a fair value of \$90 per share, and the patent had a carrying value of \$320,000 on Montana's books. Helena should record the patent at

- a. \$320,000.
- b. \$270,000.
- c. \$180,000.
- d. \$160,000.

51. On May 5, 2014, Miami Corp. exchanged 5,000 of its common shares for a copyright owned by Lauderdale Ltd. At this date, Miami's common shares were quoted at \$28 per share, and the copyright had a carrying value of \$130,000 on Lauderdale's books. Miami should record the copyright at

- a. \$110,000.
- b. \$120,000.
- c. \$130,000.
- d. \$140,000.

52. On January 2, 2011, Fresno Corp. purchased a patent for a new consumer product for \$45,000. At the time of purchase, the patent was valid for fifteen years. Due to the competitive nature of the product, however, the patent was estimated to have a useful life of only ten years. During 2014, the product was permanently removed from the market because of a potential health hazard. What amount should Fresno recognize as an impairment loss for calendar 2014, assuming amortization has been recorded annually using the straight-line method with no residual value?

- a. \$4,500.
- b. \$27,000.
- c. \$31,500.
- d. \$36,000.

53. Which of the following costs of goodwill should be capitalized?

	Costs of goodwill from a business combination accounted for as a purchase	Costs of developing goodwill internally
a.	No	No
b.	No	Yes
c.	Yes	Yes
d.	Yes	No

Multiple Choice Answers—CPA Adapted

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
45.	c	47.	b	49.	c	51.	d	53.	d		
46.	b	48.	a	50.	b	52.	c				

DERIVATIONS—CPA Adapted

No.	Answer	Derivation
45.	c	Conceptual
46.	b	$\$360,000 + \$610,000 + \$325,000 = \$1,295,000$
47.	b	$\$160,000 / 50 = \$3,200$
48.	a	$(\$400,000 \div 16) + (\$60,000 \div 12) = \$30,000$
49.	c	$\$60,000 + \$90,000 + \$50,000 = \$200,000$
50.	b	$\$3,000 \times \$90 = \$270,000$, since do not have a reliable fair value of patent received
51.	d	$5,000 \times \$28 = \$140,000$, since do not have a reliable fair value of copyright received
52.	c	$(\$45,000 \div 10) \times 3 = \$13,500$ amortization already recorded carrying value is $\$45,000 - \$13,500 = \$31,500$ impairment is $\$0 - \$31,500 = \$31,500$
53.	d	Conceptual

EXERCISES

Ex. 12-54 Definitions

Provide clear, concise answers for the following:

1. What are intangible assets?
2. How are research costs accounted for?
3. How are development costs accounted for?
4. What are the two models that are used to measure intangible assets after initial acquisition?
5. What are the factors that should be considered when determining the useful life of limited life intangible assets?
6. What are the major categories of intangible assets?
7. What are the two models that are used to account for the impairment of intangible assets?

Solution 12-54

1. Intangible assets are assets that are individually identifiable, lack physical substance, and are non-monetary in nature.
2. Research costs do not, by definition, meet the criteria for recognition as an asset. As a result, they must be recognized as expenses when they are incurred.
3. Development costs may be recognized as intangible assets, provided that future economic benefits can be demonstrated. That demonstration includes the satisfaction of six specific conditions.
4. The models are the cost model and the revaluation model.
5. Factors to be considered are the expected use of the asset; legal, contractual or regulatory provisions; potential obsolescence, demand, competition and other economic factors; and the expected expenditures for its maintenance.
6. The major categories are marketing-related, customer-related, artistic-related, contract-based and technology-based intangible assets.
7. The two models are the cost recovery impairment model and the rational entity impairment model. The first is used for ASPE and the latter is used in IFRS.

Ex. 12-55 Intangible assets theory

It has been argued on the grounds of conservatism that all intangible assets should be written off immediately after acquisition. Discuss the accounting arguments against this treatment.

Solution 12-55

Intangible assets may have future revenue producing ability, like tangible assets. The costs, therefore, should be capitalized, deferred, and matched as closely as possible against those revenues. Definite-life intangible assets should be amortized over the lesser of their useful and legal lives; indefinite-life intangibles are not amortized. Both types of intangibles should be tested regularly for impairment.

