7.5 Homework
1. Would any of the following provide a random sample of letters used in the text of the book *Harry Potter and the Sorcerer’s Stone* by J.K. Rowling? Explain your reasoning.
   a. Use the first letter of every word of a randomly chosen paragraph.
   b. Number all of the letters in the words in a paragraph of the book, cut out the numbers, and put them in a bag. Then, choose a random set of numbers from the bag to identify which letters you will use.
   c. Have a family member or friend write down a list of his favorite words, and count the number of times each of the letters occurs.

2. Indicate whether the following are random samples from the given population, and explain why or why not.
   a. Population: All students in school; the sample includes every fifth student in the hall outside of class.
   b. Population: Students in your class; the sample consists of students who have the letter s in their last names.
   c. Population: Students in your class; the sample is selected by putting their names in a hat and drawing the sample from the hat.
   d. Population: People in your neighborhood; the sample includes those outside in the neighborhood at 6:00 p.m.
   e. Population: Everyone in a room; the sample is selected by having everyone toss a coin, and those that result in heads are the sample.
7.5 Homework

3. Consider the two sample distributions of the number of letters in randomly selected words shown below:

![Graph showing two sample distributions of word lengths](image)

Do you think the two samples came from the same poem? Why or why not?