## Statistics 630 - Assignment 4

(due Wednesday, October 1, 2014, 11:59 pm)

## **Instructions:**

- The textbook exercises are in the book by Evans and Rosenthal. This assignment covers material from Chapters 2 discussed in Lectures 10–12.
- Whether you write out the solutions by hand or in a text document, be sure that they are *neat*, *legible and in order* (even if you choose to solve them in a different order).
- **Type** your name, email address, course number, section number and assignment number at the top of the first page (or cover page).
- Either scan or print your solutions to a **PDF** file under 15MB in size. It must be in a *single* file, not separate files for separate pages. Name the file using your name (for example, I could use twehrly630hw01.pdf) to avoid confusion with other students and/or assignments. *Do not* take a photo of each page and then paste them into a document this will make your file too big and the results will generally not be very readable anyway.
- Login to your WebAssign account to upload your file. You must do this by 11:59 pm U.S. Central time, according to the WebAssign server, on the due date. We highly recommend that you start the upload at least 15 minutes earlier. You can make multiple submissions, but only the last submission will be graded.

Answer the following problems from Chapter 2:

2.7.3, 2.7.4ad (change the range to  $0 \le x \le 2$ ,  $0 \le y \le 1$  in part (d))

2.7.9, 2.7.10 (You may apply the result in problem 2.7.13 without proof.), 2.7.16

2.8.1, 2.8.2, 2.8.5abc, 2.8.7ad (change the range to  $0 \le x \le 2, \ 0 \le y \le 1$  in part (d)), 2.8.10, 2.8.15, 2.8.23 (use the result of 2.8.22 without proof), 2.8.24

2.9.7, 2.9.14 (to simplify the calculations, you may assume that X and Y are independent N(0,1) variables)