General Algebra II Lesson #2 Unit 6 Class Worksheet #2 For Worksheets #2 & #3

# General Algebra II Unit 6 CWS #2 Relation:

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This value of x, 5, is paired with two different values of y, -5 and 5.

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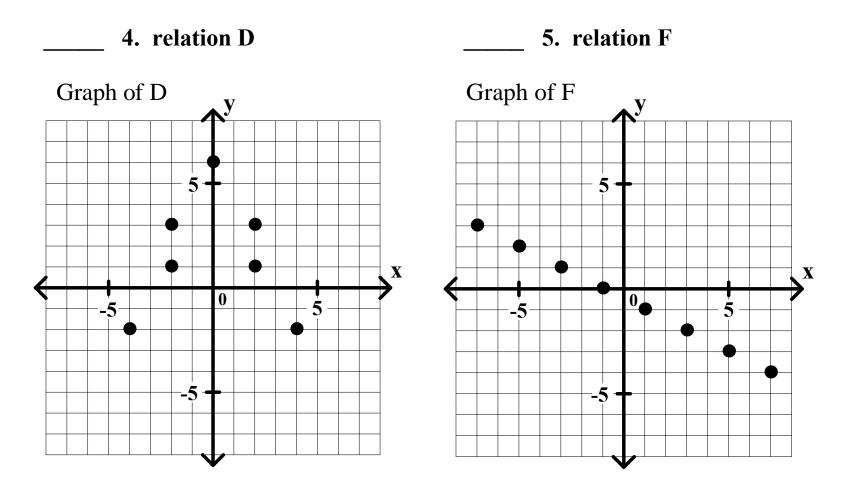
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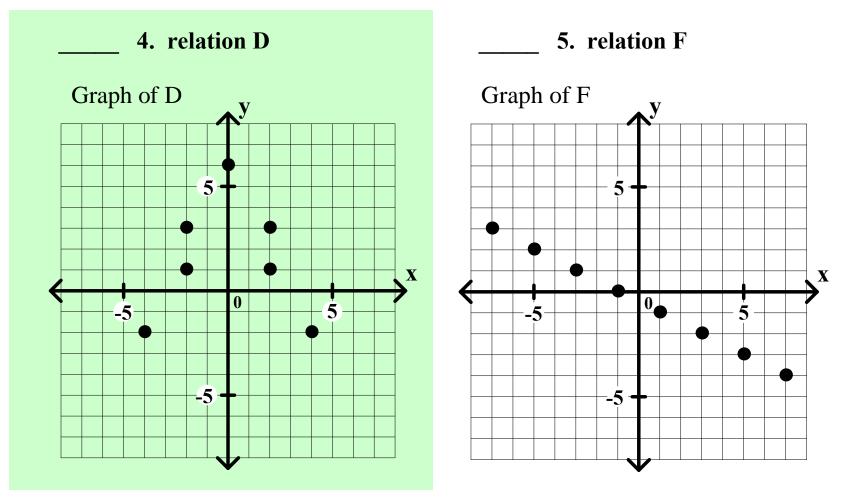
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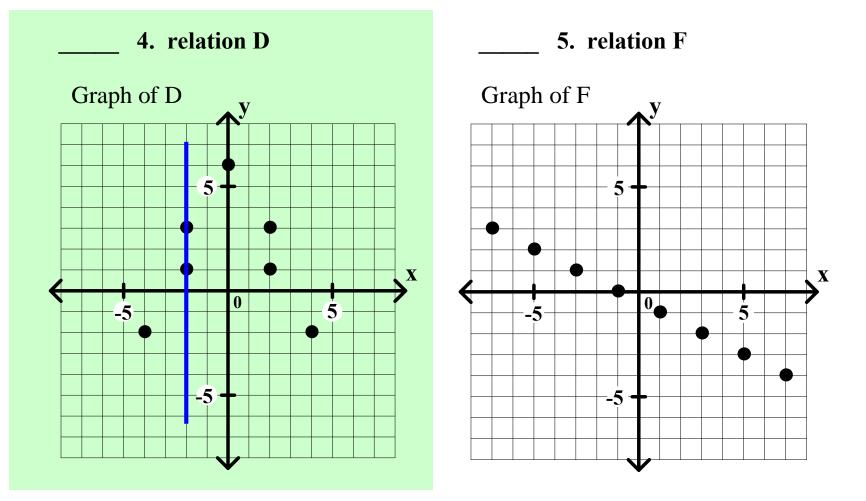
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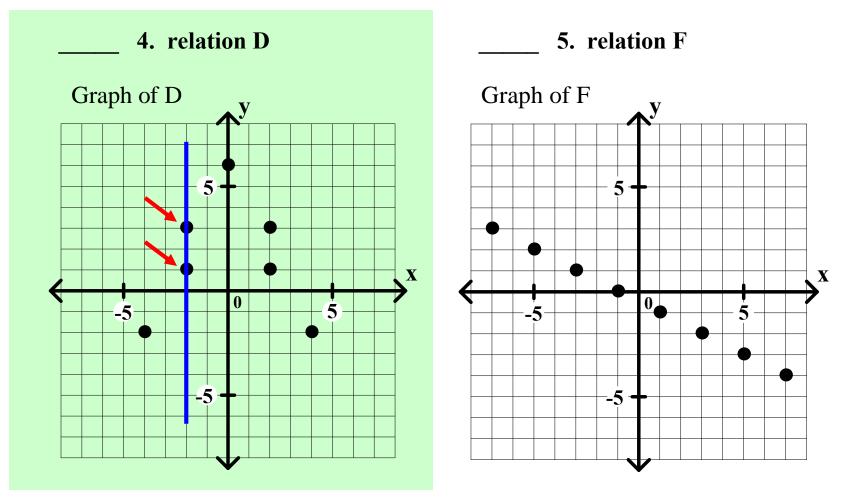
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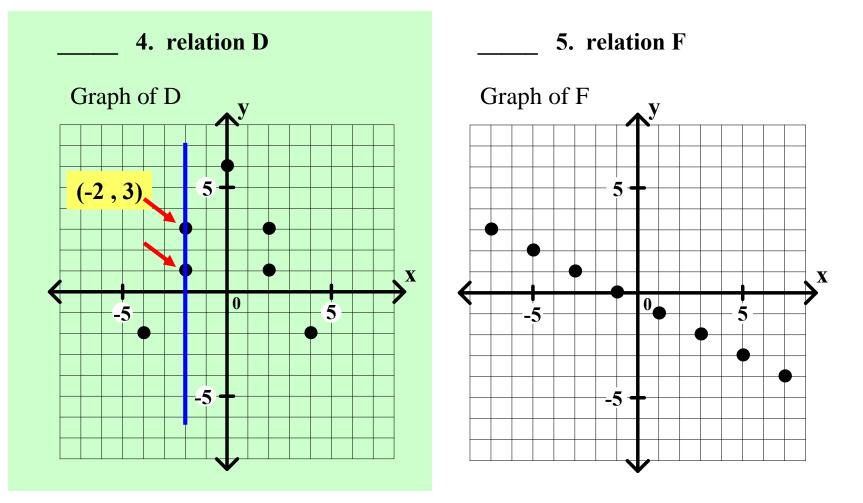
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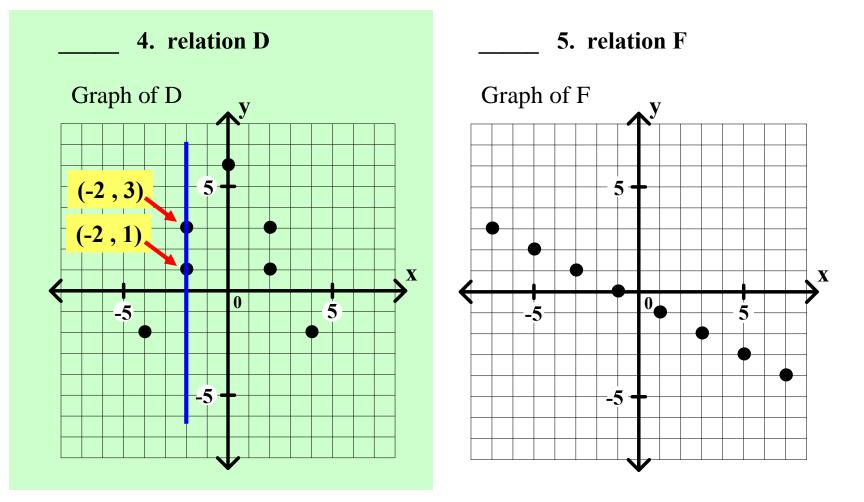
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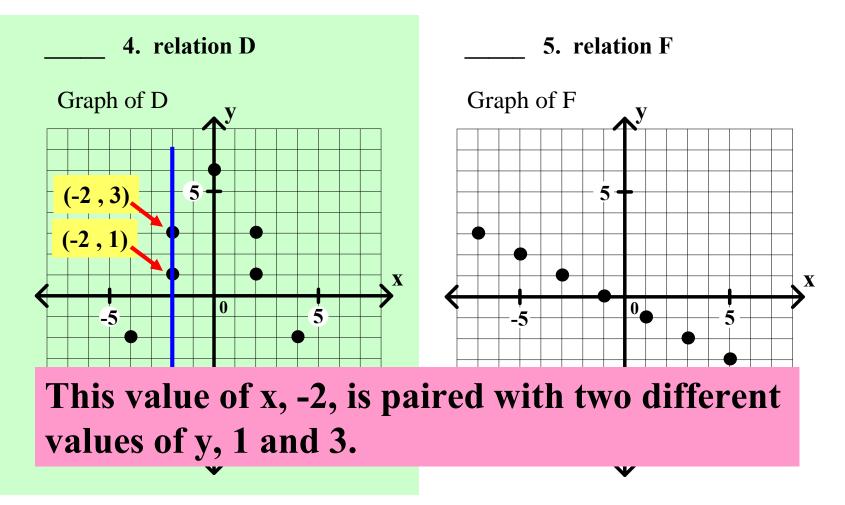
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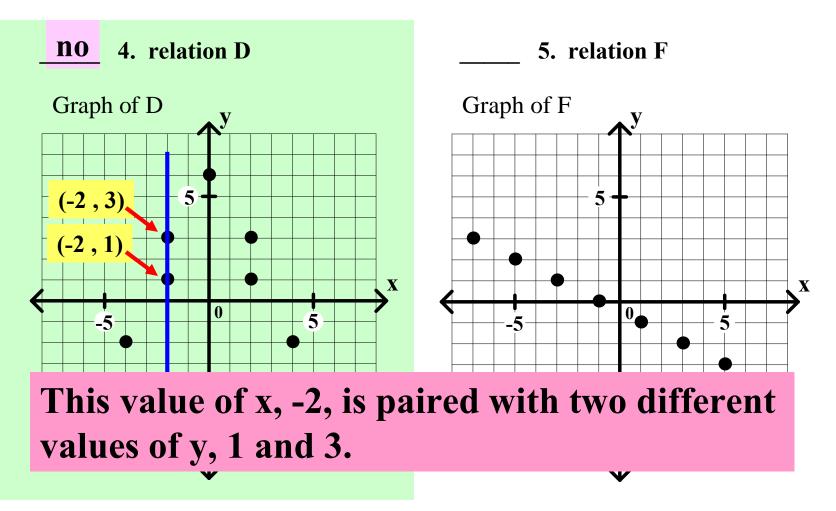
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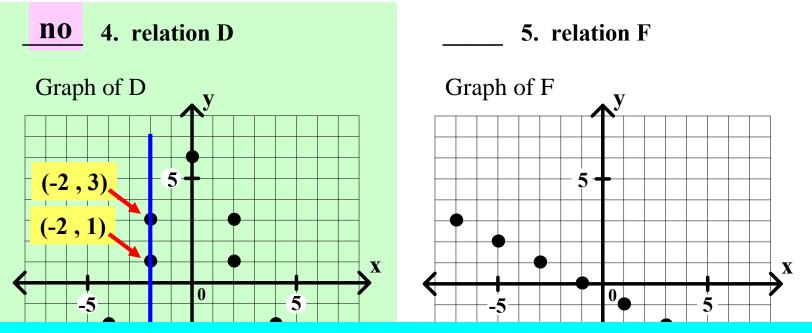
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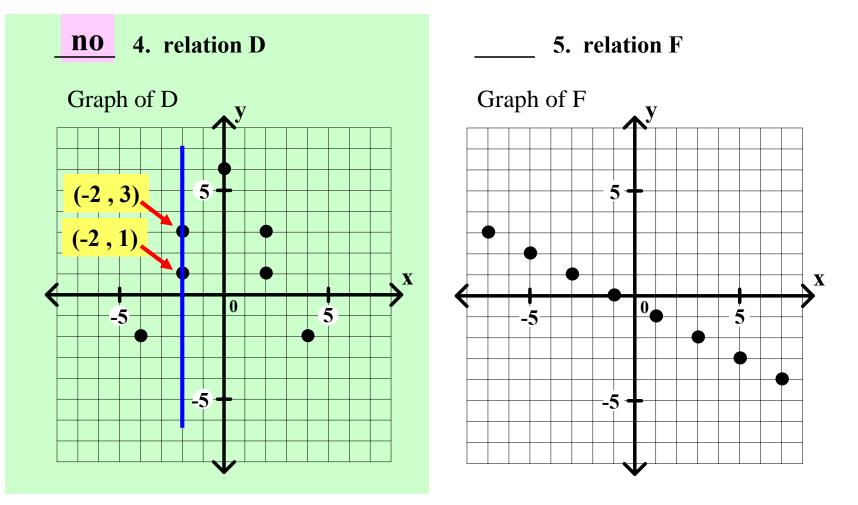
Determine whether or not the relation given in each problem is a function.



