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YORK UNIVERSITY
FACULTY OF LIBERAL ARTS & PROFESSIONAL STUDIES
DEPARTMENT OF ECONOMICS

FALL 2009

ECONOMICS 1000 3.0G: INTRODUCTION TO MICROECONOMICS

ANSWERS TO TEST #1
TEST #1
VERSION A

October 7, 2009
Course Director: Dr. John Paschakis
TOTAL WORTH: 25%

STUDENT NAME:

STUDENT NUMBER:

INSTRUCTIONS:

- This examination consists of forty five (45) multiple choice questions. There is only one correct answer. No penalty for wrong answers.
- Please answer all questions by marking the appropriate spaces on the computerized answer sheet. Use HB pencil only.
- Time allowed: 75 minutes.

MULTIPLE-CHOICE TEST QUESTIONS

E. EFFICIENCY AND EQUITY

1. What method of resource allocations depends on willingness-to-pay and affordability-to-pay of potential users?

A. Command system.
B. Lotteries.
C. Market price.
D. First-come, first-served.
E. All of the above.

C

2. A used truck has a sticker price of \$21,000. Arthur decided that he would pay no more than \$19,500 for this truck. He actually bought the truck for \$19,250. Arthur therefore has obtained a consumer surplus of

A. \$21,000.
B. \$19,500.
C. \$19,250.
D. \$1,750.
E. None of the above.

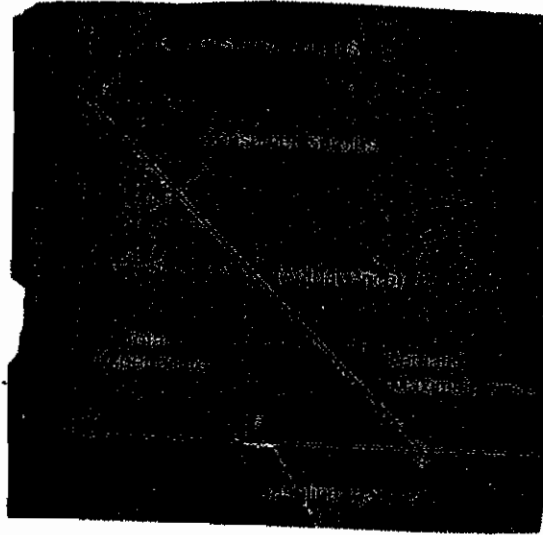
$$\begin{array}{r} 19,500 \\ 19,250 \\ \hline = 250 \end{array}$$

E

3. Refer to the Figure below. Assume the market price of gasoline is \$2 per gallon. If the buyers purchase 4 gallons at this price, the consumer surplus is

A. \$2.
B. \$5.
C. \$6.
D. \$3.
E. None of the above.

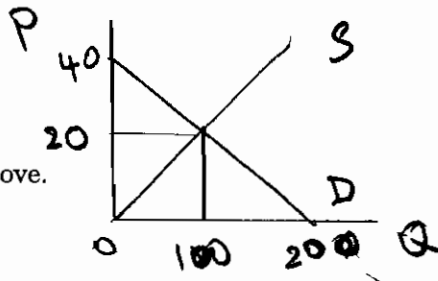
E



$$\begin{aligned}
 CS &= \\
 \text{AREA} &= \frac{1}{2} b h \\
 &= \frac{1}{2} (4)(2) = \frac{1}{2} (8) \\
 &= 4 = \text{CS}
 \end{aligned}$$

4. Suppose that the demand for apples is specified as $Q = 200 - 5P$, and the supply is defined as $Q = 5P$. What is the consumer surplus in this market?

