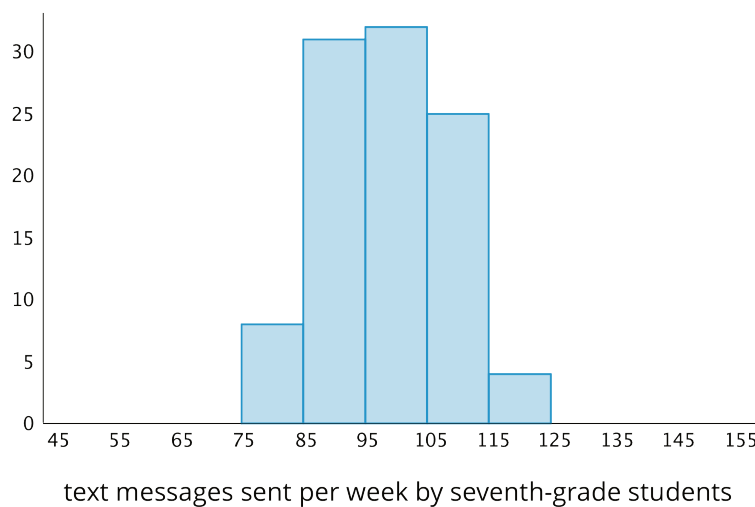
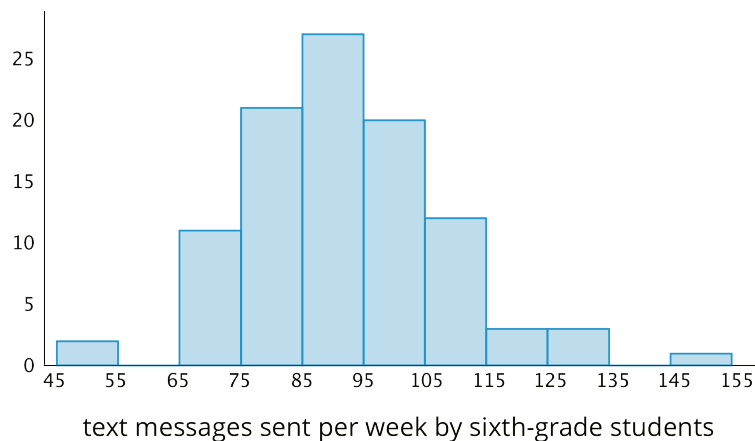


## Lesson 7 Practice Problems

1. These two histograms show the number of text messages sent in one week by two groups of 100 students. The first histogram summarizes data from sixth-grade students. The second histogram summarizes data from seventh-grade students.

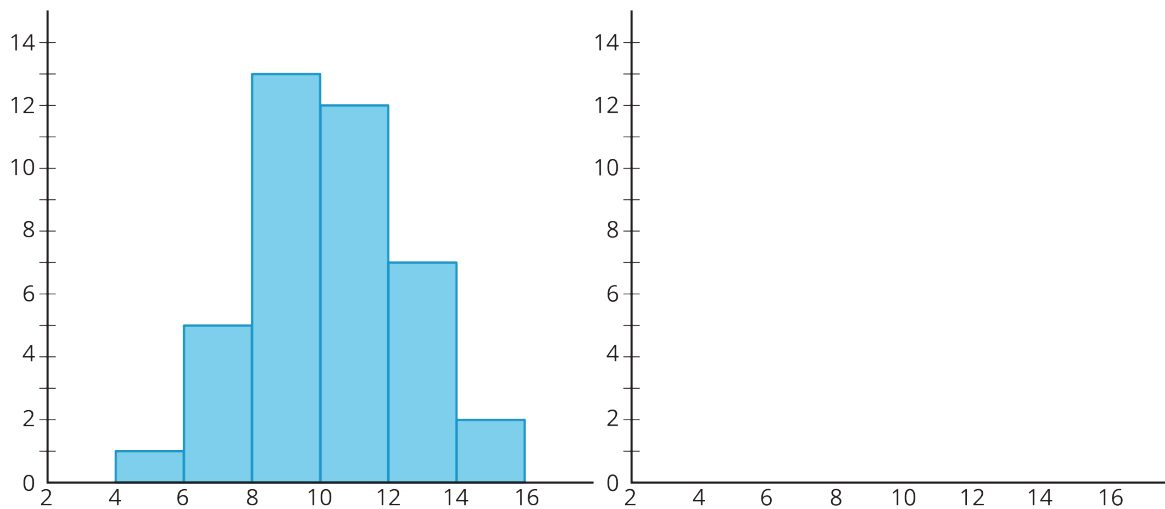


- Do the two data sets have approximately the same center? If so, explain where the center is located. If not, which one has the greater center?
- Which data set has greater spread? Explain your reasoning.
- Overall, which group of students—sixth- or seventh-grade—sent more text messages?

2. Forty sixth-grade students ran 1 mile. Here is a histogram that summarizes their times, in minutes. The center of the distribution is approximately 10 minutes.

On the blank axes, draw a second histogram that has:

- a distribution of times for a different group of 40 sixth-grade students.
- a center at 10 minutes.
- less variability than the distribution shown in the first histogram.



3. Jada has  $d$  dimes. She has more than 30 cents but less than a dollar.

- a. Write two inequalities that represent how many dimes Jada has.
- b. Can  $d$  be 10?
- c. How many possible solutions make both inequalities true? If possible, describe or list the solutions.

(From Unit 7, Lesson 9.)

4. Order these numbers from greatest to least:  $-4$ ,  $\frac{1}{4}$ ,  $0$ ,  $4$ ,  $-3\frac{1}{2}$ ,  $\frac{7}{4}$ ,  $-\frac{5}{4}$

(From Unit 7, Lesson 4.)