Homework 4

Do Hogg & Craig, Problems 9.1, 9.4, 9.9, 9.15 and 9.17. Some of these problems are hard, so I suggest that you get started as soon as possible.

For 9.1, use the results from Handout 7, pages 9-10. You do not need to re-derive these results.

In 9.9, do not use any "continuity correction". (And if you’ve never heard of the continuity correction, you don’t need to learn about it now). The expectation and variance of a $B(n, p)$ random variable $Y$ are $E[Y] = np$, and $Var[Y] = np(1-p)$. Do not worry about rounding $n$ to an integer.