

# STAT 405-01: Mathematical Statistics I

## Problem Set 7

Assigned 2013 October 18

Due 2013 October 29

**Show your work on all problems!** Be sure to give credit to any collaborators, or outside sources used in solving the problems. Note that if using an outside source to do a calculation, you should use it as a reference for the method, and actually carry out the calculation yourself; it's not sufficient to quote the results of a calculation contained in an outside source.

### 1 Hogg 3.3.3

[Please obtain an answer to this problem using the tables in the back of Hogg, without referring to any other tables or computational tools, although you may of course use such tools to check the result.]

### 2 Hogg 3.3.23

### 3 Hogg 3.3.24

### 4 Hogg 3.3.25

### 5 Hogg 3.4.1

### 6 Hogg 3.4.2

### 7 Hogg 3.4.6

### 8 Hogg 3.4.31