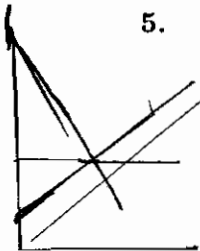
- A. 2,000.
- B. 1,000.
- C. 750.
- D. 250.
- E. None of the above.



$$\begin{aligned}
 Q &= 200 - 5P \\
 P &= 0 \quad Q = 200 \\
 Q &= 0 \quad 0 = 200 - 5P \\
 5P &= 200 \\
 P &= \frac{200}{5} = 40
 \end{aligned}$$

B

5. Other things remaining the same, an increase in the supply of a good will



- A. Increase the consumer surplus.
- B. Decrease the consumer surplus.
- C. Leave consumer surplus unchanged.
- D. Have an effect on consumer surplus that cannot be determined.
- E. Have an effect on consumer surplus that depends on the source of the supply change.

A

$$\begin{aligned}
 Q &= 5P \\
 P &= 0 \quad Q = 0
 \end{aligned}$$

$$\begin{aligned}
 Q &= Q^s \\
 200 - 5P &= 5P \\
 200 &= 10P \quad P = \frac{200}{10} = 20
 \end{aligned}$$

6. Consider the market for hamburgers. To show the idea of producer surplus in the hamburger market, we need to use

- A. The market demand curve for hamburgers.
- B. The market supply curve for hamburgers.

$$\begin{aligned}
 Q &= 5P = 5(20) \\
 &= 100
 \end{aligned}$$

$$\begin{aligned}
 CS &= \frac{1}{2} b h = \frac{1}{2} (100)(20) \\
 &= \frac{2000}{2} = 1000
 \end{aligned}$$

- C. Both the market supply curve and the market demand curve for hamburgers.
- D. The market demand curve for hotdogs, a substitute for hamburgers.
- E. The market supply curve for hotdogs, a substitute for hamburgers.

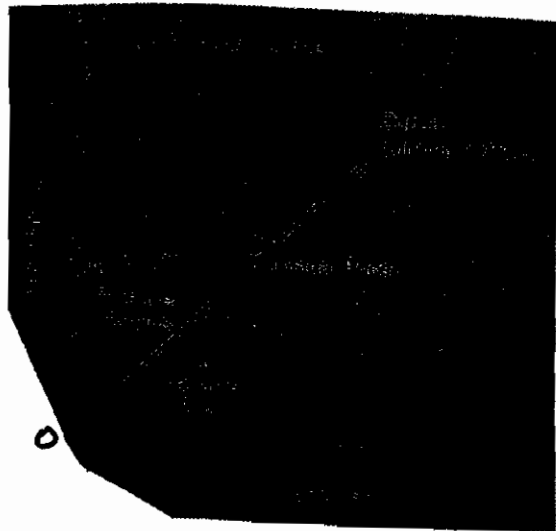
B

7. Refer to the Figure below. Assume the market price of gasoline is \$2 per gallon. If the producers supply 4 gallons at this price, the producer surplus is

- A. \$2.
- B. \$5.
- C. \$3.
- D. \$1.
- E. None of the above.

E

$$\begin{aligned}
 PS &= \frac{1}{2} b h \\
 &= \frac{1}{2} (4)(2) \\
 &= \frac{8}{2} = 4
 \end{aligned}$$



8. Compared with the efficient level of output, an impediment to efficiency in the form of high transaction costs will result in

- A. Producing low cost output.
- B. Overproduction.
- C. Underproduction.
- D. Zero production.
- E. An optimun allocation of resources.

C

9. If resources are allocated efficiently,
- A. consumer surplus exceeds producer surplus.
 - B. Producer surplus equals consumer surplus.
 - C. The sum of consumer surplus and producer surplus is minimized.
 - D. Marginal social benefit is minimized.
 - E. None of the above.

E

A. WHAT IS ECONOMICS?

10. Which of the following is the best definition of economics?
- A. The study of how individuals and societies choose to use the scarce resources that nature and previous generations have provided.
 - B. The study of how consumers spend their income.
 - C. The study of how business firms decide what inputs to hire and what outputs to produce.
 - D. The study of how the federal government allocates tax dollars.
 - E. All of the above.