The vertical line test: If <u>any vertical line</u> intersects the graph of a relation in more than one point, then the relation is <u>not</u> a function.

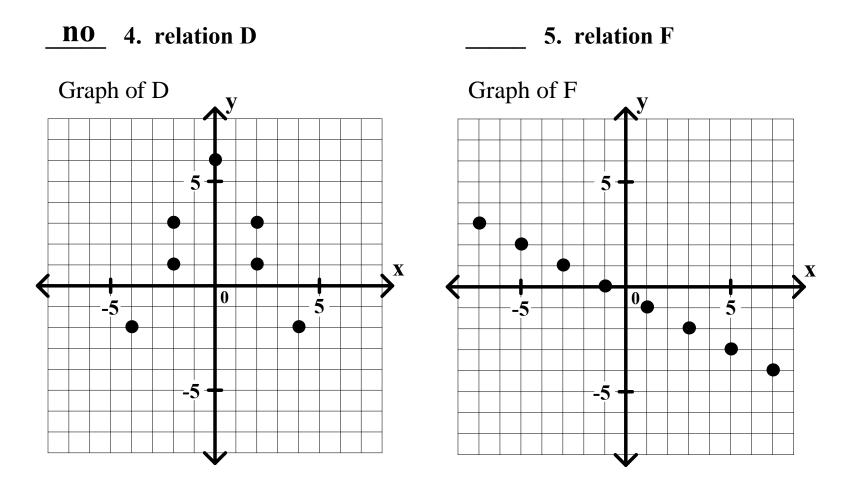
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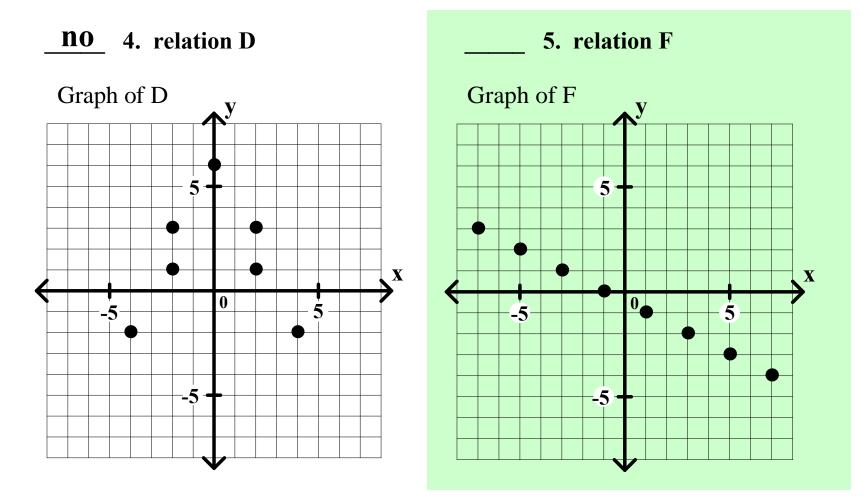
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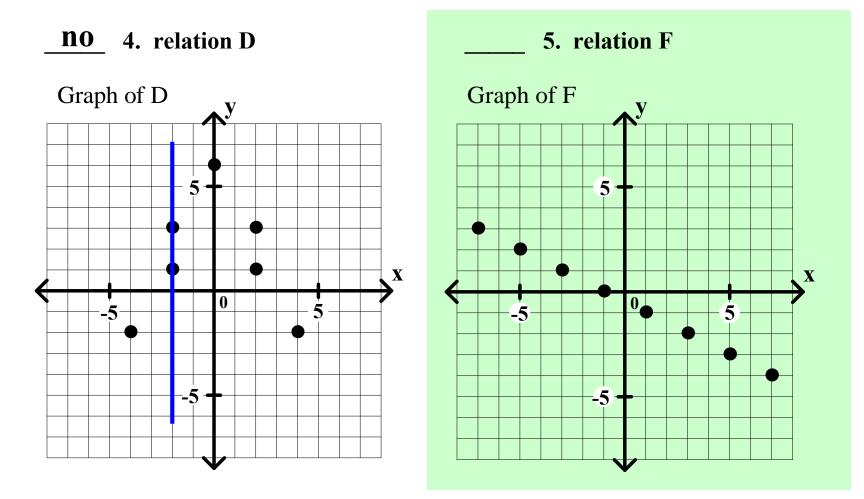
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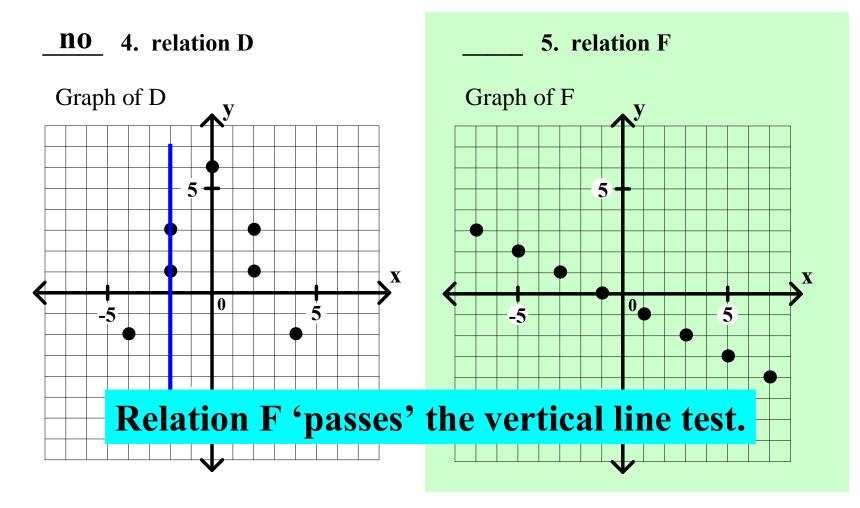
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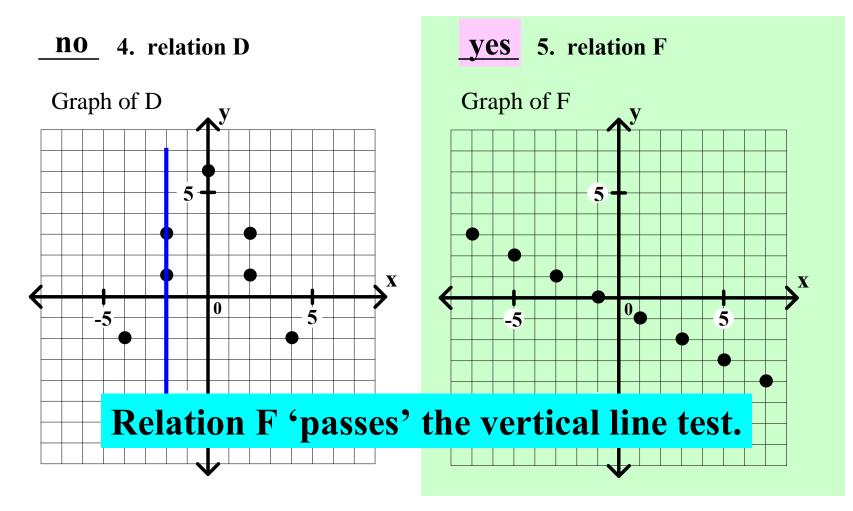
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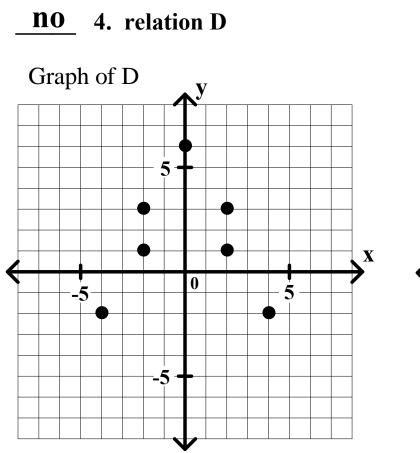
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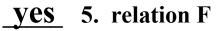
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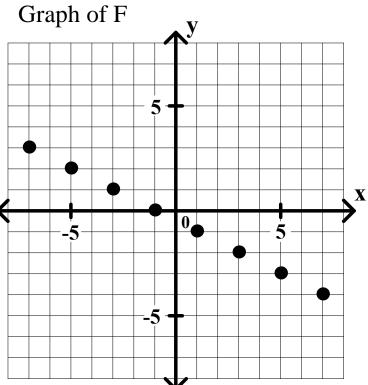


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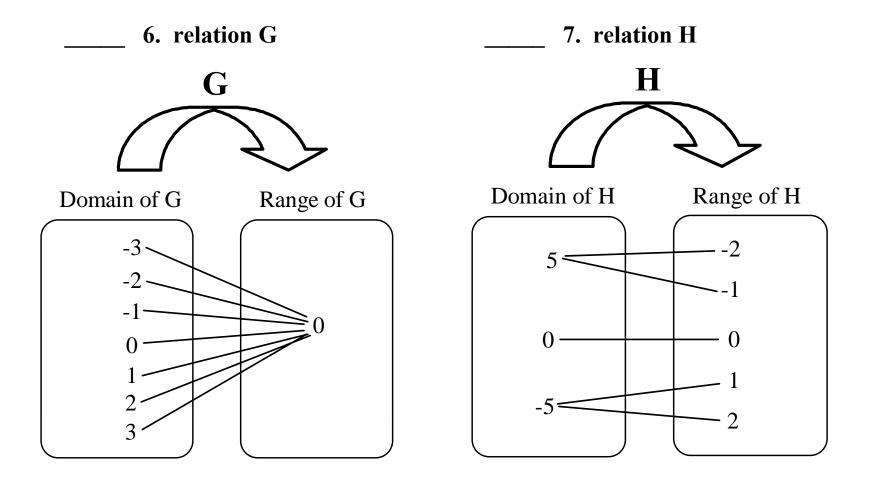






