

**STA 3032 Homework 3**  
**Due on September 22, 2022 at 11:59 p.m.**

**Instructions:**

- Submit the following file to the relevant dropbox on course website.
  1. **One single pdf file** of your report showing your steps, answers, and R output if necessary. This file should be named  $\text{HW}_x\text{Last.pdf}$ , where  $x$  is the homework number and  $\text{Last}$  is your last name (e.g., HW1\_Lee.pdf).
- **No late homework will be accepted.** Make use of the dropping policy stated in the syllabus if you are unable to meet the deadline.
- In the following, WMMY refers to our textbook by Walpole, Myers, Myers, and Ye.

**Assignment:**

1. WMMY Exercise 4.14.
2. WMMY Exercise 4.38.
3. WMMY Exercise 4.40.
4. WMMY Exercise 4.62.
5. WMMY Exercise 4.63.  
In addition, find the correlation coefficient between  $X$  and  $Y$ .
6. WMMY Exercise 4.83.  
In addition, find the correlation coefficient between  $X$  and  $Y$  (recall Exercise 3.41 solved in class).
7. WMMY Exercise 4.84.