

Problem Set 1

This assignment is due on Thursday, June 25. It covers class material from June 22–24 and reading from Section 1.1–1.6 of the text. You might also want to go over the review material in Appendices A–C, especially C.1 on mathematical induction.

Homework scores will be based on two or three selected problems from each assignment. Although the other problems do not count toward your score, the grader will keep a record of the number of problems for which you submitted a reasonable attempt at a solution. In cases where your point total at the end of the term is on the borderline between two grades, having a good record of submitted homework may count in your favor.

Discussing homework problems with others is allowed, and I encourage it. However, you must write your solutions independently. Share *ideas*, not *writing*. Looking up solutions on the internet, or from past years classes, or from any other source that replaces *thinking* with *copying* is not allowed.

Sections 1.1–1.3: Exercise 1.3.1

Section 1.4: Ex. 1.4.2

Section 1.5: Ex. 1.5.1, 2, 5, 7, 11

Section 1.6: Ex. 1.6.1 (see Appendix C for a statement of the Well-Ordering Principle); 1.6.2 for part (c) of Prop. 1.6.9 (we'll do parts (a) and (b) in class); 1.6.3, 4(b), 8, 12(a) (with explanation), 14.