STAT 421
Fall 2010 Homework 11, due Fri. Dec. 10

Problems marked by * are required for graduate students, optional for undergraduates. I encourage you to use R (or your calculator) on problems where you are asked to compute probabilities for named distributions.

From DeGroot and Schervish: Sec. 5.5 (pp. 267-8): #2,5,8,12*; Sec. 5.6 (pp. 280-1): #2acfh,3,4,14,17,22*; Sec. 5.7 (pp. 290-1): #2,8,10; Sec. 5.8 (pp. 294-5): #2,4

Additional problem:

A 1982 article (S. Sidney Ulmer, "Supreme Court Appointments as a Poisson Distribution," *American Journal of Political Science*, Vol. 26, No. 1, Feb., 1982, pp. 113-116) showed that the yearly number of appointments to the U.S. Supreme Court, 1790-1980, closely followed a Poisson distribution. I've updated the data through 2010. It shows that in 133 years there were no appointments, in 68 years there was one appointment, in 18 years there were 2 appointments, and in 2 years there were 3 appointments. Compare these observed values to the expected values from a Poisson distribution with mean equal to the mean number of appointments per year. Include also a category for "4 or more".

In-class, Wed., Dec. 8:
Pete: p. 267, #7
Grant: p. 281, #18
Micky: p. 320, #12