Reminder: To receive full credit for your homework, include as part of your solution a brief description of the problem that provides context.

This assignment includes problems related to sampling distributions and estimation of a population mean.

- 1. Exercise 5.40 (page 180)
- 2. Exercise 5.41(b) (page 180) except use R to compute the probability exactly. Then, do the normal approximation. Note that $Pr\{0.15 \le \hat{p} \le 0.25\} = Pr\{3 \le Y \le 5\}$. Find the area between 2.5 and 5.5 under a normal curve whose mean and standard deviation agree with the mean and standard deviation of the approximate binomial distribution.
- 3. Exercise 5.47 (page 181).
- 4. Exercise 6.4 (page 188).
- 5. Exercise 6.5 (page 188).
- 6. Exercise 6.9 (page 198).
- 7. Exercise 6.10 (page 198).
- 8. Exercise 6.11 (page 198).