

IST 3500
Problem Solving and Decision Making
Case Assignment 3

Fall 2023 Semester
Due Date: October 13th, 2023

Name: _____
Student ID #: _____

Work on the following problems using Excel. Show all steps in generating your model in Excel as required. Also make sure your solution file is uploaded into Teams in Excel format. Please note that this case assignment 3 accounts for 20% of your total course grade.

Good luck!

Break even analysis for a symposium. The University of Cincinnati Center for Business Analytics is an outreach center that collaborates with industry partners on applied research and continuing education in Business Analytics. One of the programs offered by the center is a quarterly Business Analytics Symposium. Each symposium features three speakers on real-world use of analytics. Each corporate member of the center (there are currently 10) receives five free seats to every symposium. Nonmembers wishing to attend must pay \$75 per person. Each attendee receives breakfast, lunch, and free parking. The following are the costs incurred for putting on this event.

Rental cost for the auditorium	\$150
Registration processing	\$8.50 per person
Speaker costs	3@\$800 = \$2,400
Continental breakfast	\$4.00 per person
Lunch	\$7.00 per person
Parking	\$5.00 per person

- a) Build a spreadsheet model that calculates a profit or loss based on the number of nonmember registrants.
- b) Use Goal Seek to find the number of nonmember registrants that will make the event break even.