Homework rules: Arguments should be precise, concise and correct. We expect rigorous and complete proofs. Answers should be clean and legible. Please use a separate sheet of paper for each problem (easier for you to work with, and easier to grade), and staple together all the sheets you hand in. Solve four of the five problems assigned each week (only first four problems you submit will be graded). Problems can be solved in a group effort, but students should independently write their own solutions!

Homework problems marked by a * are likely to be more difficult.

**Homework 1: due January 17th.**
Read everything in Sections 4.1 and 4.2 not covered in lectures by Jan. 10th.
Solve Exercises 4.1.3, 4.1.8*, 4.2.16, 4.2.22* and 4.2.23.
Solution will also be provided for Exercises 4.2.12 and 4.2.24.

**Homework 2: due January 24th.**
Read everything in Chapter 4 not covered in lectures by Jan. 15th.
Solve Exercises 4.3.11, 4.4.4, 4.4.5, 4.4.6 and 5.1.8*.
Solution will also be provided for Exercises 4.2.24, 4.2.29 and 4.2.32.

**Homework 3: due January 31st.**
Read everything in Sections 5.1 and 5.4 not covered in lectures by Jan. 24th.
Solve Exercises 5.1.13, 5.1.14*, 5.1.15, 5.1.26* and 5.1.35.
Solution will also be provided for Exercises 5.1.12 and 5.1.37*.

**Homework 4: due February 7th.**
Read everything in Sections 5.2 and 5.3 not covered in lectures by Jan. 31st.
Solve Exercises 5.3.3, 5.3.9*, 5.3.17, 5.4.10 and 5.4.12*.
Solution will also be provided for Exercises 5.3.16, 5.4.6 and 5.4.14.

**Homework 5: due February 14th.**
Read everything in Sections 5.5.1 and 5.5.2 not covered in lectures by Feb. 7th.
Solve Exercises 5.2.5*, 5.2.11, 5.2.14, 5.2.19* and 5.3.32.
Solution will also be provided for Exercises 5.2.10, 5.2.15 and 5.3.20.

**Homework 6: due February 21st.**
Read everything in Sections 5.5.3 and 6.1 that was not covered in lectures.
Solve Exercises 5.3.39, 5.5.9*, 5.5.19, 5.5.30 and 5.5.32.
Solution will also be provided for Exercises 5.3.37, 5.5.28 and 5.5.29.

**Homework 7: due February 28th.**
Read from Section 6.2 up to the start of Section 6.2.1, everything not covered in lectures.
Solve Exercises 6.1.14, 6.1.15, 6.1.18*, 6.2.2 and 6.2.5*. 