Ex. 12-56 Terminology

In the space provided at right, write the word or phrase that is defined or indicated.

- | | |
|---|----------|
| 1. In a business combination, the difference between the fair value of the consideration given and the fair values assigned to the identifiable net assets. | 1. _____ |
| 2. When identifiable net assets are acquired at a price that is below their fair value. | 2. _____ |
| 3. A lease that includes terms that are more favourable than the current market terms for a comparable lease. | 3. _____ |
| 4. Planned investigation undertaken with the hope of gaining new scientific or technical knowledge and understanding. | 4. _____ |
| 5. Translation of research findings or other knowledge into a plan or design for new or substantially improved materials, products, processes, systems or services. | 5. _____ |
| 6. A database including customer names, contact information, order history, and demographic information | 6. _____ |
| 7. An exclusive right that is granted for the life of the creator plus fifty years. | 7. _____ |

Solution 12-56

1. Goodwill
2. Negative goodwill or bargain purchase
3. A favourable lease
4. Research
5. Development
6. Customer list
7. Copyright

Ex. 12-57 Carrying value of patent

On July 1, 2011, Bermuda Corp. purchased a patent from Antigua Ltd. for \$60,000. On July 1, 2014, Bermuda paid \$12,000 for successful litigation in defence of the patent. Bermuda estimates

that the useful life of the patent will be 15 years from the date of acquisition.

Instructions

Prepare a calculation of the carrying value of the patent at December 31, 2014. Label all calculations.

Solution 12-57

Cost of patent.....	\$60,000
Amortization Jul 1/11 to Jul 1/14 ($\$60,000 \div 15$) $\times 3$	<u>(12,000)</u>
Carrying value at Jul 1/14.....	48,000
Add cost of successful defence	<u>12,000</u>
Carrying value.....	60,000
Amortization Jul 1 to Dec 31/14 [$\$60,000 \div (15 - 3)$] $\times 1/2$	<u>(2,500)</u>
Carrying value at Dec 31/14.....	<u>\$57,500</u>

Ex. 12-58 Intangible asset impairment

Trinidad Inc. is a private corporation following ASPE. On Jan 2, 2014 they purchased a limited-life licence for \$50,000. This licence has a ten year life, and is not renewable. Straight-line amortization will be used. At December 31, 2015, Trinidad estimates that the undiscounted net cash flows of this license is \$38,000, and the fair value (discounted net future cash flows) of this licence is \$32,000.

Instructions

- Calculate the amount of impairment (if any) for this asset.
- Prepare the adjusting entry required to reflect the impairment.

Solution 12-58

- Carrying value at Dec 31/15 = $\$50,000 - [(\$50,000/10) \times 2\text{years}] = \$40,000$
Recoverability test: $\$40,000 - \$38,000 = \$2,000$. Therefore, the asset is impaired.
Impairment is $\$40,000 - \$32,000 = \$8,000$
- AJE required at Dec 31/15

Impairment Loss—Licence	8,000	
Accumulated Impairment Losses, Licence.....		8,000

Ex. 12-59 Criteria for capitalization of development costs

List the criteria that must be met before development costs of a project may be capitalized.

Solution 12-59

The six criteria that must be met are:

- Technical feasibility of completing the intangible asset,
- The entity's intention to complete it for use or sale,
- The entity's ability to use or sell it,
- Availability of technical, financial, and other resources needed to complete, use or sell it,
- The way in which the future economic benefits will be received; including the existence of a market for the asset if it will be sold, or its usefulness to the entity if it will be used internally,
- The ability to reliably measure the costs associated with and attributed to the intangible asset

during its development.

Ex. 12-60 Alternative treatments of goodwill after recognition

Once goodwill has been recognized in the accounts there has been much disagreement over how it should be treated in subsequent periods. Discuss the alternative treatment approaches.

