

# Algebra 1

## Function Notation Worksheet Alternate

Name \_\_\_\_\_

For #1-8: Evaluate the following expressions given the functions below:

$$g(x) = -3x - 1$$

$$f(x) = x^2 - 7$$

$$h(x) = \frac{16}{x}$$

$$j(x) = 2x - 9$$

1.  $g(10) =$  \_\_\_\_\_

2. What is the value of  $x$  if  $g(x) = 16$   $x =$  \_\_\_\_\_

3.  $f(3) =$  \_\_\_\_\_

4. What is the value of  $x$  if  $f(x) = 23$   $x =$  \_\_\_\_\_

5.  $h(-2) =$  \_\_\_\_\_

6. What is the value of  $x$  if  $h(x) = -2$   $x =$  \_\_\_\_\_

7.  $j(7) =$  \_\_\_\_\_

8.  $h(a) =$  \_\_\_\_\_

For #9-12: Translate the following statements into coordinate points:

9.  $f(-1) = 3$  \_\_\_\_\_

10.  $g(4) = -1$  \_\_\_\_\_

11.  $h(2) = 8$  \_\_\_\_\_

12.  $k(2) = 9$  \_\_\_\_\_

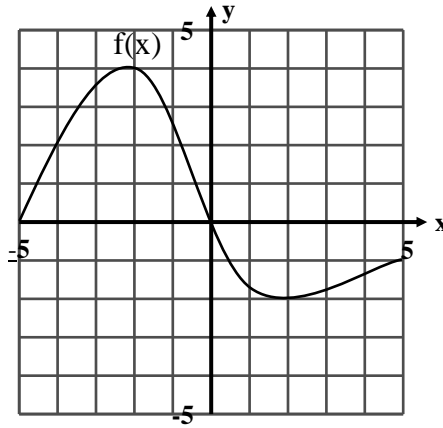
For #13-18, use the graph to find:

13.  $f(2) =$  \_\_\_\_\_

14.  $f(0) =$  \_\_\_\_\_

15.  $f(-4) =$  \_\_\_\_\_

16.  $f(-5) =$  \_\_\_\_\_



17. What is the value of  $x$  when  $f(x) = 0$                        $x =$  \_\_\_\_\_

18. Does the graph represent a *function*? Explain why or why not.

19. *Multiple Choice: Circle the best answer.*

The games you can play at the Amusement Park average \$5 per game and your ticket was \$50. Your cost for the day is \$100. Write a function to represent the distance  $C$  **remaining** after you pay  $n$  games.

- A.  $C = 50 - 5n$               B.  $C = 5 - 50n$               C.  $C = 50n + 5$               D.  $C = 5n + 50$

20. Swine flu is attacking Porkopolis. The function  $S(t) = 9t - 4$  determines how many people have swine where  $t =$  time in days and  $S =$  the number of people in thousands.

- a. Find  $S(1)$ .
- b. What does  $S(1)$  mean?
- c. Find  $t$  when  $S(t) = 32$ .
- d. What does  $S(t) = 32$  mean?
- e. Graph the function. Make a table.