A

11. Which of the following is NOT an opportunity cost of attending University?
- A. The tuition you pay.
 - B. The income you could have earned if you didn't attend university.
 - C. The alternative uses of the time you spend studying.
 - D. The cost of the food that you consume while you are attending university.
 - E. All of the above.

D

12. Which of the following is an example of a normative statement?
- A. People under six feet tall are the best stockbrokers.
 - B. There should be no unemployment in an advanced industrial society.

- C. Higher prices cause consumers to buy less.
- D. Equilibrium price implies that quantity demanded equals quantity supplied.
- E. None of the above.

B

13. Which of the following is an example of a positive statement?

- A. The federal government should be required to have a balanced budget.
- B. Local governments ought to impose rent controls to allow people to afford housing.
- C. Some studies suggest that the imposition of a minimum wage increases unemployment.
- D. The government should impose taxes on imported goods to protect the jobs of Canadian workers.
- E. All of the above.

C

14. The fallacy of composition is

- A. The belief that if Event A happens before Event B happens, then Event A causes Event B to occur.
- B. The belief that what is true for the whole is not necessarily true of the parts.
- C. The belief that what is true of the parts is necessarily true for the whole.
- D. The belief that it is impossible to draw generalization about cause and effect.
- E. Both (A) and (D).

C

15. An efficient economy is an economy

- A. In which output is steady or growing and there is low inflation.
- B. That produces what people want and does so at least cost.
- C. That distributes output equally among all consumers.
- D. In which there is a fair distribution of wealth.
- E. All of the above.

B

16. Which one of the following does microeconomics study?

- A. Reasons for a decline in the price of orange juice.
- B. Reasons for a decline in average prices.
- C. Effect of interest rates on national economic growth.
- D. Effect of the government budget deficit on employment.
- E. All of the above.

A

17. The opportunity cost to a customer for getting a \$10 haircut is the

- A. Customer's best alternative use of the \$10.
- B. Customer's best alternative use of the time it takes to get a haircut
- C. Customer's best alternative use of both the \$10 and the time it takes to get a haircut.
- D. Value of \$10 to the barber.
- E. Value to the barber of the time it takes to give a haircut.

C

B. THE ECONOMIC PROBLEM

18. Capital, as economists use the term,

- A. Is the money the firm spends to hire resources.
- B. Is the money the firm raises from selling stock.
- C. Refers to the process by which resources are transformed into useful forms.
- D. Refers to things that have already been produced that are in turn used to produce other goods and services.
- E. None of the above.

D

19. Refer to Figure 2.5. The economy moves from point B to point D. This could be explained by

- A. A reduction in unemployment.
- B. An improvement in technology.
- C. An increase in economic growth.

- D. A change in society's preferences for cars versus trucks.
- E. None of the above.

D

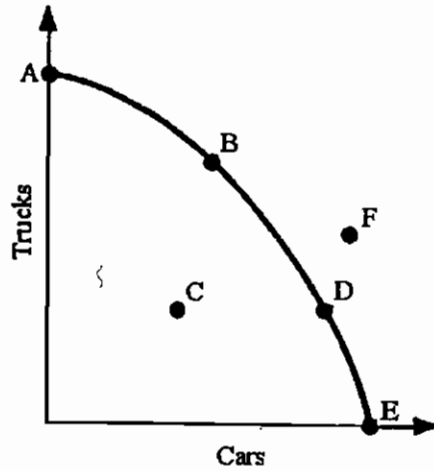


Figure 2.5

20. Refer to Figure 2.6. The economy is currently at point A. The opportunity cost of moving from point A to point B is
- A. The 60 bushels of soybeans that must be forgone to produce 10 additional bushels of wheat.
 - B. The 20 bushels of soybeans that must be forgone to produce 30 additional bushels of wheat.
 - C. The 80 bushels of soybeans that must be forgone to produce 20 additional bushels of wheat.
 - D. The 20 bushels of soybeans that must be forgone to produce 10 additional bushels of wheat.
 - E. None of the above.