Solution 12-60

1. Charge goodwill off immediately to shareholders' equity. Goodwill is not an asset that is separable from the business itself and therefore should not be recognized as a separate asset. In addition, immediate expensing would be consistent with the expensing of costs of internally generated goodwill. As well, there is no rational method to amortize goodwill, due to the many uncertainties involved; therefore, financial statements will be more reliable if it is expensed.
2. Amortize goodwill over its useful life. Goodwill at the time of purchase erodes in value over time and therefore it should be charged to income over the estimated period in which it is expected to benefit the business.
3. Retain goodwill indefinitely at cost (i.e., do not amortize), unless impairment occurs. Current and future expenses help to maintain existing goodwill; therefore, it can have an indefinite life. Amortization of goodwill is entirely arbitrary and leads to distortions of net income.

Ex. 12-61 Acquisition of tangible and intangible assets

Jamaica Manufacturing Corp. decided to expand further by purchasing the net assets of Kingston Corp. Kingston's statement of financial position at December 31, 2014 is:

KINGSTON CORP.
Statement of Financial Position
December 31, 2014

<u>Assets</u>		<u>Liabilities and equities</u>	
Cash	\$ 210,000	Accounts payable	\$ 325,000
Receivables	450,000	Common shares	800,000
Inventory	275,000	Retained earnings	<u>835,000</u>
Plant assets (net)	<u>1,025,000</u>		
Total assets	<u>\$1,960,000</u>	Total equities	<u>\$1,960,000</u>

An appraisal, agreed to by both parties, indicated that the fair value of the inventory was \$320,000 and the fair value of the plant assets was \$1,225,000. The fair value of the receivables and payables is equal to the amount reported on the balance sheet. The agreed purchase price was \$3 million, and this amount was paid in cash to the owners of Kingston Corp.

Instructions

Calculate the amount of goodwill (if any) implied in the purchase price of \$3 million. Show calculations.

Solution 12-61

Purchase price	\$3,000,000
Less tangible net assets acquired:	

Cash	\$210,000	
Receivables (FV).....	450,000	
Inventory (FV)	320,000	
Plant assets (FV).....	1,225,000	
Less accounts payable (FV).....	<u>(325,000)</u>	
Total fair market value of tangible net assets acquired		<u>1,880,000</u>
Implied Goodwill.....		<u>\$1,120,000</u>

***Ex. 12-62** Calculation of goodwill

Grenada Corp. expects excess earnings of \$48,000 for each of the next eight years. Assume half of the excess is earned at the end of each six months. Calculate the estimated goodwill if it is based on the present value of excess earnings discounted at 10%, compounded semi-annually.

***Solution 12-62**

Present value of \$24,000 for 16 periods at 5%; $10.83777 \times \$24,000 = \$260,106$.

OR 16 N 5 I 24000 PMT CPT PV = \$260,106

***Ex. 12-63** Goodwill calculation

The net assets of Hispaniola Ltd., excluding goodwill, have a total fair value of \$4 million, and earnings for the last five years total \$2.2 million. Included in the latter figure are nonrecurring gains and losses of \$200,000 and \$140,000 respectively, as well as sales commissions of \$25,000. A 10% return on identifiable net assets is considered normal for the industry and annual excess earnings are to be capitalized at 16% in arriving at goodwill in developing a sales price for the business.

Instructions

Calculate the company's goodwill. Label all calculations.

***Solution 12-63**

Goodwill is \$175,000.

Earnings for 5 years	\$2,200,000
Less nonrecurring gains	<u>200,000</u>
	2,000,000
Add nonrecurring losses.....	<u>140,000</u>
Adjusted 5-year total earnings.....	<u>\$2,140,000</u>
 Average earnings ($\$2,140,000 \div 5$)	\$428,000
Normal earnings ($\$4,000,000 \times .10$).....	<u>400,000</u>
Excess annual earnings	<u>\$ 28,000</u>
 Excess earnings capitalized at 16% ($\$28,000 \div .16$)	<u>\$175,000</u>

***Ex. 12-64** Calculation of goodwill

The owners of Paraguay Corp. are planning to sell the business. The cumulative earnings for the past five years are \$600,000 including nonrecurring losses of \$100,000. The annual earnings based on an average rate of return for this industry would be \$80,000. If excess earnings are to be

capitalized at 12%, what is the implied goodwill?

