# Assignment 5 (8/2)

#### **Subhadip Chowdhury**

This homework is due in class on Friday, 8/11. You may cite results from class as appropriate. Unless otherwise stated, you must provide a complete explanation for your solutions, not simply an answer. You are encouraged to work together on these problems, but you must write up your solutions independently.

You are encouraged to think about the problems marked with a  $(\star)$  if you have time, but you don't need to hand them in.

Remember that you can always use the result of the previous assignment problems without proof to solve the new assignment problems.

### Problem 0∗

Read section 3.2, 3.3. In particular, make sure you understand and can prove all the equivalences in the summary 3.3.10 at the end of the section.

## Problem 1

Problems 3.2.(1, 2, 3, 6\*, 15, 16, 18, 24, 26, 30, 32, 34, 36, 37, 39, 42, 48, 53\*, 54).

#### Problem 2

Problems  $3.3.(22, 24, 28, 30, 35, 36, 38, 39, 85 \star, 90)$ .