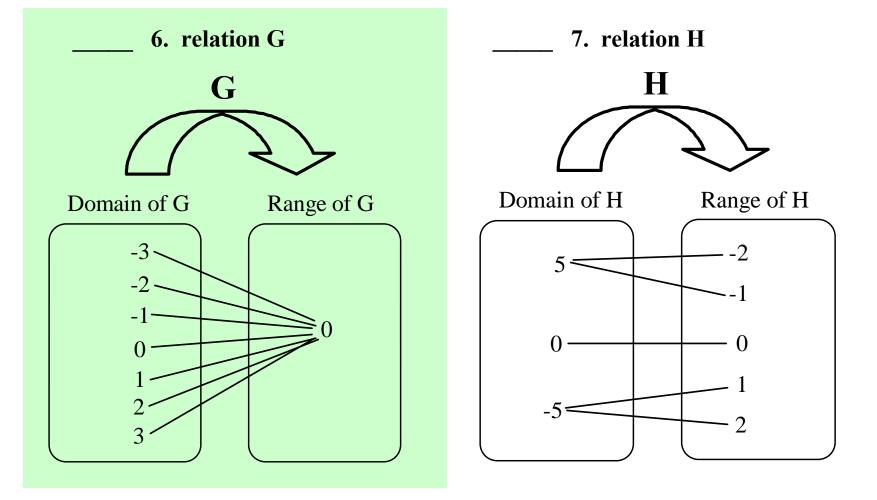
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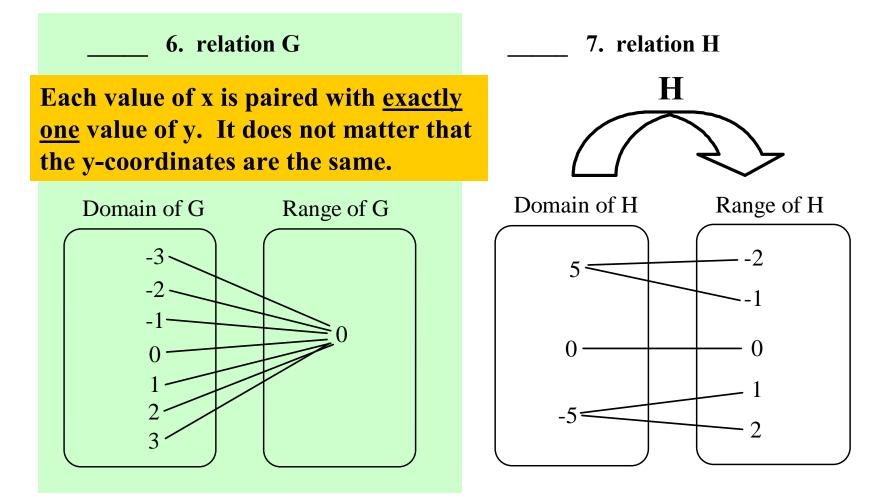
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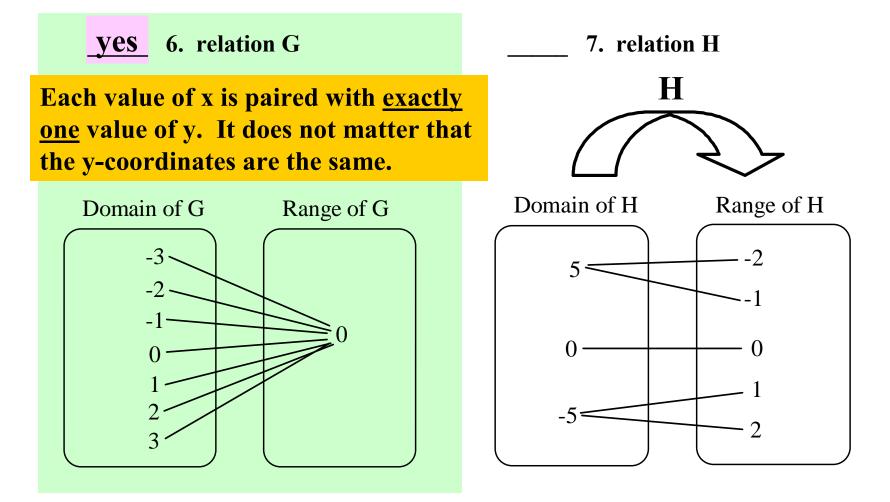
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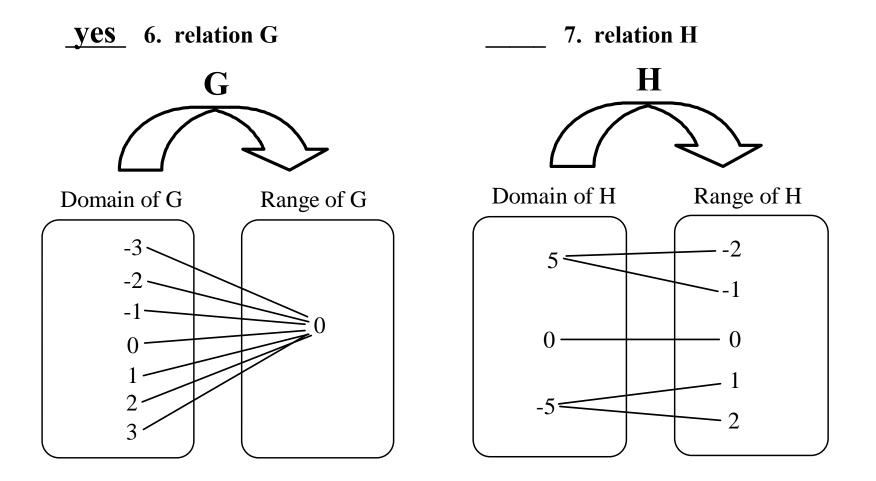
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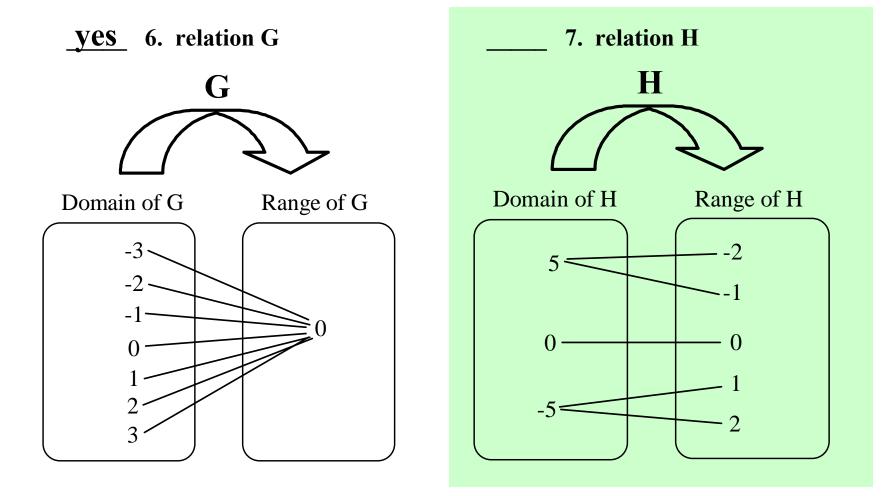
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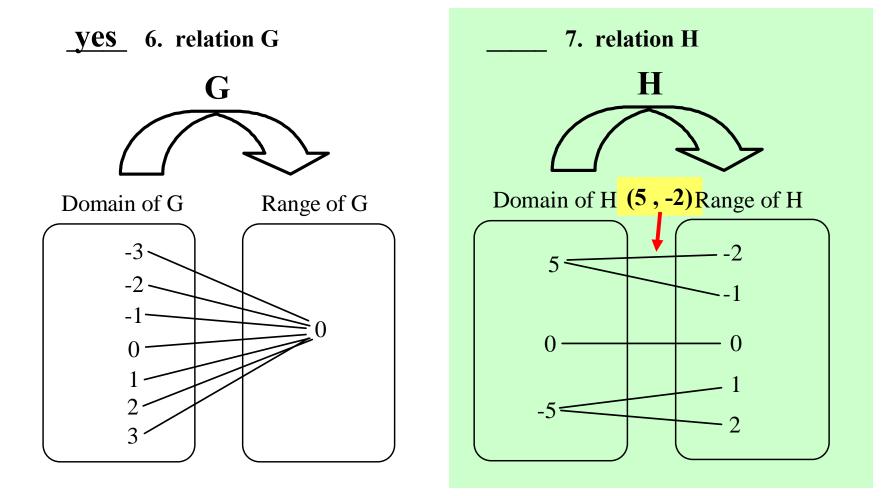
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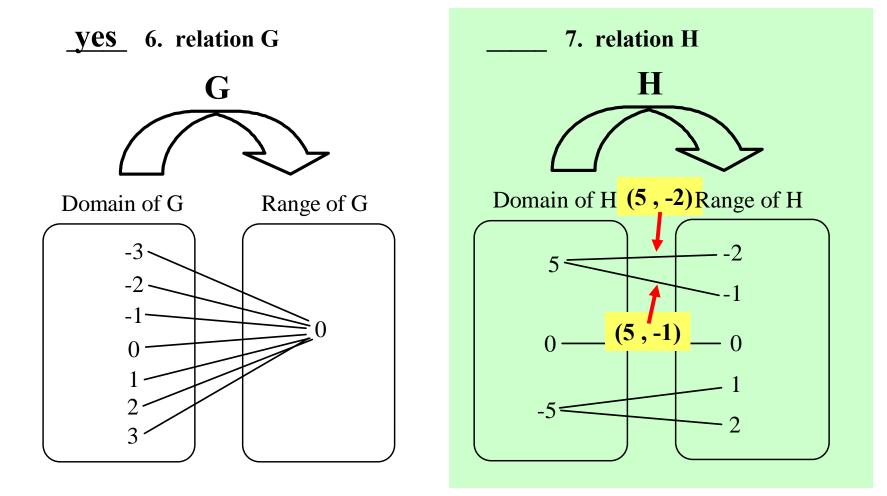
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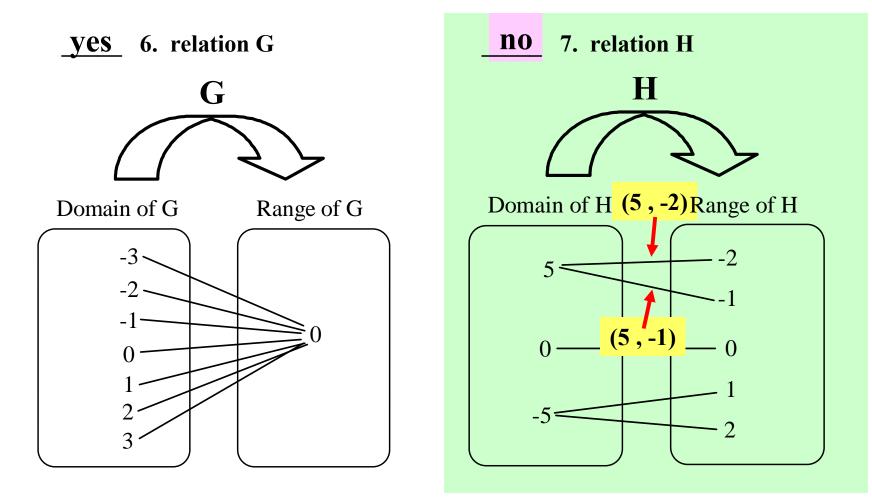
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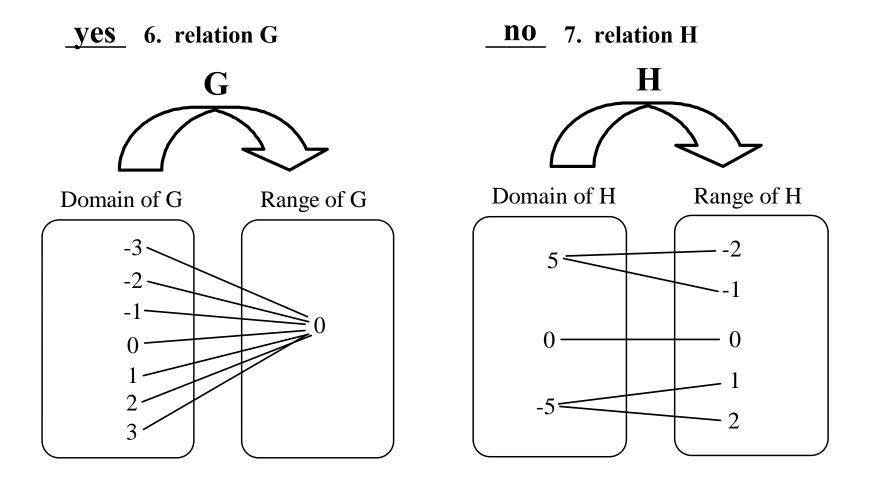
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Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8. f(-3) = 9. f(0) = 10. f(4) = 

 11. g(-3) = 12. g(0) = 13. g(4) = 

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 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

f(-3) 'means' the value of y when x = -3 in the function f.

f(-3) = 3(-3) - 6 = -15

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 11. g(-3) =\_\_\_\_\_ 12. g(0) =\_\_\_\_\_ 13. g(4) =\_\_\_\_\_

f(-3) 'means' the value of y when x = -3 in the function f.

f(-3) = 3(-3) - 6 = -15

**Relation:** A relation is a set of ordered pairs.

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- 11. g(-3) = 12. g(0) = 13. g(4) =

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- 11. g(-3) = 12. g(0) = 13. g(4) =

f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

$$f(0) = 3(0) - 6 =$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8. f(-3) = -15 9. f(0) = -6 10. f(4) = -6
- 11. g(-3) = 12. g(0) = 13. g(4) =

f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

$$f(0) = 3(0) - 6 = -6$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_$  

   11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$
- f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

$$f(0) = 3(0) - 6 = -6$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_$  

   11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$
- f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

f(0) 'means' the value of y when x = 0 in the function f.

$$f(0) = 3(0) - 6 = -6$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_$  

   11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$
- f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

f(0) 'means' the value of y when x = 0 in the function f.

$$f(0) = 3(0) - 6 = -6$$

$$f(4) = 3(4) - 6 =$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

   11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$
- f(-3) 'means' the value of y when x = -3 in the function f. f(-3) = 3(-3) - 6 = -15

f(0) 'means' the value of y when x = 0 in the function f.

$$f(0) = 3(0) - 6 = -6$$

$$f(4) = 3(4) - 6 = 6$$

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

**Relation:** A relation is a set of ordered pairs.

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Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

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 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 =$ 

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

8.  $f(-3) = \underline{-15}$ 9.  $f(0) = \underline{-6}$ 10.  $f(4) = \underline{-6}$ 11.  $g(-3) = \underline{-15}$ 12.  $g(0) = \underline{-15}$ 13.  $g(4) = \underline{-15}$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 =$ 

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_-15$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_-15$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

g(-3) 'means' the value of y when x = -3 in the function g.

