

# Homework 6

S520, Fall 2019

Due at the beginning of class, Wednesday October 16th. Please upload your file to Canvas no later than 4pm on the due date. Late submission will be accepted (but penalized) before the solutions are posted.

Trosset question numbers refer to the hardcover textbook. Show all work.

1. (24 points.) Trosset exercise 7.7.1. You can read the data into R using the following code:  
`x = scan("http://pages.iu.edu/~mtrosset/StatInferR/Data/sample771.dat")`
2. In Major League Baseball, there are 15 teams in the American League, and 15 teams in the National League. The standings for the 2015 season can be found at

<https://www.mlb.com/standings/2015>

The "W" column gives the number of wins for each team. Please consider the data from [Regular Season](#).

- (a) (6 points.) Using R, draw two boxplots side-by-side on the same graph: one for the wins of American League teams in 2015, and one for the wins of National League teams in 2015. Your graph should be labeled clearly, so that a statistician should be able to interpret the graph without any further explanation.
  - (b) (6 points.) Describe the differences between the distributions of wins for American League and National League teams in 2015. Your description can be based on other plots or statistics, not only the boxplots in (a).
3. (15 points) Trosset exercise 7.7.4.
  4. (6 points) Trosset exercise 7.7.6.