Probability (MATH 4733 - 01) Fall 2011 Homework 6

Due: Wed. Oct. 12, start of class

Instructions: Please read the homework policies and guidelines posted on the course webpage. You may **not** use a calculator (or computer). Make sure to write your name and course number in the top right corner of your solution set, as well as the assignment number on top. Please staple your homework. Sections and exercises refer to the exercises in the required course text.

Reading

Sections 3.3, 3.4

Conceptual Questions

- 1. What is an example of a random variable? Why are random variables useful to look at
- 2. What is the difference between a pdf and a cdf
- 3. What do you need for a function $f: \mathbb{R} \to \mathbb{R}$ to be a probability distribution? Why are these conditions necessary?

Written Assignment

Total: 100 points. Each problem is worth 10 points unless otherwise noted.

Section 3.3: 3, 4, 5, 7, 8, 9, 12

Section 3.4: 1, 4, 5