D

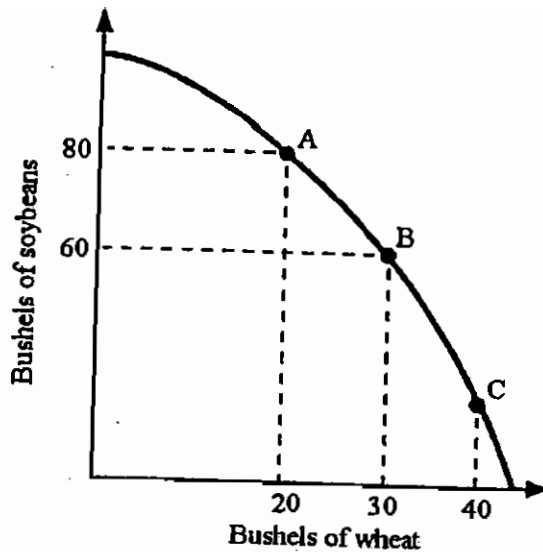


Figure 2.6

21. As more of a good, such as television sets, is produced, the opportunity costs of producing it increase. This most likely occurs because
- A. As more of a good is produced the inputs used to produce that good will increase in price.
 - B. Consumers would be willing to pay higher prices for the good as more of the good is produced.
 - C. Resources are not equally well-suited to producing all goods and as more of a good is produced it is necessary to use resources less well-suited to the production of the good.
 - D. As more of a good is produced the quality of the technology available to produce additional units of the good declines and therefore the costs of production increase.
 - E. Both (A) and (D).
- C
22. Economic growth may occur when
- A. A society acquires new resources.
 - B. A society learns to produce more using existing resources.
 - C. The society begins to produce the combination of goods society wants most.
 - D. All of the above.
 - E. Both (A) and (B).
- E
23. During the Persian Gulf War many of Kuwait's oil refineries were destroyed. This would best be represented by

- A. A movement down Kuwait's production possibility frontier.
- B. A movement off Kuwait's production possibility frontier to some point inside the frontier.
- C. A shift of Kuwait's production possibility frontier down and to the left.
- D. A movement up Kuwait's production possibility frontier.
- E. None of the above.

C

24. There are two goods, X and Y. If the opportunity cost of producing good X is lower for Pam than for George, then
- A. Pam has an absolute advantage in the production of X.
 - B. George has an absolute advantage in the production of Y.
 - C. Pam has a comparative advantage in the production of X.
 - D. George has a comparative advantage in the production of Y.
 - E. Both C and D.

E

C. DEMAND AND SUPPLY

25. Which of the following will NOT cause a shift in the demand curve for compact discs?
- A. A change in income.
 - B. A change in wealth.
 - C. A change in the price of pre-recorded cassette tapes.
 - D. A change in the price of compact discs.
 - E. All of the above.

D

26. The Halifax Corporation produces chairs. An economist working for the firm predicts that "if people's incomes rise next year, then the demand for our chairs will increase, *ceteris paribus*." The accuracy of the economist's prediction depends on whether the chairs Halifax produces
- A. Have many complementary goods.
 - B. Have few substitutes.

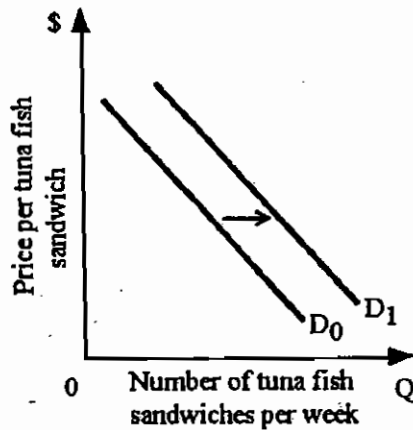
- C. Have few complementary goods.
- D. Are normal goods.
- E. None of the above.