***Solution 12-64**

$$(\$600,000 + \$100,000) \div 5 = \$140,000$$

Average earnings.....	\$ 140,000
Normal earnings.....	<u>80,000</u>
Excess earnings	<u>\$ 60,000</u>
 Goodwill (\$60,000 ÷ .12)	 <u>\$500,000</u>

PROBLEMS

Pr. 12-65 Intangible assets

The following transactions involving intangible assets of Falkland Corporation occurred on or near December 31, 2014. Complete the chart below by writing the journal entr(ies) needed at that date to record the transaction, and at December 31, 2015 to record any resultant amortization. If no entry is required at a particular date, write "none needed."

	<u>On Date of Transaction</u>	<u>On December 31, 2015</u>
1. Falkland paid Jericho Company \$200,000 for the exclusive right to market a particular product, using the Jericho name and logo in promotional material. The franchise runs for as long as Falkland is in business. Falkland decided to amortize the franchise over 25 years.		
2. Falkland spent \$300,000 developing a new manufacturing process and has applied for a patent. It believes that its application will be successful and that the process will be successfully implemented and used for 10 years.		
3. In January, 2015, Falkland's application for a patent (#2 above) was granted. Legal and registration costs incurred were \$35,000. The patent runs for 17 years from the grant date. The manufacturing process will be useful to Falkland for 10 years.		
4. Falkland incurred \$90,000 in successfully defending another of its patents in an infringement suit. The patent expires during December, 2015.		
5. Falkland incurred \$200,000 in an unsuccessful patent defence. As a result of the adverse verdict, the patent, with a remaining unamortized cost of \$99,000, is deemed worthless.		
6. Falkland paid Mexico Laboratories \$52,000 for research work performed by Mexico under contract for Falkland.		

Solution 12-65

<u>On Date of Transaction</u>	<u>On December 31, 2015</u>
1. Franchise 200,000	1. Franchise Amort. Exp. 8,000

	Cash	200,000		Acc Amortization Franchise 8,000
2.	Deferred		2.	Devel. Cost
	Devel. Costs.....	300,000		Amortization Expense 30,000
	Cash.....	300,000		Deferred
	.....			Devel. Costs 30,000
3.	Patents.....	35,000	3.	Patent Amortization
	Cash.....	35,000		Expense 3,500
				Acc Amortization Patents 3,500
4.	Patents.....	90,000	4.	Patent Amortization
	Cash.....	90,000		Expense 22,500
				Acc Amortization Patents 22,500
5.	Legal Fees Exp. ...	200,000	5.	"None needed."
	Cash.....	200,000		
	Loss on Impair. of			
	Patent	99,000		
	Acc impairment losses	99,000		
6.	Research Expense	52,000	6.	"None needed."
	Cash.....	52,000		

Pr. 12-66 Journal entries for impairment of intangible assets

Patagonia Corp., a large, privately held company is preparing its year-end entries. As senior accountant, you have been asked to prepare the entries related to the company's intangible assets.

Patagonia currently carries the following intangible assets* on its balance sheet:

Trade name	\$125,000	net of accumulated amortization of \$75,000
Patent	\$126,000	net of accumulated amortization of \$54,000
Other intangibles	\$340,000	no amortization recorded
Trademark	\$120,000	net of accumulated amortization of \$30,000
	<u>\$711,000</u>	

*Current year amortization has already been recorded.

The following additional information is available:

After recent negative press releases relating to the technology that underlies the patent, the company has carried out a recoverability test that indicates that the patent's carrying value is higher than its undiscounted future net cash flows. The patent's fair value has now been estimated at \$84,000.

The item classified as "Other intangibles" relates to research costs that the company incurred in the current year. According to a statement from the company's President, *"the costs were incurred with the intention to gain new knowledge. At the moment we don't know exactly how to use this information, but we are confident that eventually we will be able to use it."*

Instructions

Based on the information provided, prepare all journal entries that are required to adjust Patagonia's records as would be required under ASPE.

Solution 12-66

To record impairment loss on patent:

Impairment loss, patent	42,000	
Accumulated impairment losses, patent		42,000
$\$126,000 - \$84,000 = \$42,000$		

To expense research costs that had been incorrectly capitalized:

Research expense	340,000	
Other intangible assets.....		340,000

According to the information provided, these costs appear to be research costs, rather than development costs (that might qualify for capitalization). Research costs, by definition, do not meet the criteria that are required to recognize these costs as an asset. As a result, they should be expensed.

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