

## Review Worksheet for Unit 2 Quiz

Name \_\_\_\_\_ Date \_\_\_\_\_

Write in function notation.

1.  $y = 5x + 3$

2.  $y = x^2 - 5x + 6$

Evaluate each function.

3.  $w(x) = 4x + 5$ ; find  $w(-8)$

4.  $h(x) = 2x + 5$ ; find  $h(x-3)$

5.  $m(x) = -3x^2 - 5x$ ; find  $m(3)$

6.  $f(x) = x^3 - 8$ ; find  $f(2)$

Evaluate the following expressions given:

$$f(x) = 4x - 2$$

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

$$h(x) = 8x + 10$$

7. Find  $x$  if  $f(x) = 2$

8. Find  $x$  if  $g(x) = 12$

9.  $f(3) + g(2)$

10.  $f(x) + h(x)$

Write the ordered pairs that represent the following expressions.

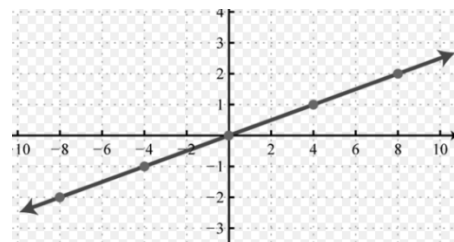
11.  $f(5) = 9$

12.  $g(-3) = 7$

Use the graph to answer the following.

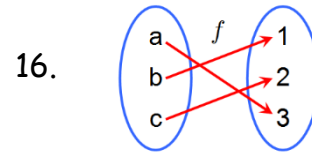
13.  $f(8) = \underline{\hspace{2cm}}$

14.  $f(\underline{\hspace{2cm}}) = -1$



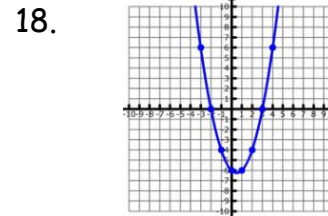
Decide whether the following relations are functions. Write yes or no.

15.  $\{(2,5),(-1,4),(2,7),(6,8)\}$



17. 

$x$	3	2	1	0	1	2	3
$y$	1	-2	2	4	-3	-2	-1



Evaluate the following expression given:

$$f(x) = 5x^2 - 9x + 2$$

$$h(x) = -2x^2 + 1$$

$$g(x) = x^2 + 3x - 8$$

$$k(x) = 4x - 3$$

19.  $f(x) - g(x)$

20.  $f(x) + g(x)$

21.  $h(x) \cdot k(x)$

Find the explicit rule for the sequence. Then find  $a_{18}$ .

22.  $-12, -2, 12, 22, \dots$

23.  $37, 31, 25, 19, \dots$

$a_n =$

$a_n =$

$a_{18} =$

$a_{18} =$

Find the first 4 terms in the sequence given the following information.

24.  $a_1 = 3$   
 $a_n = a_{n-1} - 5$

25.  $a_n = 2n - 8$