Answers

1–3. See Additional Answers.

4. mean: 6.875; median: 6.5; modes: 5 and 9; range: 6

5. mean: 11.4; median: 6; mode: none; *Sample answer:* The median is best because there is no mode, the mean is greater than most of the data, and the median is close to 3 of 5 data values.

6. mean: about 54.86; median: 53; mode: none; The mean or median is best because there is no mode and the mean and median are close to each other.

7. 74 **8.** 90

9. median = 36; $Q_1 = 22.5$; $Q_3 = 57.5$; IQR = 35

10. median = 37; $Q_1 = 30$; $Q_3 = 39.5$; IQR = 9.5

11. about 39.3; The distances driven differ from the mean distance by an average of about 39.3 miles.

12. 3.7; The prices of sunglasses differ from the mean price by an average of \$3.70.

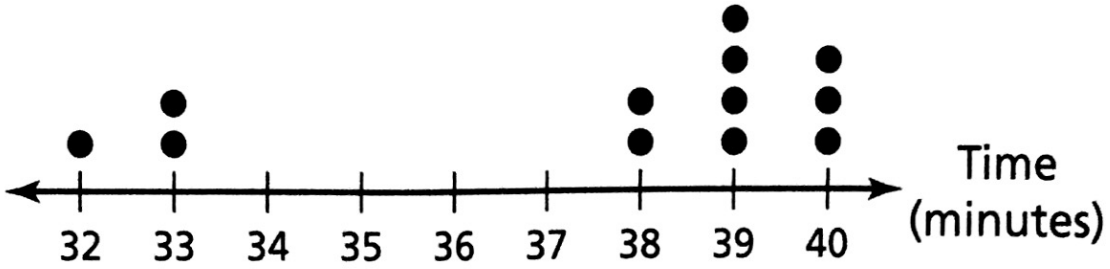
13. **a.** range = 36 guests; IQR = 10 guests

b. The outlier is 90 guests; range = 18; IQR = 7; range

14. See Additional Answers.

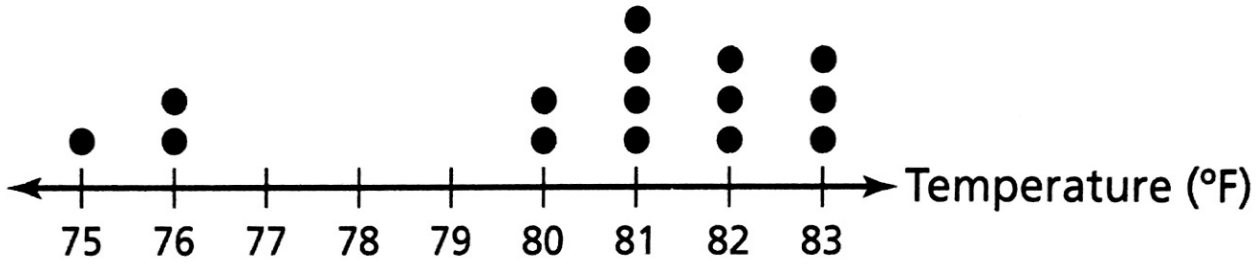
Chapter 9 Test

1.



The data are clustered around 39. There is a peak at 39. There is a gap between 33 and 38.

2.



The data are clustered around 81. There is a peak at 81. There is a gap between 76 and 80.

3. mean: 6.4; median: 7; mode: 7; range: 10

14. Greg's hours: mean: 11.25; median: 10.5; modes: 9, 12; range: 18; IQR: 7.5; MAD: 4.5

Tom's hours: mean: 15; median: 15; modes: 12, 15, 18; range: 6; IQR: 4; MAD: 1.75

Sample answer: The measures of center for Tom's hours are greater than the measures of center for Greg's hours. The measures of variation for Tom's hours are less than the measures of variation for Greg's hours.