## Homework 5, Sta/OR 524 Fall 2005

## Due Oct. 28

- 1. If X is an exponential  $(\lambda)$  random variable, find E(X);  $E(X^2)$  and Var(X).
- 2. Find P(3 < X < 5) where X is same as above.
- 3. Find the moment generating function of X if X has uniform (continuous) distribution on interval [0,1].