Two problems:

14-A. An investor has a stock that each week goes up \$1 with probability 52% or down \$1 with probability 48%. She bought the stock when it cost \$50 and will sell it when it reaches \$70 or falls to \$40.

(a) What is the probability that she will end up with \$70?

(b) Find the mean number of weeks the investor keeps the stock.

14-B. An investor has a stock that each week goes up \$1 with probability 50% or down \$1 with probability 50%. She bought the stock when it cost \$50 and will sell it when it reaches \$80 or falls to \$30.

(a) What is the probability that she will end up with \$80?

(b) Find the mean number of weeks the investor keeps the stock.

The starred problems are for extra credit. Each problem is graded on the base of "4 points max".

Note: I'll be out of town till next Monday, December 2. I'll grade the homework 13 by that date. On Wednesday, November 27, a substitute professor (Dr Simanyi) will give the class. Friday, November 29, is a holiday.