D

27. Refer to Figure 4.2. If consumer income falls, the demand for tuna fish sandwiches shifts from D_0 to D_1 . This implies that tuna fish sandwiches are

- A. A normal good.
- B. An inferior good.
- C. A substitute good.
- D. A complementary good.
- E. None of the above.

B



¹ Figure 4.2

28. During an economic downturn when consumer income falls, the demand for ice cream increases and the demand for chocolate cake decreases. This implies that

- A. Ice cream and chocolate cake are complements.
- B. Ice cream is a normal good and chocolate cake is an inferior good.
- C. Ice cream is an inferior good and chocolate cake is a normal good.
- D. Ice cream is an unrelated good and chocolate is an economic good.
- E. None of the above.

C

29. Demand curves are derived while holding constant

- A. Income, tastes, and the price of the good.
- B. Income and tastes.
- C. Income, tastes, and the price of other goods.
- D. Tastes and the price of other goods.
- E. None of the above.

C

30. Which of the following is consistent with the law of supply?

- A. As the price of calculators rises, the supply of calculators increases, **ceteris paribus**.
- B. As the price of calculators falls, the supply of calculators increases, **ceteris paribus**.
- C. As the price of calculators rises, the quantity supplied of calculators increases, **ceteris paribus**.
- D. As the price of calculators rises, the quantity supplied of calculators decreases, **ceteris paribus**.
- E. None of the above.

C

31. Refer to Figure 4.8. The supply curve of hula hoops shifts from S_0 to S_1 . This could be caused by

- A. A decrease in the price of hula hoops.
- B. A decrease in the number of firms producing hula hoops.
- C. A decrease in the demand for hula hoops.
- D. An increase in the demand for hula hoops.
- E. Both (B) and (C).

B

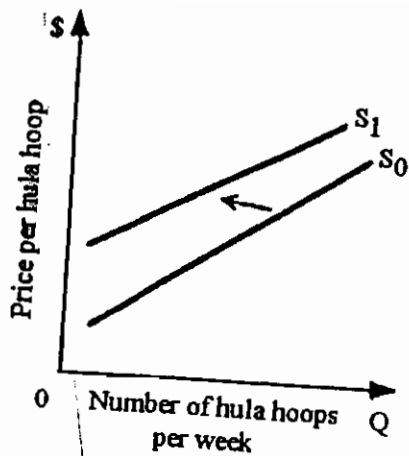


Figure 4.8

32. Suppose that video game cartridges are a normal good. If the income of video game players increases, you predict that in the market for video game cartridges
- Both equilibrium price and quantity will fall.
 - Both equilibrium price and quantity will increase.
 - Equilibrium price will increase and quantity will decrease.
 - Equilibrium price will fall but quantity will increase.
 - None of the above.
- B
33. When Hurricane passed through Louisiana in the summer of 1992, approximately a quarter of the sugar cane crop was destroyed. *Ceteris Paribus*,
- The supply of sugar has decreased and the price of sugar will increase.
 - The supply of sugar has decreased and the price of sugar will decrease.
 - The demand for sugar has increased and the price of sugar will increase.
 - The demand for sugar has decreased and the price of sugar will decrease.
 - None of the above.
- A
34. Which of the following will unambiguously occur when there is a simultaneous decrease in demand and a decrease in supply?
- An increase in equilibrium price.
 - A decrease in equilibrium price.
 - An increase in equilibrium quantity.
 - A decrease in equilibrium quantity.
 - None of the above.

D

35. A decrease in demand for cameras would likely be caused by

- A. An increase in the price of a substitute good.
- B. An increase in the price of cameras.
- C. An increase in the price of a complementary good.
- D. A decrease in the price of cameras.
- E. None of the above.

C

D. ELASTICITY

36. The price of apples falls by 5% and quantity demanded increases by 6%. This means that the demand for apples is

- A. Perfectly elastic.
- B. Elastic.
- C. Perfectly inelastic.
- D. Inelastic.
- E. None of the above.