 $g(-3) = -2(-3)^2 + 3 = -2(9) + 3 = -15$ 

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_-15$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

 8.  $f(-3) = \_-15$  9.  $f(0) = \_-6$  10.  $f(4) = \_6$  

 11.  $g(-3) = \_-15$  12.  $g(0) = \_$  13.  $g(4) = \_$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

$$g(0) = -2(0)^2 + 3 =$$

**Relation:** A relation is a set of ordered pairs.

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Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

8.  $f(-3) = \underline{-15}$ 9.  $f(0) = \underline{-6}$ 10.  $f(4) = \underline{-6}$ 11.  $g(-3) = \underline{-15}$ 12.  $g(0) = \underline{-3}$ 13.  $g(4) = \underline{-15}$ 

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

$$g(0) = -2(0)^2 + 3 = 3$$

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \underline{-15}$  9.  $f(0) = \underline{-6}$  10.  $f(4) = \underline{-6}$
- 11.  $g(-3) = \underline{-15}$  12.  $g(0) = \underline{3}$  13.  $g(4) = \underline{-15}$

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

$$g(0) = -2(0)^2 + 3 = 3$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8. f(-3) = -15 9. f(0) = -6 10. f(4) = 6
- 11. g(-3) = -15 12. g(0) = 3 13.  $g(4) = _____$

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

g(0) 'means' the value of y when x = 0 in the function g.

$$g(0) = -2(0)^2 + 3 = 3$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \underline{-15}$  9.  $f(0) = \underline{-6}$  10.  $f(4) = \underline{-6}$
- 11. g(-3) = -15 12. g(0) = 3 13.  $g(4) = _____$

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

g(0) 'means' the value of y when x = 0 in the function g.

$$g(0) = -2(0)^2 + 3 = 3$$

$$g(4) = -2(4)^2 + 3 =$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \underline{-15}$  9.  $f(0) = \underline{-6}$  10.  $f(4) = \underline{-6}$
- 11. g(-3) = -15 12. g(0) = 3 13.  $g(4) = _____$

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

g(0) 'means' the value of y when x = 0 in the function g.

$$g(0) = -2(0)^2 + 3 = 3$$

$$g(4) = -2(4)^2 + 3 = -2(16) + 3 =$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8.  $f(-3) = \underline{-15}$  9.  $f(0) = \underline{-6}$  10.  $f(4) = \underline{-6}$
- 11.  $g(-3) = \underline{-15}$  12.  $g(0) = \underline{3}$  13.  $g(4) = \underline{-29}$

g(-3) 'means' the value of y when x = -3 in the function g. g(-3) =  $-2(-3)^2 + 3 = -2(9) + 3 = -15$ 

g(0) 'means' the value of y when x = 0 in the function g.

$$g(0) = -2(0)^2 + 3 = 3$$

$$g(4) = -2(4)^2 + 3 = -2(16) + 3 = -29$$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions  $f = \{ (x,y) : y = 3x - 6 \}$  and  $g = \{ (x,y) : y = -2x^2 + 3 \}$ . Evaluate each of the following.

- 8. f(-3) = -15 9. f(0) = -6 10. f(4) = 6
- 11.  $g(-3) = \underline{-15}$  12.  $g(0) = \underline{3}$  13.  $g(4) = \underline{-29}$

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. H(-3) =	9. $H(0) = $	10. $H(4) =$
11. L(-3) =	12. L(0) =	13. L(4) =

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

 8. H(-3) = 9. H(0) = 10. H(4) = 

 11. L(-3) = 12. L(0) = 13. L(4) = 

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. H(-3) =	9. $H(0) =$	10. $H(4) =$
11. L(-3) =	12. L(0) =	13. L(4) =

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8. H(-3) =	9. $H(0) =$	10. $H(4) = $
11. L(-3) =	12. L(0) =	13. L(4) =

H(x) = -2x + 1

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. H(-3) =	9. $H(0) =$	10. $H(4) = $
11. L(-3) =	12. $L(0) = $	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$		
H(-3) = -2(-3) + 1 =		

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = $	10. $H(4) =$
11. L(-3) =	12. L(0) =	13. L(4) =
H(x) = -2x + 1		
H(-3) = -2(-3) + 1 =	= 7	

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. H(0) =	10. $H(4) =$
11. L(-3) =	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$		
H(-3) = -2(-3) + 1 = 7	7	

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. H(0) =	10. $H(4) =$
11. L(-3) =	12. L(0) =	13. L(4) =
H(x) = -2x + 1		
H(-3) = -2(-3) + 1 =	7	
H(0) = -2(0) + 1 =		

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. $H(0) = 1$	10. $H(4) = $
11. L(-3) =	12. L(0) =	13. L(4) =
H(x) = -2x + 1		
H(-3) = -2(-3) + 1 =	7	
H(0) = -2(0) + 1 = 1		

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8.  $H(-3) = \underline{7}$ 9.  $H(0) = \underline{1}$ 10.  $H(4) = \underline{1}$ 11.  $L(-3) = \underline{1}$ 12.  $L(0) = \underline{1}$ 13.  $L(4) = \underline{1}$  H(-3) = -2(-3) + 1 = 7H(0) = -2(0) + 1 = 1

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8.  $H(-3) = \underline{7}$ 9.  $H(0) = \underline{1}$ 10.  $H(4) = \underline{1}$ 11.  $L(-3) = \underline{1}$ 12.  $L(0) = \underline{1}$ 13.  $L(4) = \underline{1}$ H(-3) = -2(-3) + 1 = 7 H(0) = -2(0) + 1 = 1 H(4) = -2(4) + 1 = 1

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8.  $H(-3) = \underline{7}$ 9.  $H(0) = \underline{1}$ 10.  $H(4) = \underline{-7}$ 11.  $L(-3) = \underline{1}$ 12.  $L(0) = \underline{1}$ 13.  $L(4) = \underline{1}$ H(-3) = -2(-3) + 1 = 7 H(0) = -2(0) + 1 = 1 H(4) = -2(4) + 1 = -7

## General Algebra II Unit 6 Class Worksheet #2 Relation: A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8.  $H(-3) = \underline{7}$ 9.  $H(0) = \underline{1}$ 10.  $H(4) = \underline{-7}$ 11.  $L(-3) = \underline{12}$ 12.  $L(0) = \underline{13}$ 13.  $L(4) = \underline{13}$  H(-3) = -2(-3) + 1 = 7 H(0) = -2(0) + 1 = 1H(4) = -2(4) + 1 = -7

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8.  $H(-3) = \underline{7}$ 9.  $H(0) = \underline{1}$ 10.  $H(4) = \underline{-7}$ 11.  $L(-3) = \underline{12}$ 12.  $L(0) = \underline{13}$ 13.  $L(4) = \underline{13}$  H(-3) = -2(-3) + 1 = 7 H(0) = -2(0) + 1 = 1H(4) = -2(4) + 1 = -7

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. $H(0) = 1$	10. $H(4) = -7$
11. L(-3) =	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	l	
H(-3) = -2(-3) + 1	= 7	
H(0) = -2(0) + 1 =	= 1	
H(4) = -2(4) + 1 =	= <b>-</b> 7	

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. L(-3) =	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	L(x)	$= x^3$
H(-3) = -2(-3) + 1 = -2(-3) + 2(	7	
H(0) = -2(0) + 1 = 1		
H(4) = -2(4) + 1 = -7	7	

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. L(-3) =	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$L(\mathbf{x}) = \mathbf{x}$	x <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	3 =
H(0) = -2(0) + 1 = 1		
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$L(\mathbf{x}) = \mathbf{x}$	x <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	3 = -27
H(0) = -2(0) + 1 = 1		
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7_$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	L(x	$\mathbf{x}) = \mathbf{x}^3$
H(-3) = -2(-3) + 1 = 7	L(-3) =	$(-3)^3 = -27$
H(0) = -2(0) + 1 = 1		
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. L(0) =	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	L()	$\mathbf{x}) = \mathbf{x}^3$
H(-3) = -2(-3) + 1 = 7	L(-3) =	$(-3)^3 = -27$
H(0) = -2(0) + 1 = 1	L(0) =	$(0)^3 =$
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. $L(0) = 0$	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	L(x	$\mathbf{x}) = \mathbf{x}^3$
H(-3) = -2(-3) + 1 = 7	L(-3) =	$(-3)^3 = -27$
H(0) = -2(0) + 1 = 1	L(0) =	$(0)^3 = 0$
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

**Function:** A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. $L(0) = 0$	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$\mathbf{L}(\mathbf{x}) = \mathbf{x}$	K <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	$b^3 = -27$
H(0) = -2(0) + 1 = 1	$L(0) = (0)^3 =$	= 0
H(4) = -2(4) + 1 = -7		

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. $L(0) = 0$	13. L(4) =
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$\mathbf{L}(\mathbf{x}) = \mathbf{x}$	K <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	$b^{3} = -27$
H(0) = -2(0) + 1 = 1	$L(0) = (0)^3 =$	= 0
H(4) = -2(4) + 1 = -7	$L(4) = (4)^3 =$	=

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. $L(0) = 0$	13. $L(4) = 64$
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$\mathbf{L}(\mathbf{x}) = \mathbf{x}$	K <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	$b^{3} = -27$
H(0) = -2(0) + 1 = 1	$L(0) = (0)^3 =$	= 0
H(4) = -2(4) + 1 = -7	$L(4) = (4)^3 =$	= 64

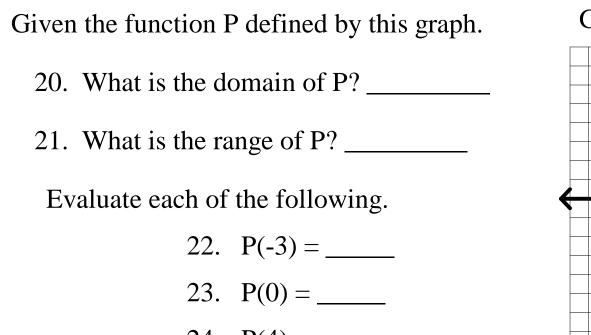
# General Algebra II Unit 6 Class Worksheet #2 Relation: A relation is a set of ordered pairs.

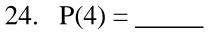
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

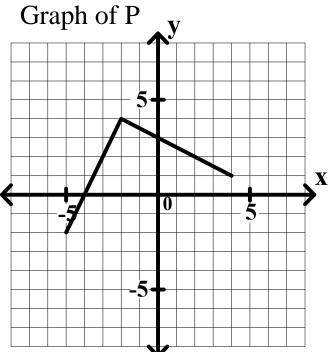
Given: Functions H and L defined by the equation H(x) = -2x + 1 and  $L(x) = x^3$ . Evaluate each of the following.

