## Homework 1, Sta/OR 524 Fall 2005

## Due Sept. 7

- 1. If X is a random variable with  $\text{Poisson}(\lambda)$  distribution. Please find  $E(X^2)$ .
- 2. For a fixed Poisson distribution with parameter  $\lambda$ , which integer value(s) has the highest probability/probabilities?
- 3. Focus on the probability P(X = 2) in a Poisson distribution. What  $\lambda$  value will make this probability the largest?
- 4. Page 37 number 22.
- 5. Page 40 number 31.