

Due: Saturday, January 23rd (11:59 p.m. PT)

References are to the course textbook (Baker, 3rd edition), except as noted.

Reading

You should look briefly at Chapter 1. Sections 1.1 and 1.3 are about mathematical modelling generally. They may or may not make sense to you. Hopefully they will make sense by the end of the course. Sections 1.2, 1.4 and 1.5 are about spreadsheets, and how to use Excel's Solver utility.

For Friday, January 15th, Chapter 2, Sections 1 and 2.

For Wednesday, January 20th, Chapter 2, Sections 3 and 5.

For Friday, January 22nd, Chapter 2, Section 4.

Note that in Chapter 2, Sections 1 through 4 are about forming mathematical models, while Section 5 is about solving the models.

Assignment exercises to hand in

Questions 1 and 2 must be solved in an Excel spreadsheet, and must be accompanied by well-written solutions. Submissions will be via upload to Canvas. Submit one .pdf and one Excel file per question for questions 1 and 2, and a .pdf file for question 3.

1. Exercise 2.2.

2. Exercises 2.12 and 2.13. Note these are among the supplementary exercises.

3. Write a one page "mathematical autobiography" about your previous experiences with mathematics. It should include details of your educational background, along with your short-term and long-term mathematical goals. Please mention at least one teacher who has had an impact on how you think about mathematics. Also include details on what mathematical subjects you prefer, and why.

Some other exercises you should try

4. There are many formulation problems available on the Web, such as the following solved problems authored by J.E. Beasley: <http://people.brunel.ac.uk/~mastjjb/jeb/or/lpmore.html>.