Homework 4 - Sta230/Mth230 - Spring 2014

Due Feb 12th - In Class

From Pitman, Probability (1st edition).

- Exercises:
  - **3.1** - 8, 10, 14
  - **3.2** - 2, 6, 8, 10
  - **3.3** - 12, 14, 20, 22
  - Show that for $X \sim \text{Pois}(\lambda)$ that $E(X) = \lambda$ and $Var(X) = \lambda$. Hint - you can use a similar trick to what we used in class to find $E(X)$ for a Hypergeometric random variable.

Remember to show your work for all problems.