

Probability (MATH 4733 - 01) Fall 2011

Homework 9

Due: Wed. Nov. 2, 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 3.7, 3.8 and review multiple integrals.

Conceptual Questions

1. What is the use of a marginal pdf?
2. What is the relation between independence and random samples?

Written Assignment

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

Section 3.7: 9, 11, 12 (5 pts), 16 (5 pts), 19(a,b,c,e,f), 25 (5 pts), 26 (5 pts), 27, 29 (5 pts), 33, 34, 39 (5 pts)

Section 3.8: 3 (5 pts), 5 (5 pts)