

## Mini Case 6

### Montreal Museum of Fine Arts

#### Description of Problem

The Board of Directors of the Montreal Museum of Fine Arts is planning an exhibit of the Group of 7 in winter 2000. The paintings will come mainly from the collection of the National Gallery of Ontario.

In accordance with past exhibits, the price has been established at \$10. The Board has not decided the duration of the exhibit. The duration could be 8, 10, or 12 weeks. The corresponding ticket sales have been estimated at 9,000, 11,000, and 12,000 respectively.

A book on the Group of 7 will be sold at the exhibit for the price of \$40. The production cost of the book is \$20. It is estimated that 5% of the visitors will purchase the book.

The setup cost of the exhibit is \$35,000. The insurance cost is \$5,000 per week. The operating cost per day is \$250, \$300, and \$375, per weekday, Saturday, and Sunday respectively.

#### Requirements

You are the Vice-President of Finance of the Montreal Museum of Fine Arts. You have been requested by the Chairman of the Board to prepare a spreadsheet that will allow the members of the Board to compare the expected profits for the three contemplated durations of the exhibit. Moreover, the Chairman would like to have a graph of the expected profits. Assuming that the Board has selected the most profitable option, what is the number of visitors required to break-even?

## Purpose

The purpose of this assignment is to have Excel calculate the requirements automatically through formulas and/or functions. You need to enter as much of the above information as you can in an Excel spreadsheet and create formulas and/or functions that will automatically calculate the results.

\*Be resourceful. Use the textbook if you need help and you can also research the web for ideas.

\*Try your best. This is not a math course and we will not answer math related questions. You may, **within reason**, add your own assumptions and make small changes to some of the variables to make it easier for you to work with. We are interested in your ability to create a logical spreadsheet and use formulas and/or functions to have Excel calculate the requirements.

## Requirements

1. Create a **spreadsheet** comparing the expected profits for the 3 contemplated durations of the exhibit. Use formulas to have Excel calculate the profits for all 3 exhibit options.
2. Have Excel calculate the number of visitors required to **Break-Even** for the most profitable option as calculated by Excel.
3. Create a **graph** of your spreadsheet comparing the profits for the 3 options.
4. Write a **Word document** (1 to 2 pages) “selling” your new solution. You can explain what problems could arise with the “old” manual way of calculating the above, give a brief explanation of your solution and why it is a good solution, and explain the benefits of an automated solution for automatically calculating the needed results.
5. Create a short **PowerPoint** presentation (5 to 6 slides) summarizing your Word document in point form.