## On Your Own (for the **cdc** dataset)

- 1. Make a scatterplot of weight versus desired weight. Describe the relationship between these two variables
- 2. Let's consider a new variable: the difference between desired weight (wtdesire) and current weight (weight). Create this new variable by subtracting the two columns in the data frame and assigning them to a new object called wdiff.
- 3. What type of data is wdiff? If an observation wdiff is 0, what does this mean about the person's weight and desired weight. What if wdiff is positive or negative?
- 4. Describe the distribution of wdiff in terms of its center, shape, and spread, including any plots you use. What does this tell us about how people feel about their current weight?
- 5. Using numerical summaries and a side-by-side box plot, determine if men tend to view their weight differently than women.
- 6. Now it's time to get creative. Find the mean and standard deviation of weight and determine what proportion of the weights are within one standard deviation of the mean.