8. $H(-3) = _7$	9. $H(0) = 1$	10. $H(4) = -7$
11. $L(-3) = -27$	12. $L(0) = 0$	13. $L(4) = 64$
$\mathbf{H}(\mathbf{x}) = -2\mathbf{x} + 1$	$\mathbf{L}(\mathbf{x}) = \mathbf{y}$	x <sup>3</sup>
H(-3) = -2(-3) + 1 = 7	L(-3) = (-3)	$^{3} = -27$
H(0) = -2(0) + 1 = 1	$L(0) = (0)^3 =$	= 0
H(4) = -2(4) + 1 = -7	$L(4) = (4)^3 =$	= 64

**Relation:** A relation is a set of ordered pairs.





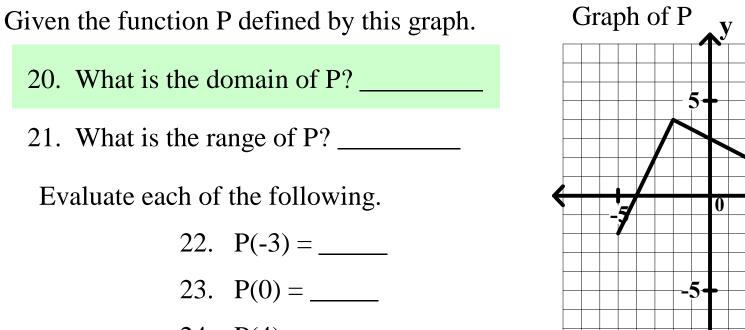


**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X

5

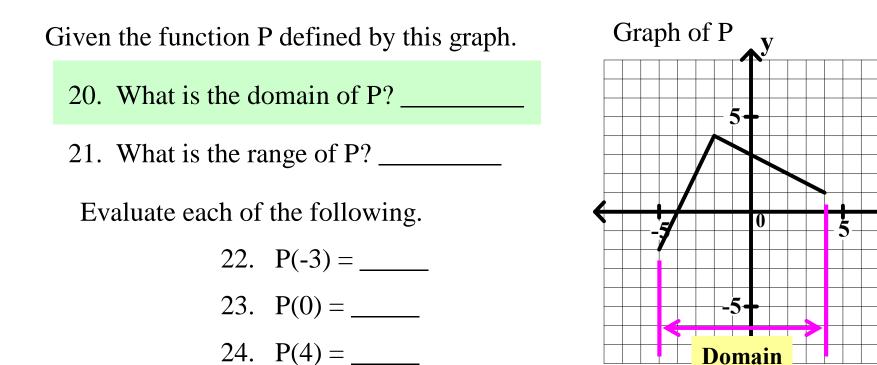


24. P(4) = \_\_\_\_\_

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

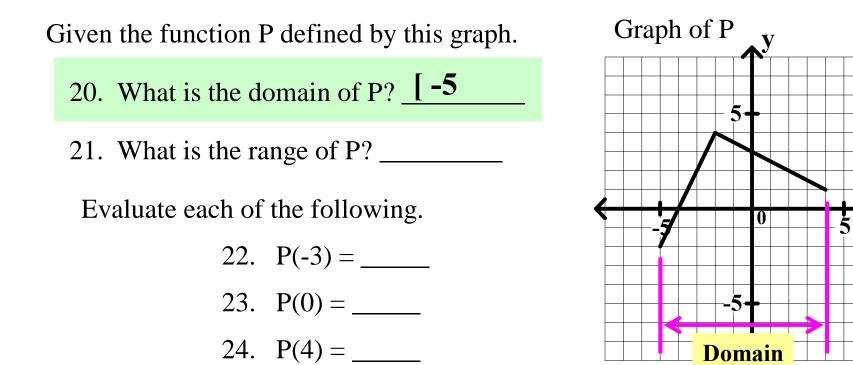
X



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X

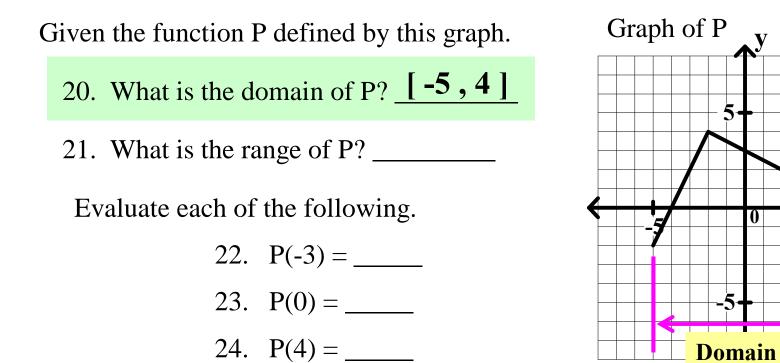


**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X

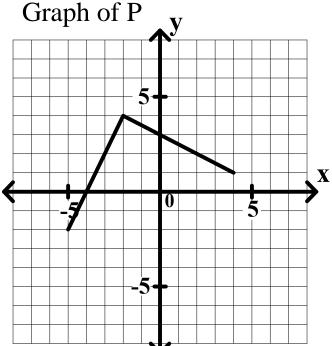
5



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph. 20. What is the domain of P? [-5, 4]21. What is the range of P? \_\_\_\_\_ Evaluate each of the following. 22. P(-3) = \_\_\_\_\_ 23. P(0) = \_\_\_\_\_ 24. P(4) = \_\_\_\_\_



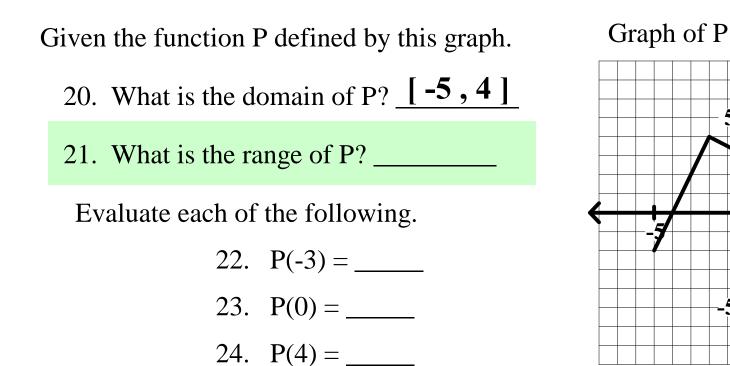
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with exactly one value of y.

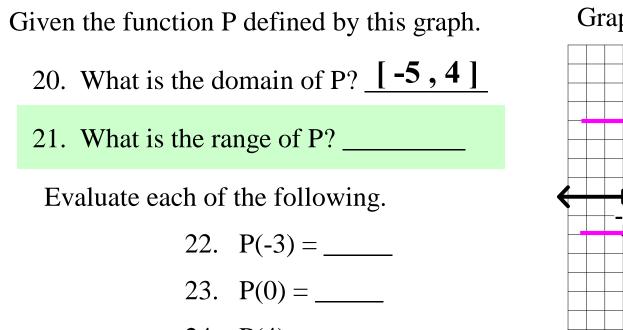
X

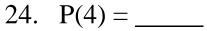
5

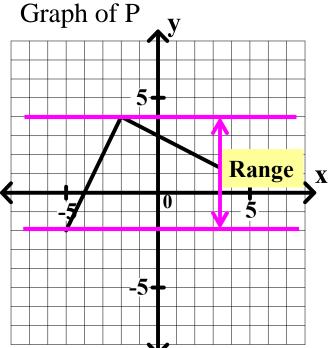
-5



**Relation:** A relation is a set of ordered pairs.



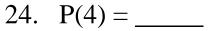


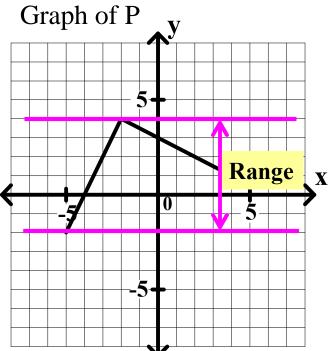


**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph. 20. What is the domain of P? [-5, 4]21. What is the range of P? [-2,Evaluate each of the following. 22. P(-3) = \_\_\_\_\_ 23. P(0) = \_\_\_\_\_



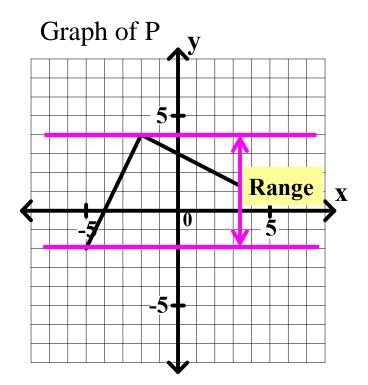


**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph.
20. What is the domain of P? [-5,4]
21. What is the range of P? [-2,4]

Evaluate each of the following.



**Relation:** A relation is a set of ordered pairs.

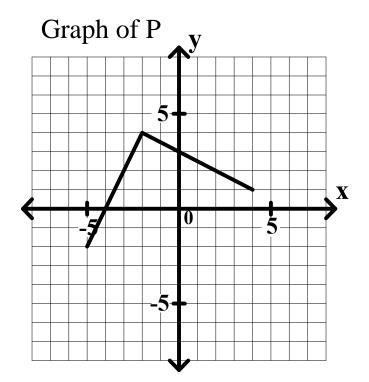
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph.

20. What is the domain of P? [-5, 4]

21. What is the range of P? [-2, 4]

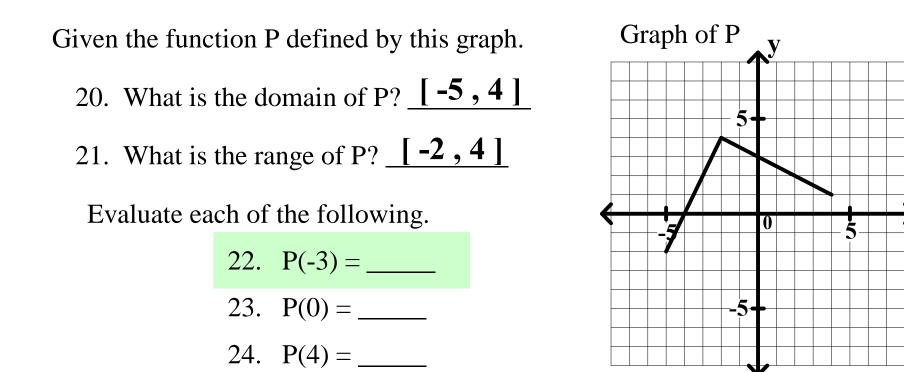
Evaluate each of the following.



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

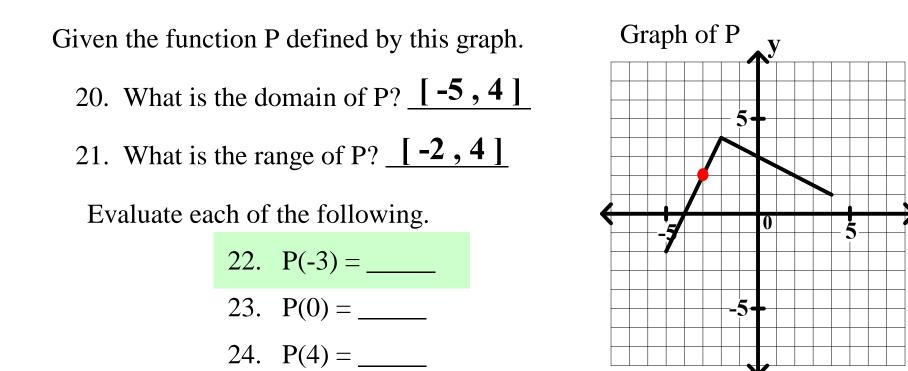
X



**Relation:** A relation is a set of ordered pairs.

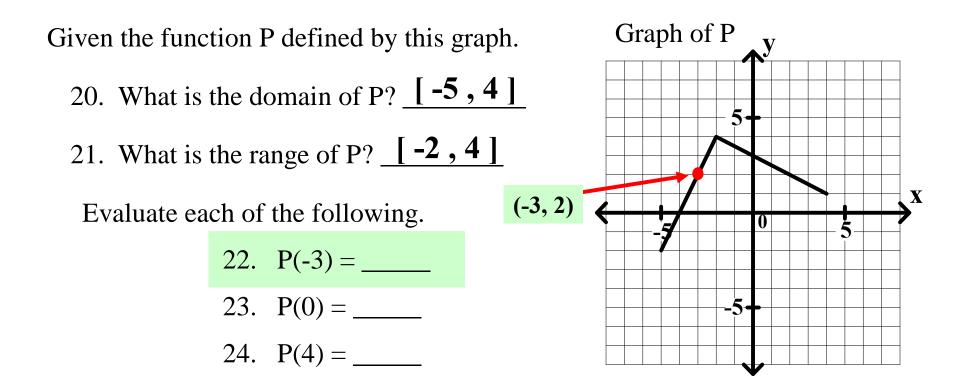
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X



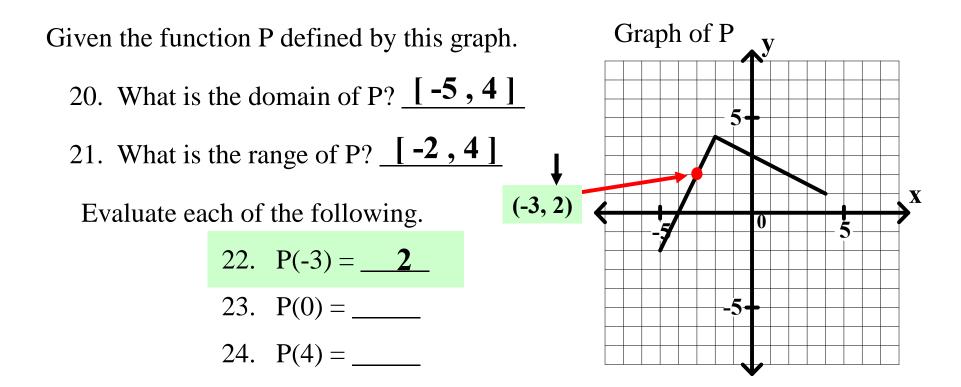
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



