**Homework rules:** Arguments should be precise, concise and correct. We expect rigorous and complete proofs. Answers should be clean and legible. 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 15th.**
Read everything in Sections 4.1 and 4.2 not covered in lectures by Jan. 15th.
**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 4.1.12 and 4.2.21

**Homework 2: due January 22nd.**
Read everything in Chapter 4 not covered in lectures by Jan. 22nd.
**Solve Exercises 4.2.32, 4.3.11, 4.4.4, 4.4.5 and 4.4.6**
Solution will also be provided for Exercises 4.2.21 and 4.2.29

**Homework 3: due January 29th.**
Read everything in Section 5.1 not covered in lectures by Jan. 27th.
**Solve Exercises 5.1.8*, 5.1.13, 5.1.14*, 5.1.15 and 5.1.26*.**
Solution will also be provided for Exercise 5.1.12

**Homework 4: due February 6th.**
Read everything in Section 5.3 not covered in lectures by Jan. 29th.
**Solve Exercises 5.1.35, 5.3.3, 5.3.9*, 5.4.10 and 5.4.12*.**
Solution will also be provided for Exercises 5.1.37, 5.1.40 and 5.4.14

**Homework 5: due February 13th.**
Read everything in Sections 5.2 and 5.3 not covered in lectures by Feb. 10th.
**Solve Exercises 5.2.5*, 5.2.11, 5.2.14, 5.2.19* and 5.3.17**
Solution will also be provided for Exercises 5.2.10, 5.2.15, 5.3.10 and 5.3.20

**Homework 6: due February 20th.**
Read everything in Sections 5.5.1 and 5.5.2 not covered in lectures by Feb. 16th.
**Solve Exercises 5.3.32, 5.3.39, 5.5.9*, 5.5.16* and 5.5.19**
Solution will also be provided for Exercises 5.5.3 and 5.5.15

**Homework 7: due February 27th.**
Read everything in Sections 5.5.3 and 6.1 that was not covered in lectures.
**Solve Exercises 5.5.32, 6.1.12, 6.1.15, 6.1.18* and 6.1.19*.**
Solution will also be provided for Exercises 5.5.29, 5.5.30 and 6.1.14

**Homework 8: due March 6th.**
Read what was not covered in lectures, from Section 6.2 up to the start of Section 6.2.1 and from Section 7.1.
**Solve Exercises 6.2.2, 6.2.5*, 7.1.14, 7.1.15 and 7.1.17**
Solution will also be provided for Exercise 7.1.16

**Homework 9: due March 12th.**
Read everything in Sections 7.2 and 7.3 that was not covered in lectures.
**Solve Exercises 7.2.9, 7.2.10, 7.2.11, 7.3.5 and 7.3.6.**
Solution will also be provided for Exercise 7.4.6
Exam practice.

Solution to be provided for exercises: 4.2.35 4.3.13 5.2.12 5.2.16 5.4.11 and 5.4.16

More exercises from past exams: 4.2.15 4.3.12 4.4.10 5.3.11 5.3.27 5.3.28\star, 5.3.29 5.3.31 and 5.4.15