
First Homework:

Section 3 (Tues-Thurs class) due Thurs Feb 5.

Section 4 (Mon-Wed class) due Wed Feb 11.

Problem 1. (No R needed.)

In a 2008 article titled “Letting Our Fingers Do the Talking,” the New York Times reported that Americans now send more text messages than they make phone calls. According to a study by Nielsen Mobile, “Teenagers ages 13 to 17 are by far the most prolific texters, sending or receiving 1742 messages a month.” Mr. Williams, a high school statistics teacher, was skeptical about the claims in the article. So he collected data from his first-period statistics class on the number of text messages and calls they had sent or received in the past 24 hours. Here are the texting data:

0 7 1 29 25 8 5 1 25 98 9 0 26 8 118 72 0 92 52 14 3 3 44 5 42

- (a) Make a boxplot of these data by hand. Be sure to check for outliers.
- (b) Explain how these data seem to contradict the claim in the article.

Problem 2. (Use R in Google Colab.)

Here are the scores on the Survey of Study Habits and Attitudes (SSHA) for 18 first-year college women:

154 109 137 115 152 140 154 178 101 103 126 126 137 165 165 129 200 148

and for 20 first-year college men:

108 140 114 91 180 115 126 92 169 146 109 132 75 88 113 151 70 115 187 104

Do these data support the belief that men and women differ in their study habits and attitudes toward learning? (Note that high scores indicate good study habits and attitudes toward learning.) Follow the four-step process.