**Relation:** A relation is a set of ordered pairs.

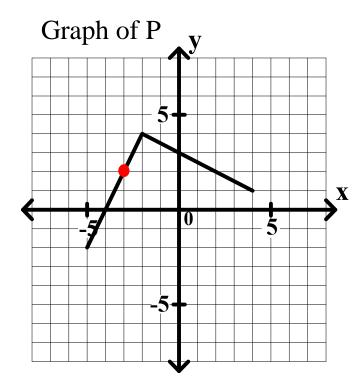
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



**Relation:** A relation is a set of ordered pairs.

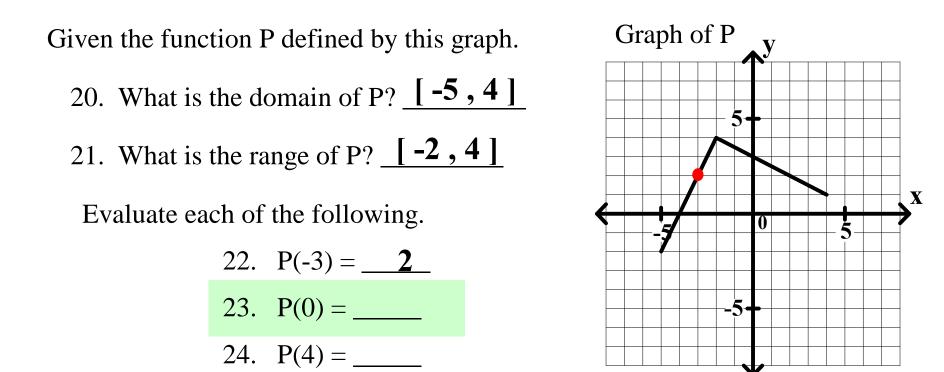
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph. 20. What is the domain of P? [-5, 4]21. What is the range of P? [-2, 4]Evaluate each of the following. 22. P(-3) = 223. P(0) = 224. P(4) = 2



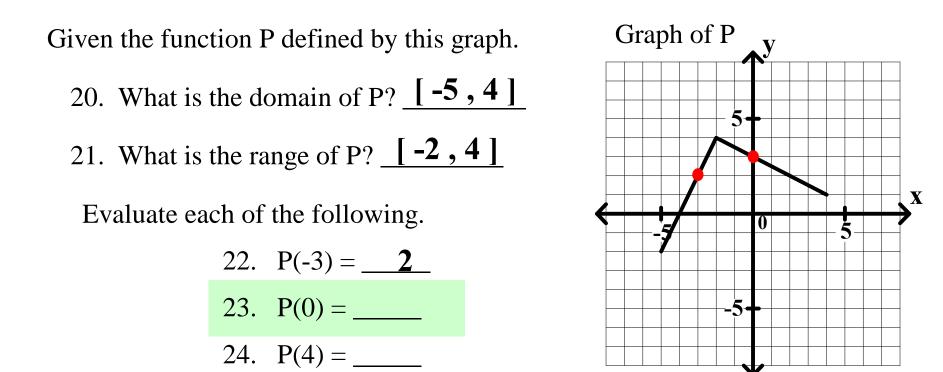
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Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



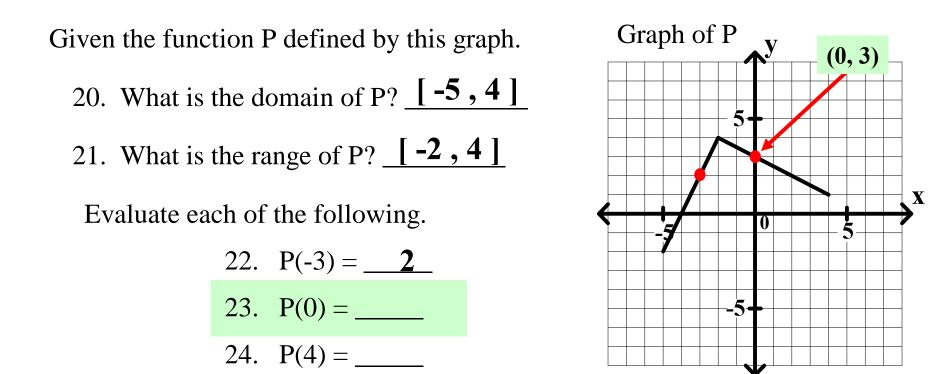
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



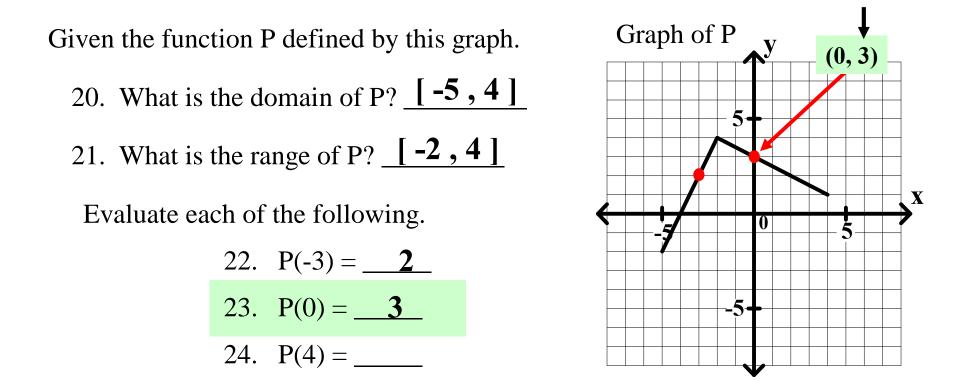
**Relation:** A relation is a set of ordered pairs.

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**Relation:** A relation is a set of ordered pairs.

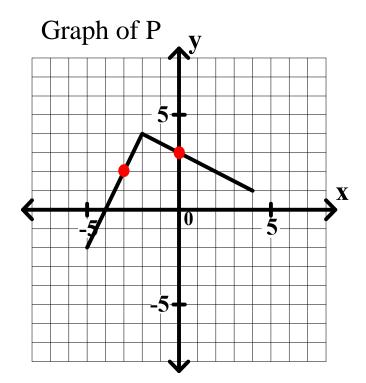
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



**Relation:** A relation is a set of ordered pairs.

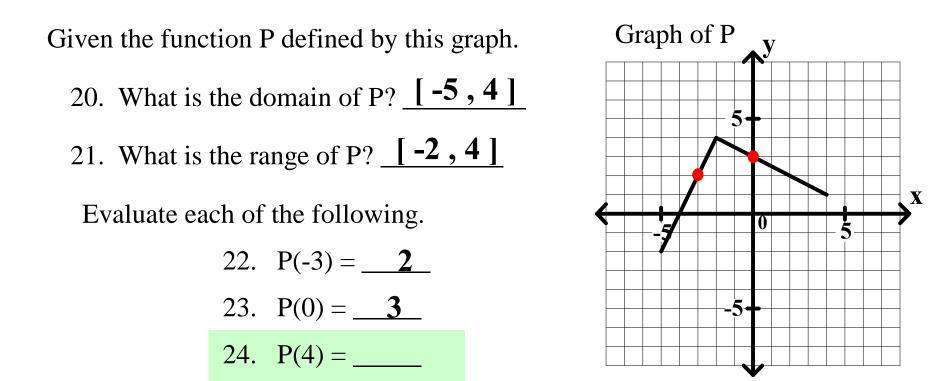
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function P defined by this graph. 20. What is the domain of P? [-5, 4]21. What is the range of P? [-2, 4]Evaluate each of the following. 22. P(-3) = 223. P(0) = 324. P(4) = \_\_\_\_



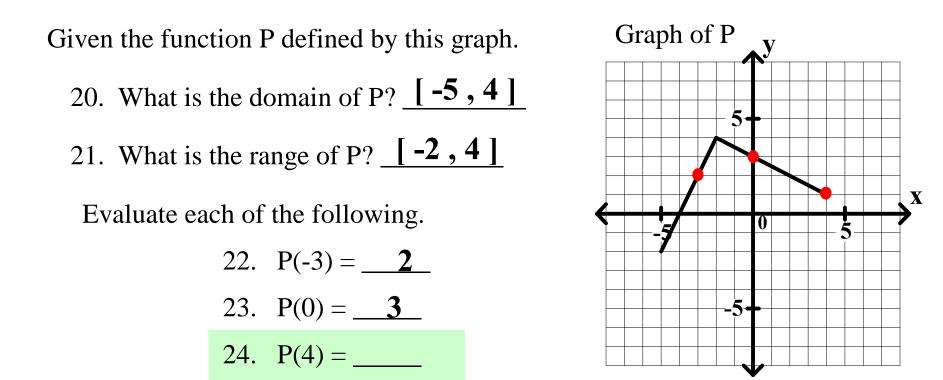
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



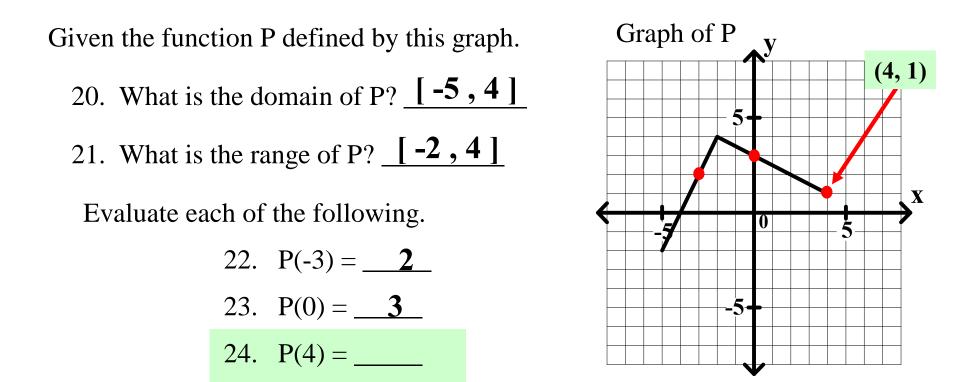
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



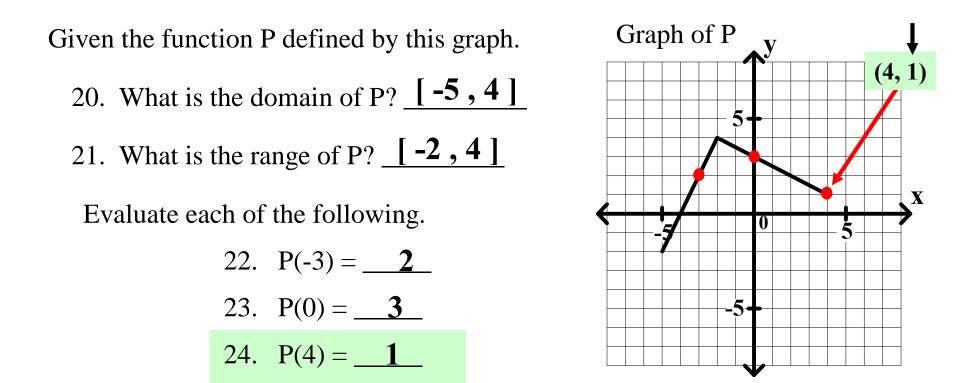
**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



**Relation:** A relation is a set of ordered pairs.

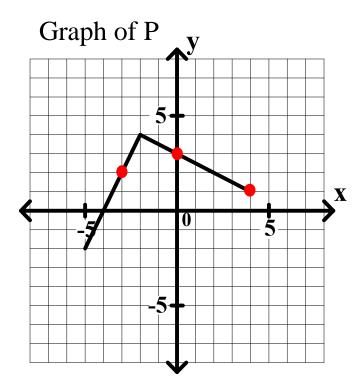
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

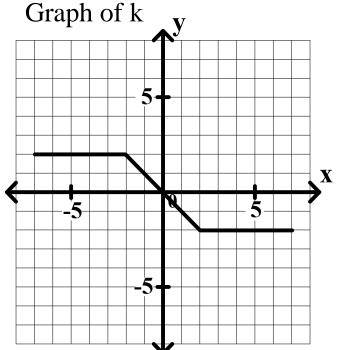
Given the function P defined by this graph. 20. What is the domain of P? [-5, 4]21. What is the range of P? [-2, 4]Evaluate each of the following. 22.  $P(-3) = \underline{2}$ 23.  $P(0) = \underline{3}$ 24.  $P(4) = \underline{1}$ 



