1. If you haven’t done so already, look at the extra problems from Week 1. Many are still relevant for this week.

2. The distribution of the weights of loaves of bread from a certain bakery follows approximately a normal distribution. Based on a very large sample, it was found that 10 percent of the loaves weighed less than 15.34 ounces and 20 percent of the loaves weighed more than 16.31 ounces. What are the mean and standard deviation of the weights of the loaves of bread?

3. A baseball player’s batting average is the ratio of hits to at-bats (i.e. if the player had 6 hits in 20 at bats, his batting average is 6/20 = .300). Consider the following (hypothetical) discussion between two baseball fans after next season:

   Red Sox Fan: Jacoby Ellsbury is the better contact hitter. He batted .320 this season, whereas Robinson Cano only batted .300.

   Yankees Fan: But if you look at the splits, Cano had a higher batting average than Ellsbury both before and after the All-Star Break.

Is it possible for both fans to be right? If so, make up some data that exhibits the phenomenon described. If not, explain why it is impossible.
4. The Center for Teaching and Learning advises TA’s: “Studies have shown that students who do the reading before class perform better on exams, so you should encourage your students to read before class.” Do you agree with this logic? What is a more plausible explanation for this association? (Note: This is not to say that you shouldn’t do the reading before class!)