These problems are due on Wednesday, September 2\textsuperscript{nd} in class, and will be graded on clarity of exposition as well as correctness. See the website for a more detailed description of the expectations. I encourage you to work in small groups, but what you hand in must be written in your own words. If you do work in a group, please write the names of all the members on your homework sheet.

The problem set this week is 1.7, 1.13, 1.21, 1.27, 1.31, 1.32, and 1.36 in Chapter 1 of the book, along with the following problem:

For any two sets $A$ and $B$, show that

$$A \cap B \subset B, \quad A \subset A \cup B.$$  

Four of these problems will be graded carefully and worth 4 points each, and the remaining problems will be marked for completeness, worth 1 point each, for a total of 20 points.