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

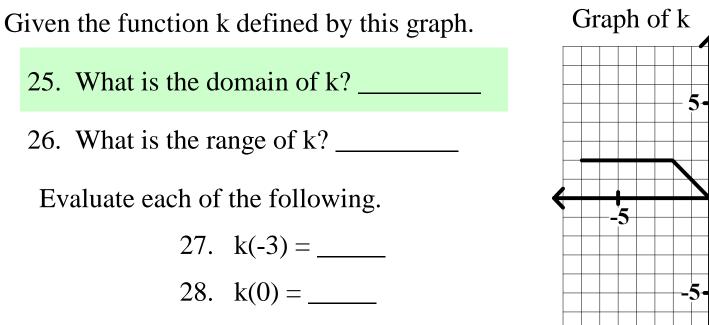
Given the function k defined by this graph. 25. What is the domain of k? \_\_\_\_\_ 26. What is the range of k? \_\_\_\_\_ Evaluate each of the following.  $27. k(-3) = \____$   $28. k(0) = \____$  $29. k(4) = \____$ 



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X

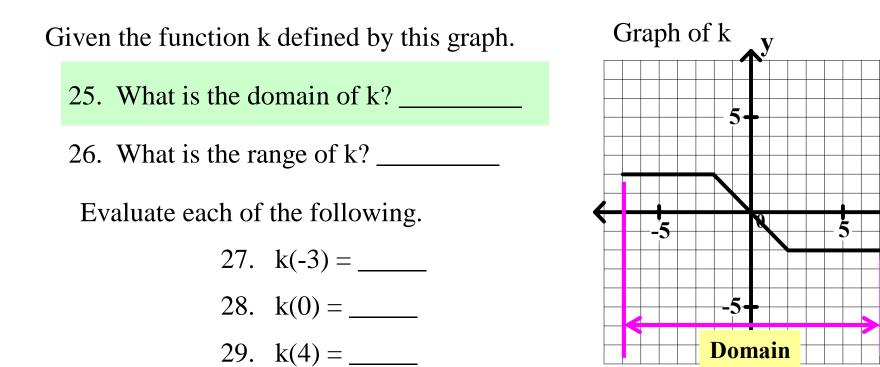


29. k(4) = \_\_\_\_\_

**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

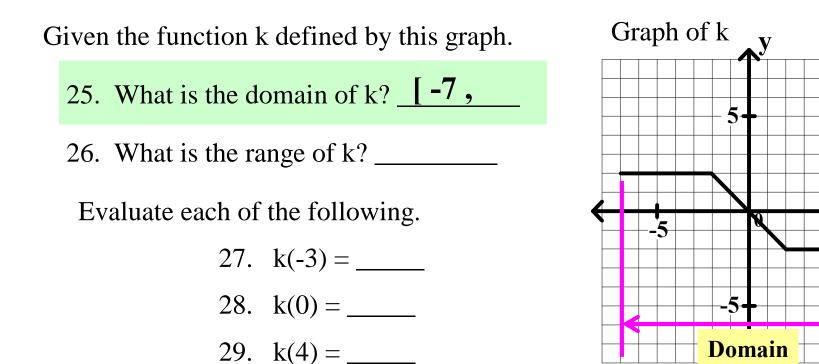
X



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

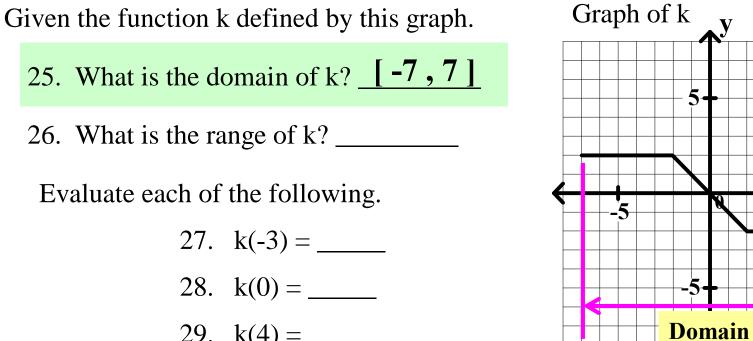
X



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with exactly one value of y.

X

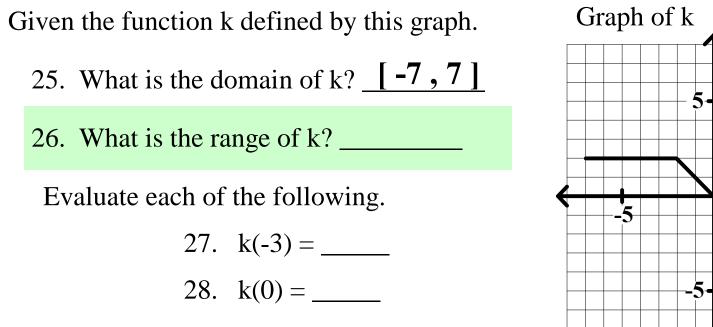


29. k(4) = \_\_\_\_\_

#### **Relation:** A relation is a set of ordered pairs.

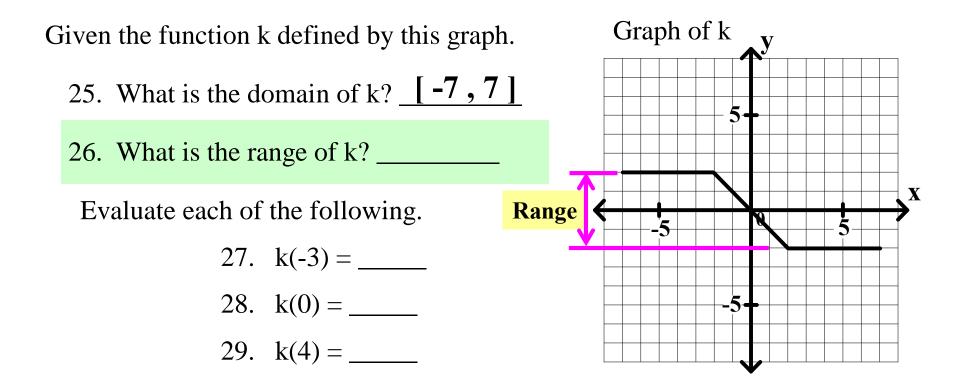
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

X

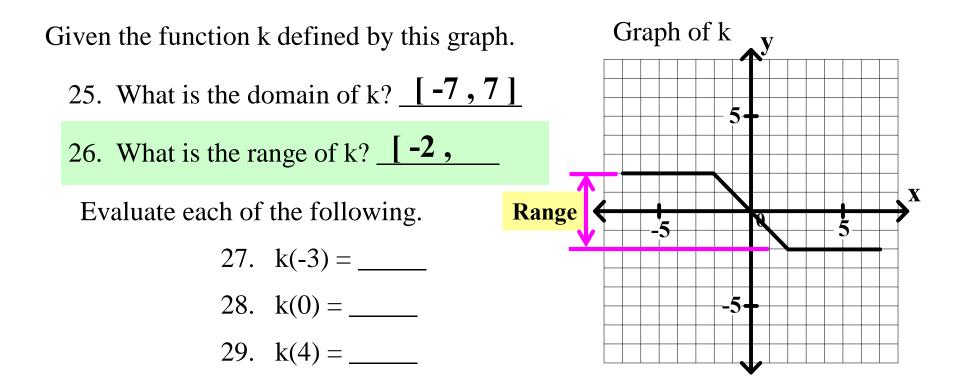


29. k(4) = \_\_\_\_\_

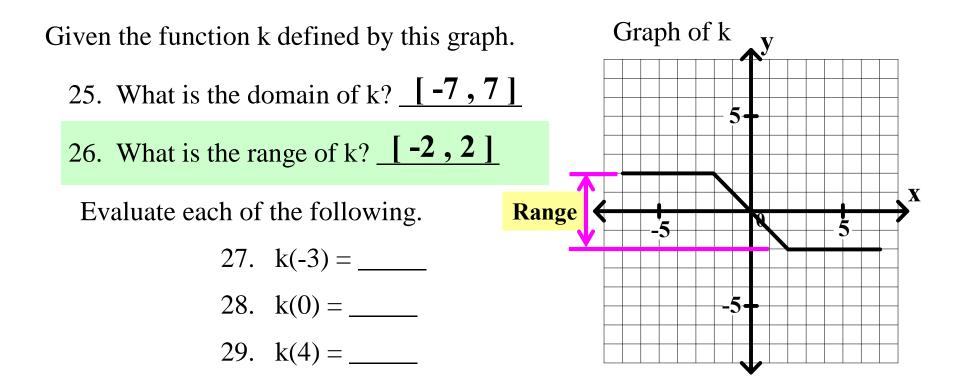
#### **Relation:** A relation is a set of ordered pairs.



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**Relation:** A relation is a set of ordered pairs.

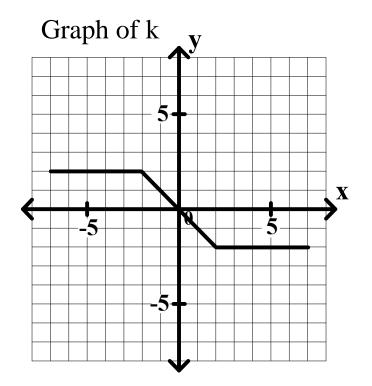
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function k defined by this graph.

25. What is the domain of k? [-7, 7]

26. What is the range of k? [-2, 2]

27. 
$$k(-3) =$$
\_\_\_\_\_



**Relation:** A relation is a set of ordered pairs.

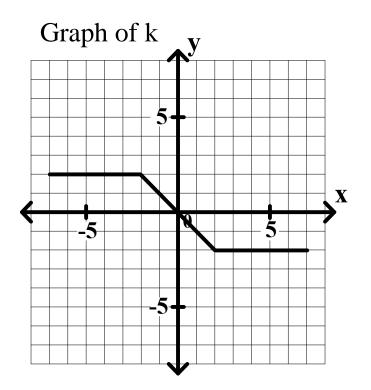
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function k defined by this graph.

25. What is the domain of k? [-7, 7]

26. What is the range of k? [-2, 2]

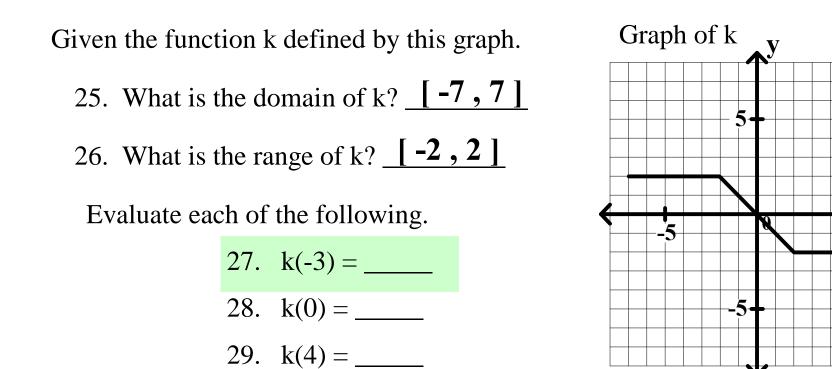
27. 
$$k(-3) =$$
 \_\_\_\_\_  
28.  $k(0) =$ 



