## **Assignment 15** (11/1)

## **Subhadip Chowdhury**

This homework is due at the beginning of class on Friday 11/10. 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∗

Over this week we will be covering chapter 15. Try to read the corresponding sections from book everyday after class. Once you have solved a homework problem, look up the nearby exercises to understand how else a similar problem could be formulated. Also look through all the examples in the section.

There will be a quiz next Monday.

## Problem 1

Problems 15.2.(3, 5, 10, 12\*, 14, 21, 46, 47).