COS 341, September 20, 2000
Due: September 27, 2000

Homework Set 1

Reading Assignments Read Chapter 1, and start reading Chapter 3.

Written Assignments Do Exercises 1, 2, 7, 12, 15, 23, 28, 31, 33, and 35 in Section 1.8.

Remarks

(a) In Exercise 2, the second part of problem asks you "If n is odd, is it possible to construct a cube ... with a 1-by-1 hole in the middle?" This is possible for some n but not for other n. So you need to identify exactly for what values of odd n this is possible. Furthermore, you need to give a mathematical proof of why this is so.

(b) Exercise 23 may be a little bit harder than the rest.

(c) You may utilize results from previous exercises if you find them useful.

(d) Keep in mind that sometimes it takes laborious work by trial-and-error to solve a problem; so don't always count on finding an ingenious elegant solution.