**Relation:** A relation is a set of ordered pairs.

Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

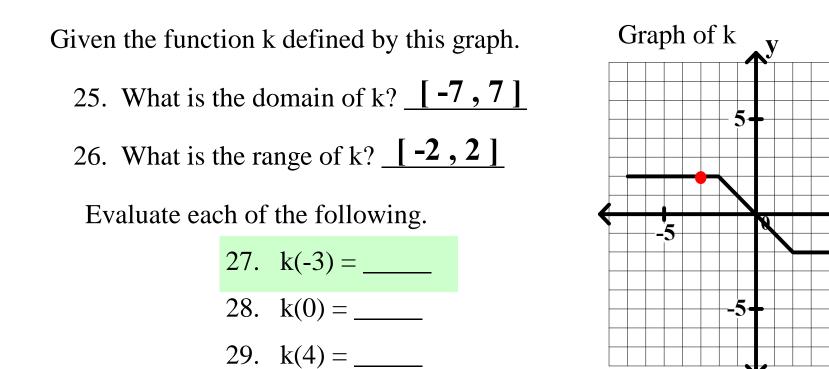
X



**Relation:** A relation is a set of ordered pairs.

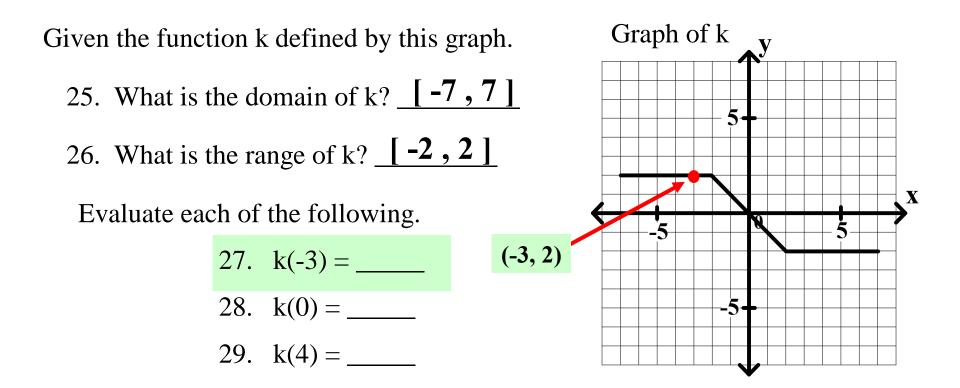
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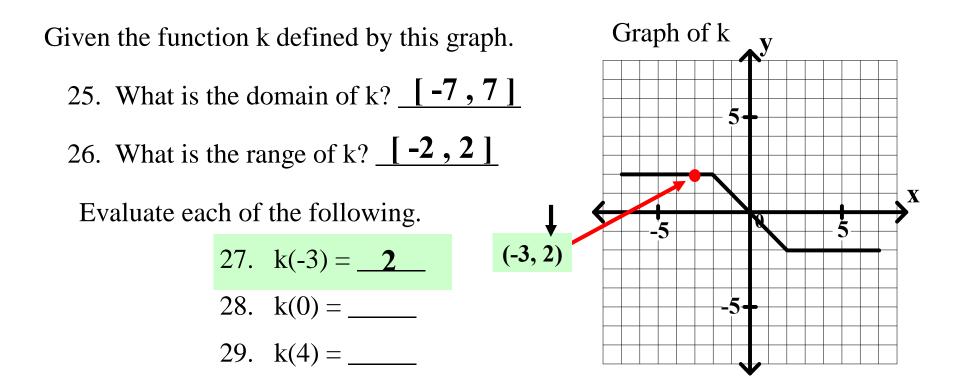
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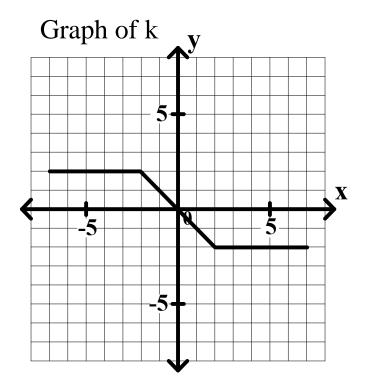
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

Given the function k defined by this graph.

25. What is the domain of k? [-7, 7]

26. What is the range of k? [-2, 2]

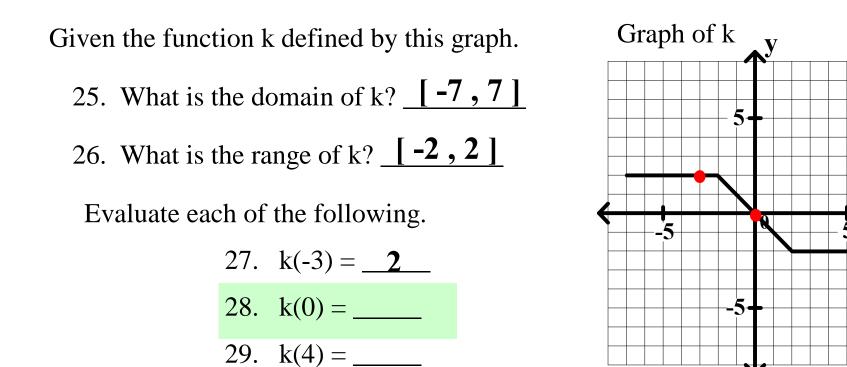
27. 
$$k(-3) = 2$$
  
28.  $k(0) = 2$   
29.  $k(4) = 2$ 



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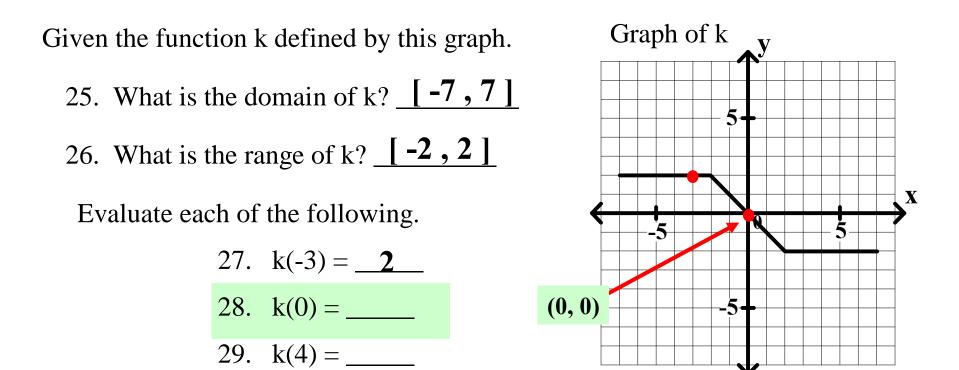
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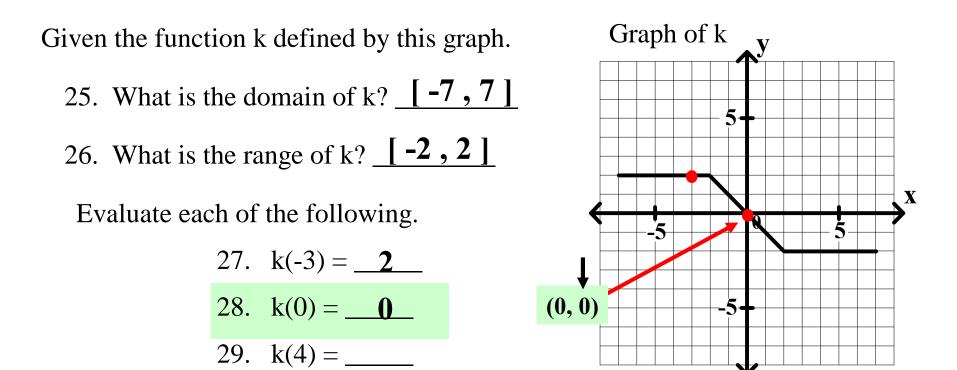
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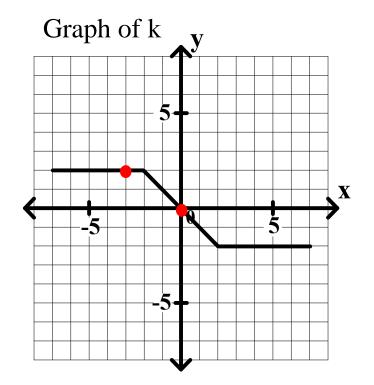
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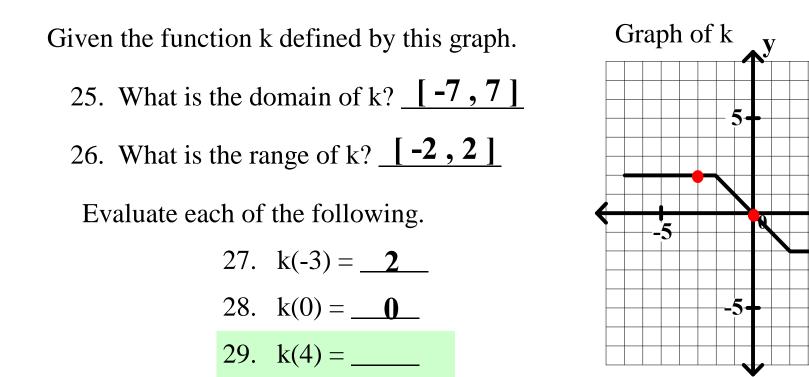
27. 
$$k(-3) = 2$$
  
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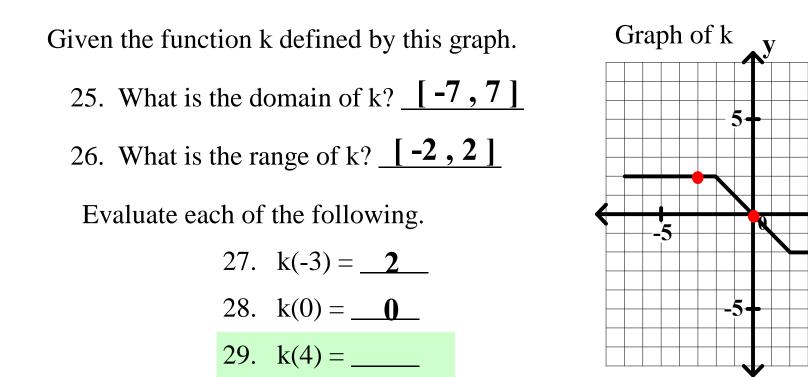
X



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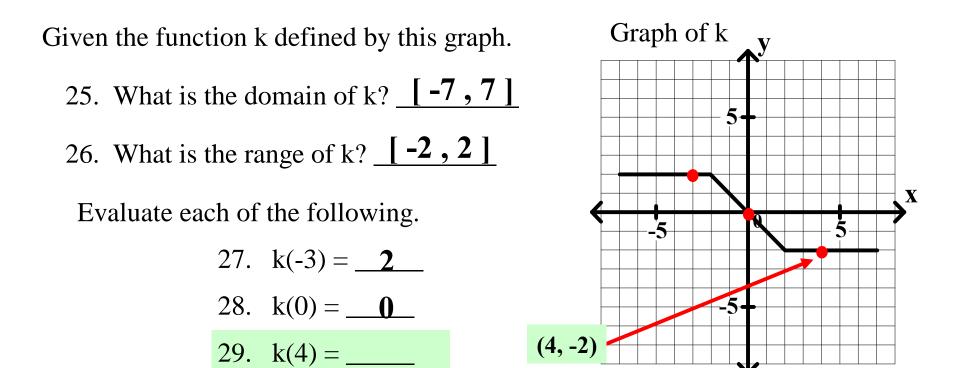
Function: A function is a relation in which each value of x is paired with <u>exactly one</u> value of y.

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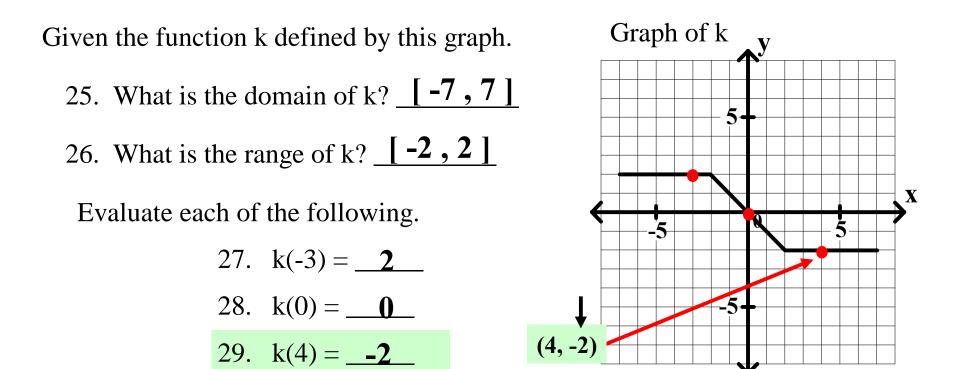
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Given the function k defined by this graph.

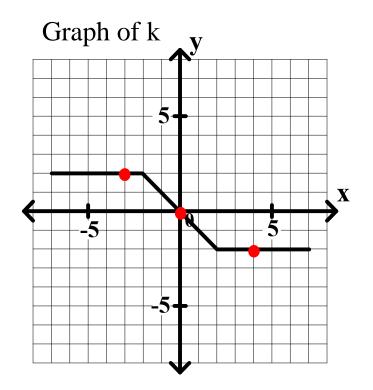
25. What is the domain of k? [-7, 7]

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Evaluate each of the following.

27. 
$$k(-3) = 2$$
  
28.  $k(0) = 0$ 

29. k(4) = -2

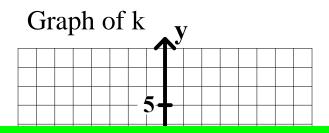


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Given the function k defined by this graph.

25. What is the domain of k? [-7, 7]



# **Good luck on your homework !!**

27.	k(-3) = 2		-						_	,	
28.	$\mathbf{k}(0) = \{0}$					5	•				_
29.	k(4) = -2										