

**LESSON**  
**4-3** **Practice A**  
**Writing Functions**

Choose the equation from the box that describes each relationship.

1. 

$x$	-3	-2	-1	0
$y$	-9	-6	-3	0

$y = -3x$
$y = 3x$
$y = x - 3$

2.  $\{(3, 0), (2, -1), (1, -2), (0, -3)\}$  \_\_\_\_\_
3.  $\{(0, 0), (1, -3), (2, -6), (3, -9)\}$  \_\_\_\_\_

For each, write whether the given variable is *independent* or *dependent*.

4. Auto insurance costs increase with each accident and traffic violation.
- number of accidents/violations: \_\_\_\_\_
  - cost of auto insurance: \_\_\_\_\_
5. Christian is buying several DVDs that cost \$12 each.
- total cost of the DVDs: \_\_\_\_\_
  - number of DVDs purchased: \_\_\_\_\_

Evaluate each function for the given input values.

6. For  $f(x) = x + 7$ , find  $f(x)$  when  $x = 3$  and when  $x = -5$ . \_\_\_\_\_
7. For  $g(x) = -2x$ , find  $g(x)$  when  $x = 4$  and when  $x = -1$ . \_\_\_\_\_
8. For  $h(x) = 3x - 1$ , find  $h(x)$  when  $x = -2$  and when  $x = 7$ . \_\_\_\_\_

Complete the following.

9. Marlena is making her own beaded bracelets. rule: \_\_\_\_\_  
 Each bracelet will have 10 beads. Write a function domain: \_\_\_\_\_  
 rule to describe the number of beads she will use. Find a reasonable domain and range for the function if Marlena makes up to 7 bracelets. range: \_\_\_\_\_
10. Giselle is going to rent a scooter for at least one hour. The fee is \$45 plus \$5 for each hour it is rented. Write a function rule to describe the total cost of renting a scooter. Find a reasonable domain and range for the function if Giselle has \$65. rule: \_\_\_\_\_  
 domain: \_\_\_\_\_  
 range: \_\_\_\_\_