Math 242: Chapter 3 Reading Questions, Due September 9

1. What is the disadvantage of using a 100% coverage interval to describe variation?

2. In describing a sample of a variable, what is the relationship between the variance and the standard deviation?

3. What is a residual?

4. What’s the difference between “density” and “frequency” in displaying a variable with a histogram?

5. What’s a normal distribution?

6. On page 71 is the graph showing boxplots of height broken down according to sex as well as for both males and females together. Which components of the boxplot for “All” match up exactly with the boxplot for “M” or “F”? Explain why.

7. Variables typically have units. For example, in Galton’s height data, the height variable has units of inches. Suppose you are working with a variable in units of degrees celsius. What would be the units of the standard deviation of a variable? Of the variance? Why are they different?