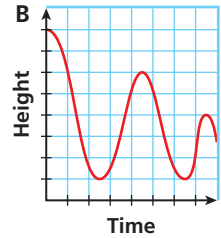
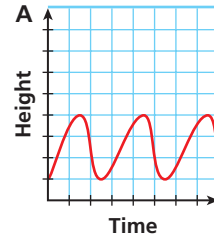


## Quiz for Lessons 4-1 Through 4-4

### 4-1 Graphing Relationships

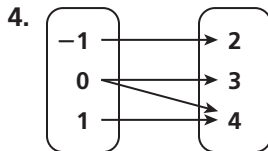
Choose the graph that best represents each situation.

- A person bungee jumps from a high platform.
- A person jumps on a trampoline in a steady motion.
- Xander takes a quiz worth 100 points. Each question is worth 20 points. Sketch a graph to show his possible score if he misses 1, 2, 3, 4, or 5 questions.



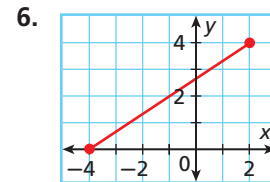
### 4-2 Relations and Functions

Give the domain and range of each relation. Tell whether the relation is a function. Explain.



5. 

x	-2	-2	0	2	2
y	3	3	3	3	3



### 4-3 Writing Functions

Determine a relationship between the  $x$ - and  $y$ -values. Write an equation.

7. 

x	1	2	3	4
y	-6	-5	-4	-3

8. 

x	1	2	3	4
y	-3	-6	-9	-12

- A printer can print 8 pages per minute. Identify the dependent and independent variables for the situation. Write a rule in function notation.

Evaluate each function for the given input values.

- For  $f(x) = 3x - 1$ , find  $f(x)$  when  $x = 2$ .
- For  $g(x) = x^2 - x$ , find  $g(x)$  when  $x = -2$ .
- A photographer charges a sitting fee of \$15 plus \$3 for each pose. Write a function to describe the situation. Find a reasonable domain and range for up to 5 poses.

### 4-4 Graphing Functions

Graph each function for the given domain.

- $2x - y = 3$ ; D:  $\{-2, 0, 1, 3\}$
- $y = 4 - x^2$ ; D:  $\{-1, 0, 1, 2\}$
- $y = 3 - 2x$ ; D:  $\{-1, 0, 1, 3\}$

Graph each function.

- $x + y = 6$
- $y = |x| - 3$
- $y = x^2 + 1$

- The function  $y = 8x$  represents how many miles  $y$  a certain storm travels in  $x$  hours. Graph the function and estimate the number of miles the storm travels in 10.5 h.