## Probability (MATH 4733 - 01) Fall 2011 Homework 11

Due: Wed. Nov. 30, start of class

**Instructions:** Please read the homework policies and guidelines posted on the course webpage. 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.

You may not use a calculator or computer except for basic arithmetic operations  $(+, -, \times, \div)$  or to give a decimal approximation to an exact answer you have (e.g.,  $e^{-2} \approx 0.135$ ). In particular, you may not use a calculator/computer for integration.

## Reading

Section 4.2.

## **Conceptual Questions**

1. What are the relationships between binomial distributions, exponential distributions and Poisson distributions? Which are discrete and which are continuous?

## Written Assignment

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

**Section 4.2:** 2, 4, 5, 9, 10, 11, 23, 25, 27, 29