B

37. At a price of \$10 the same amount of income was spent on cassette tapes as when the price of cassette tapes was \$13. Therefore demand for cassette tapes is

- A. Perfectly inelastic.
- B. Inelastic.
- C. Unitarily elastic.
- D. Elastic.
- E. None of the above.

C

38. Refer to Figure 5.5. Using the midpoint formula, if the price of a hamburger is increased from \$8 to \$10, the price elasticity of demand equals

- A. -0.036.
 B. -0.333.
 C. -2.5.
 D. -6.
 E. None of the above.

E

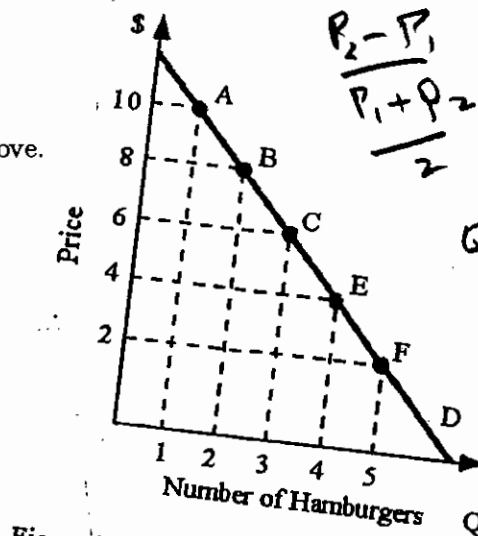


Figure 5.5

$$\frac{P_2 - P_1}{\frac{P_1 + P_2}{2}} = \frac{10 - 8}{\frac{10 + 8}{2}} = \frac{2}{9}$$

$$\frac{Q_2 - Q_1}{\frac{Q_1 + Q_2}{2}} = \frac{1 - 2}{\frac{1 + 2}{2}} = \frac{-1}{1.5}$$

$$\eta = \frac{-1/1.5}{2/9} = \frac{-9}{3} = -3$$

39. As you move down a straight-line-downward-sloping demand curve, the price elasticity of demand

- A. Becomes more elastic.
 B. Becomes more inelastic.
 C. Remains constant because the slope is constant.
 D. May become more or less elastic depending on the slope of the demand.
 E. Both (A) and (D).

B

40. Total revenue will increase if price

- A. Falls and demand is inelastic.
 B. Falls and demand is elastic.
 C. Rises and demand is elastic.

- D. Rises and demand is unitarily elastic.
- E. You need more information to answer the question.

B

41. If the income elasticity of good Z is 1.5, then good Z is

- A. An inferior good.
- B. A normal good.
- C. A luxury good.
- D. A complement good.
- E. None of the above.

C

42. Suppose the government of Ontario wants to reduce the consumption of electricity by 5 percent. The price elasticity of demand for electricity is 0.40. Advise the Ontario government to

- A. Raise the price of electricity by 12.5 percent.
- B. Raise the price of electricity by 2 percent.
- C. Decrease the price of electricity by 12.5 percent.
- D. Decrease the price of electricity by 2 percent.
- E. None of the above.

$$-0.40 = \frac{-5\%}{\% \Delta P}$$

$$\% \Delta P (-0.40) = -5\%$$

$$\% \Delta P = \frac{-5\%}{-0.40} = 12.5\%$$

A

43. Luxury goods tend to have income elasticities of demand that are

- A. Greater than 1.
- B. Greater than zero but less than 1.
- C. Positive.
- D. Negative.
- E. First positive and then negative as income increases.

A

44. If the cross elasticity of demand between goods A and B is negative, then

- A. The demands for A and B are both price elastic.
- B. The demands for A and B are both price inelastic.
- C. A and B are complements.
- D. A and B are substitutes.
- E. A and B are independent from each other.

C

45. If a 10 percent increase in price results in a 18 percent increase in quantity supplied, the elasticity of supply is

- A. 0.3.
- B. 0.6.
- C. 1.2.
- D. 1.8.
- E. 9.0.

$$\eta_s = \frac{18\%}{10\%} = 1.8$$

D