Assignment #13

Due on Wednesday March 12, 2008

Read Section 4.3 on *Variance*, pp. 197–202, in DeGroot and Schervish.

Read Section 4.3 on *Moments*, pp. 203–208, in DeGroot and Schervish.

Do the following problems

- 1. Compute the moment generating function, $\psi(t)$, of a continuous random variable X with Uniform (-1,2) distribution. What should $\psi(0)$ be? Give also the second moment and variance of X.
- 2. Exercise 2 on page 203 in the text.
- 3. Exercise 4 on page 203 in the text.
- 4. Exercise 8 on page 209 in the text.
- 5. Exercise 12 on page 209 in the text.