Mini Case 9

St. Laurent Hockey Club

Description of Problem

The Saint Laurent Hockey Club wants to organize a show to raise funds for the club. During the last club meeting, the club executives discussed a proposal prepared by the executive in charge of fund raising.

The production of the show is expected to cost $2,000. The attendance may vary with the ticket price: from 550 spectators at $10.00 per ticket, to 400 spectators at $15.00 per ticket, to 250 spectators at $20.00 per ticket.

There are two theaters in Saint Laurent that can be rented for this event:

- The Centaur, with a capacity of 600 spectators, can be rented for $1,000.
- The Pegasus, with a capacity of 300 spectators, can be rented for $700.

The club executives estimate that the club will get additional revenue of about 10% of the ticket sales from the sales of T-shirts.

The club will required to pay an amusement tax of 15% of the ticket price.

Requirements

You are the club treasurer. You have been requested by the president to prepare a spreadsheet that will let the executives compare the expected profits for the 3 selected ticket prices, at the next club meeting. Moreover, the president would like to have a graph of the expected profits for the 3 selected ticket prices. Assuming that the club has selected the most profitable option, what is the number of spectators required to break-even?

Features to be used

Not available

Purpose

The purpose of this assignment it 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** as stated above comparing the 3 selected sites. Use formulas to have Excel calculate the profits for all 3 ticket prices and the number of spectators required to **Break-Even** for the most profitable location as calculated by Excel.
2. Create a **graph** of your spreadsheet comparing the profits for the 3 selected ticket prices.
3. 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.
4. Create a short **PowerPoint** presentation (5 to 6 slides) summarizing your Word document in point form.