

## Quiz for Lessons 4-5 Through 4-6

### 4-5 Scatter Plots and Trend Lines

The table shows the time it takes different people to read a given number of pages.

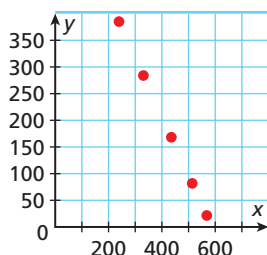
Pages Read	2	6	6	8	8	10	10
Time (min)	10	15	20	15	30	25	30

- Graph a scatter plot using the given data.
- Describe the correlation illustrated by the scatter plot.

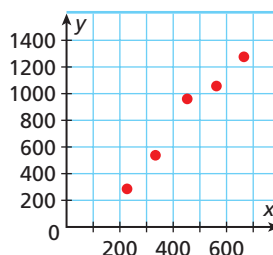
Choose the scatter plot that best represents the described relationship. Explain.

- number of movie tickets sold and number of available seats
- number of movie tickets sold and amount of concession sales
- number of movie tickets sold and length of movie

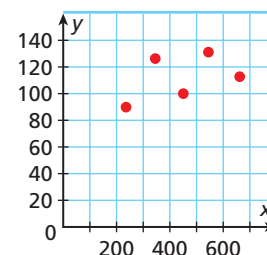
Graph A



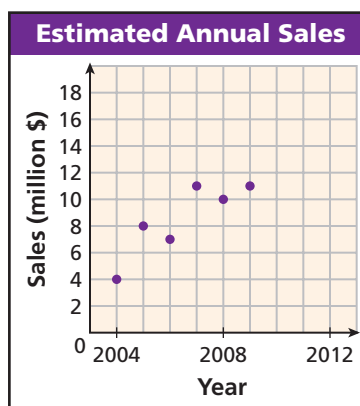
Graph B



Graph C



- The scatter plot shows the estimated annual sales for an electronics and appliance chain of stores for the years 2004–2009. Based on this relationship, predict the annual sales in 2012.



### 4-6 Arithmetic Sequences

Determine whether each sequence appears to be an arithmetic sequence. If so, find the common difference and the next three terms.

- 7, 3, -1, -5, ...
- 3, 6, 12, 24, ...
- 3.5, -2, -0.5, 1, ...

Find the indicated term of the arithmetic sequence.

- 31st term: 12, 7, 2, -3, ...
- 22nd term:  $a_1 = 6$ ;  $d = 4$
- With no air resistance, an object would fall 16 feet during the first second, 48 feet during the second second, 80 feet during the third second, 112 feet during the fourth second, and so on. How many feet will the object fall during the ninth second?