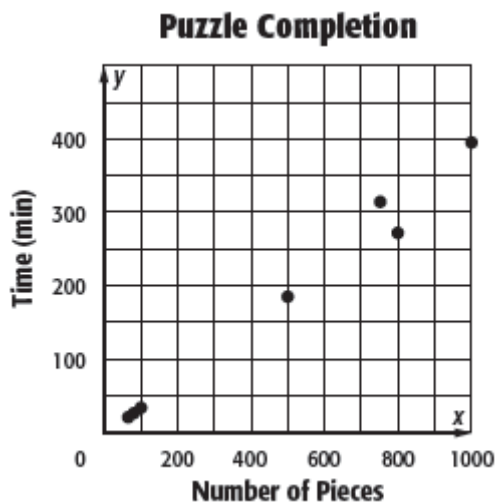


## Chapter 9 Extra Practice Answers

### Lesson 9-1

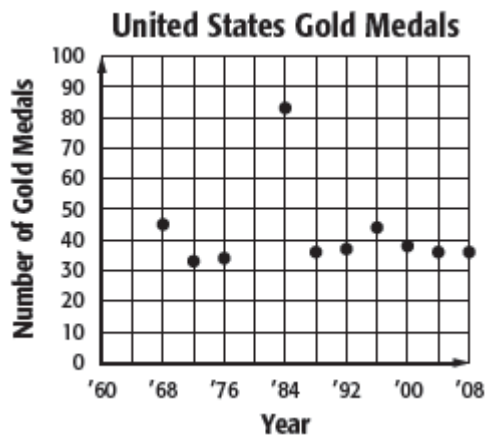
1a.



1b. Sample answer: the scatter plot shows a positive linear association. There are no clusters or outliers.

1c. Sample answer: 260 min

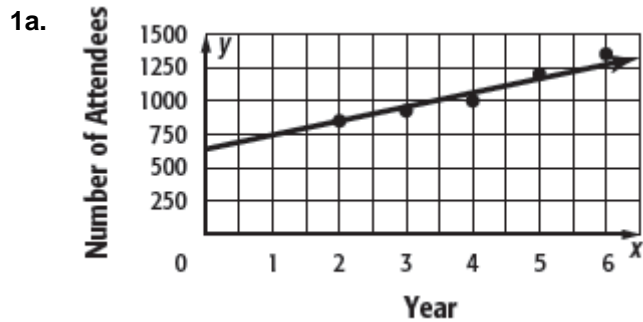
2a.



2b. Sample answer: The scatter plot shows a linear association. There are no clusters and one outlier.

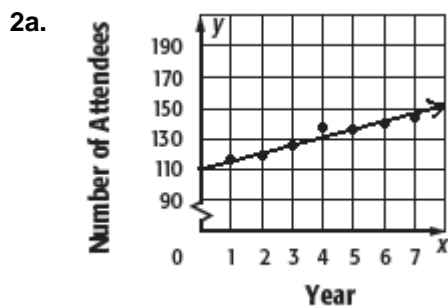
2c. Sample answer: There is not a positive or negative relationship, but the number of medals is around 40 each year. You could reasonable predict that the number of gold medals in 2016 would be around 40.

## Lesson 9-2



1b. Sample answer:  $y = 112.5x + 625$

1c. Sample answer: 1,750 attendees



2b. Sample answer:  $y = 5x + 110$

2c. Sample answer: 185 attendees

## Lesson 9-3

1a.

	T-Shirts	Tank Tops	Total
Jeans	40; 0.73	25; 0.71	65
Khakis	15; 0.27	10; 0.29	25
Total	55; 1.00	35; 1.00	90

1b. Sample answer: Most people in the store prefer jeans and T-shirts.

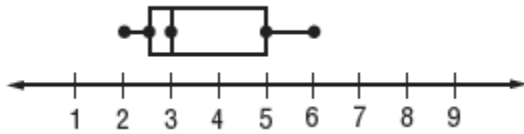
2a.

	Popcorn	No Popcorn	Total
Comedy	75; 0.83	15; 0.17	90; 1.00
Drama	35; 0.58	25; 0.42	60; 1.00
Total	110; 0.73	40; 0.27	150

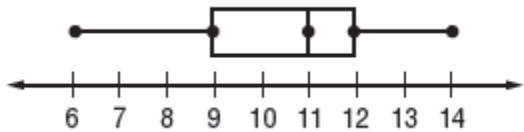
2b. Sample answer: Most people like popcorn and prefer comedies.

### Lesson 9-4

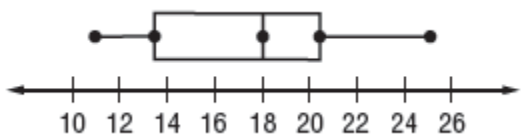
1. 7.4; 7.5; no mode; 12
2. 55.9; 57; 61; 12
3. 131.6; 134; 134; 18
4. 52.1; 54; 56; 29
5. 12.1; 11; 11; 15
6. 20.9; 20.5; 20, 21; 7
7. 1.9; 2; 2; 2
8. 29.9; 29; 27, 29; 19
9. minimum: 2; Q1: 2.5; median: 3; Q3: 5; maximum: 6



10. minimum: 6; Q1: 9; median: 11; Q3: 12; maximum: 14



11. minimum: 11; Q1: 13.5; median: 18; Q3: 20.5; maximum: 25



12. minimum: 2; Q1: 5; median: 7; Q3: 12; maximum: 14



### Lesson 9-5

1. 5.6; Sample answer: The average distance each data value is from the mean is 5.6 points.
2. 28.4; Sample answer: The average distance each data value is from the mean is 28.4 minutes.
3. 6.5; Sample answer: The average distance each data value is from the mean is 6.5 miles per hour.
4. 1.4; Sample answer: The average distance each data value is from the mean is 1.4 hours.
5. 1.7; Sample answer: The average distance each data value is from the mean is 1.7 inches.
6. 2.9; Sample answer: The average distance each data value is from the mean is \$2.90.

## Lesson 9-6

1. The distribution is not symmetric. There is a cluster from 0.0–1.9 and a peak at the interval 1.0–1.9. There are no gaps or outliers.
- 2a. The distribution is not symmetric. There is a cluster from 1–5 and a peak at 5. The distribution has a gap from 20–30 feet. There are no outliers.
- 2b. The distribution is not symmetric, so the median and interquartile range are appropriate measures to use. The data are centered around the median of 5. The spread of the data around the center is 12.