Due: Wednesday, February 22nd (11:59 p.m.)

References are to the course textbook, except as noted.

Reminders

Enjoy spring break (February 12th-16th).

The project proposals will take place on Monday, February 26th.

The midterm exam will take place on Monday, March 5th.

Reading

For Monday, February 5th, Sections 4.5 and 4.6.

For Wednesday, February 7th, Chapter 6.

For Monday, February 19th, Chapter 7.

For Wednesday, February 21st, Chapter 8.

Assignment exercises to hand in

Questions 1, 2 and 3 must be solved in a spreadsheet, and must be accompanied by well-written solutions. Please submit your answers directly to the teaching assistant by e-mail (`imartine` at `sfu` dot `ca`). All file names should begin: `math_208W_1181_name_hw3_q1` (or `q2`, `q3`, `q4`) where `name` is your family name. Submit one .pdf and one Excel file per question in a single e-mail. If you prefer, you may submit a single .pdf file for the first 3 questions, but please submit the article review as a separate file.

1. Exercises 4.4 and 4.5.

2. Exercise 6.15.

Question 3 requires a detailed written answer, typeset in LaTeX. It does not request that you do any particular calculation: what you need to do is prepare an analysis of the contract highlighting the most critical aspects in a quantitative way.

3. Chapter 4 Case: Cox Cable and Wire Company.

4. By now you should have chosen an interesting article that describes an application of operations research. You will write a brief summary of the article, typeset in LaTeX. The summary that you will produce should be at most 1200 words and fit on two pages (one double sided page) using reasonable margins and an 11- or 12-point font. It should describe the contents of the article **in your own words**.

Your essay should be clearly organized, and should address the following issues:

1. What real-world problem is treated in the paper?

2. What type of mathematical (Operations Research) model is proposed to solve the problem?

3. What data is used in the model?

4. What mathematical tools are used to solve the model? How well is it solved?

5. What are the limitations of the model?

6. How has the solution been implemented? What is the impact of the implementation?

7. What are possible future directions for this work? For instance, can the model be improved? Can it be applied elsewhere?

Particularly on points 4 and 6, you are encouraged to go beyond the contents of the paper, and include your own critical analysis.

Some other exercises you should try

Additional exercises from Chapters 4 and 6.