

# Homework 5

Due: Thursday 3/19/20 by 8:30am

1. Problem 2.10 from the `.pdf` version of the textbook.
2. Problem 2.11 from the `.pdf` version of the textbook.
3. Problem 2.28 from the `.pdf` version of the textbook, parts (a)-(b).
4. Problem 2.31 from the `.pdf` version of the textbook, parts (a)-(b).
5. Problem 3.2 from the `.pdf` version of the textbook. The idea is to make an example plot of the residuals  $e_1, \dots, e_n$  against the predictors  $X_1, \dots, X_n$ , that depicts what you might expect to see under the circumstances described by each part of the problem.
6. Problem 3.7 from the `.pdf` version of the textbook, parts (a)-(d). You only need to do the first part of (d), i.e. construct a normal probability plot of the residuals. Note that this will require a bit of material that we will cover Tuesday 3/10.
7. Problem 3.8 from the `.pdf` version of the textbook, parts (a)-(d). You only need to do the first part of (d), i.e. construct a normal probability plot of the residuals. Note that this will require a bit of material that we will cover Tuesday 3/10.