## **Guided Practice**

## 461-9

1. Wendy kept track of the number of text messages she sent each day for three weeks. Complete the frequency table. (Explore Activity)

0, 5, 5, 7, 11, 12, 15, 20, 22, 24, 25, 25, 27, 27, 29, 29, 32, 33, 34, 35, 35

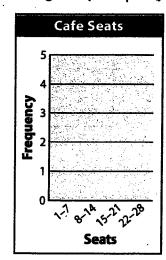
Ed counted the number of seats available in each cafe in his town. Use his data for 2-3.

interval	Frequency:
0–9	

18, 20, 22, 26, 10, 12, 16, 18, 7, 8

2. Complete the frequency table and the histogram. (Example 1)

Interval	Erequency
1–7	
8–14	
15–21	
22-28	,



**3.** What are some conclusions you can make about the distribution of the data? (Example 2)

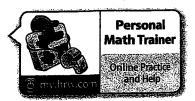
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### ESSENTIAL QUESTION

4. How can you display data in a histogram?

# 16.5 Independent Practice



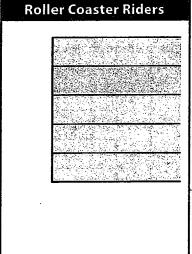


An amusement park employee records the ages of the people who ride the new roller coaster during a fifteen-minute period.

Ages of riders: 47, 16, 16, 35, 45, 43, 11, 29, 31, 50, 23, 18, 18, 20, 29, 17, 18, 48, 56, 24, 18, 21, 38, 12, 23.

**5.** Complete the frequency table. Then make a histogram of the data.

Interval	Frequency
10–19	
- 12 - 12	



**6.** Describe two things you know about the riders who are represented by the data.

- **7. Multiple Representations** West Middle School has classes of many different sizes during first period. The number of students in each class is shown.
  - 9, 23, 18, 14, 20, 26, 14, 18, 18, 12, 8, 13, 21, 22, 28, 10, 7, 19, 24, 20
  - **a.** Hank made a histogram using intervals of 6–10, 11–15, and so on. How many bars did his histogram

have? What was the height of the highest bar?

**b.** Lisa made a histogram using intervals of 0–9, 10–19, and so on. How many bars did her histogram have?

What was the height of the highest bar?

**c.** Besides a histogram, what are some other ways you could display these data?

a set of data from a histogram? Explain.

**9. Multistep** A theater owner keeps track of how many people come to see movies on 21 different Saturdays.

#### **Saturday Moviegoers**

Interval	Frequency
60–69	1
70–79	3
80–89	10
90–99	7

- Saturday Moviegoers
- a. Use the data to make a histogram.
- asks, "How many moviegoers come to the theater on a typical Saturday?" What would you tell the theater owner? Use your histogram to support your answer.

8. Communicate Mathematical Ideas Can you find the mean or median of

c. Communicate Mathematical Ideas Is the theater owner's question a statistical question? Why or why not?

**10. Explain the Error** Irina says she can find the range of a set of data from a histogram. Is she correct? Justify your answer.