

Algebra 1 Test 3 Review  
Graphing Linear Equations

Name \_\_\_\_\_

Date \_\_\_\_\_

1 Which ordered pair is a solution of the equation  $y = 5x - 4$ ?

- A (5, -9)
- B (6, 12)
- C (-3, 4)
- D (2, 6)

2 Find the slope of the line passing through each pair of points listed below.

a.) (3, 9) and (-4, 9)

b.) (-4, 8) and (4, 2)

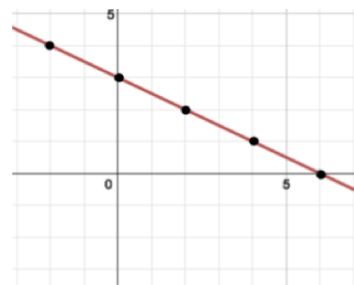
c.) (-2, -4) and (-2, 5)

d.) (-3, -10) and (3, -8)

3 Find the slope of the line passing through (5, 1) with an x-intercept of 4.

4 Find the slope of the line passing through (3, -1) with a y-intercept of 5.

5 Given the following graph:



a.) x-intercept?

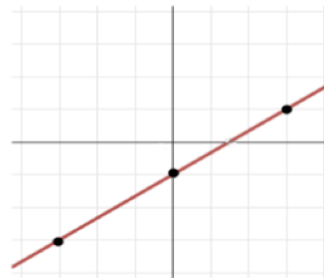
b.) y-intercept?

c.) Slope?

d.) Slope of the line parallel to this line?

e.) Slope of the line perpendicular to this line?

6 Given the following graph



a.) The x-intercept is between which two numbers?

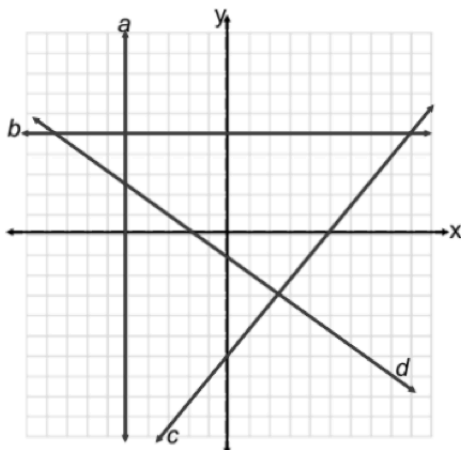
b.) y-intercept?

c.) Slope?

d.) Slope of the line parallel to this line?

e.) Slope of the line perpendicular to this line?

7 Given the following graphs:



a.) Complete the following chart:

	Slope	Slope	⊥ Slope
Line <i>a</i>			
Line <i>b</i>			
Line <i>c</i>			
Line <i>d</i>			

b.) Complete the following chart:

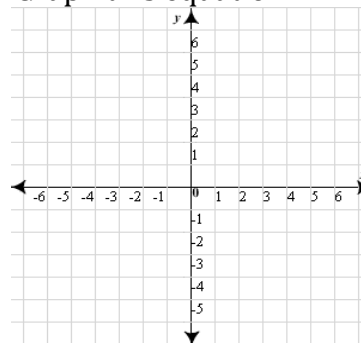
	x-intercept	y-intercept
Line <i>a</i>		
Line <i>b</i>		
Line <i>c</i>		
Line <i>d</i>		

8 Given  $3x - 2y = 6$

- Write this equation in slope-intercept form.
- What is the slope of this equation?
- What is the slope of the line parallel to this line?
- What is the slope of the line perpendicular to this line?
- What is the y-intercept of this equation?

f.) What is the x-intercept of this equation?

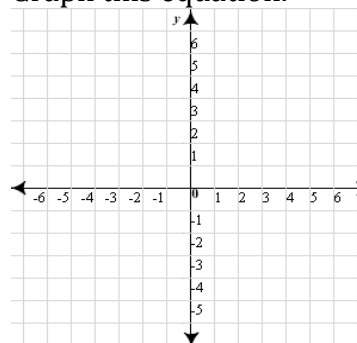
g.) Graph this equation



9 Given  $y = -4x + 4$

- What is the slope of this equation?
- What is the slope of the line parallel to this line?
- What is the slope of the line perpendicular to this line?
- What is the y-intercept of this equation?
- What is the x-intercept of this equation?

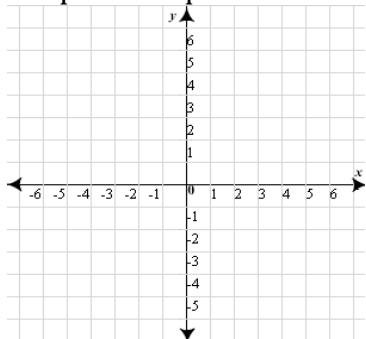
f.) Graph this equation.



10 **Given  $6x + 3y = 12$**

- a.) Write this equation in slope-intercept form.
- b.) What is the slope of this equation?
- c.) What is the slope of the line parallel to this line?
- d.) What is the slope of the line perpendicular to this line?
- e.) What is the y-intercept of this equation?
- f.) What is the x-intercept of this equation?

g.) Graph this equation

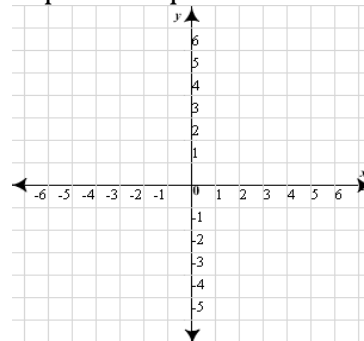


11  **$y = 2(x - 4) + 3$**

- a.) Write this equation in slope-intercept form.
- b.) What is the slope of this equation?
- c.) What is the slope of the line parallel to this line?
- d.) What is the slope of the line perpendicular to this line?

e.) What is the y-intercept of this equation?

f.) Graph this equation



12 **Given  $x - 4y = -16$**

a.) Write this equation in slope-intercept form.

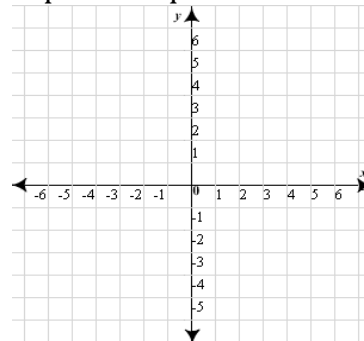
b.) What is the slope of this equation?

c.) What is the slope of the line parallel to this line?

d.) What is the slope of the line perpendicular to this line?

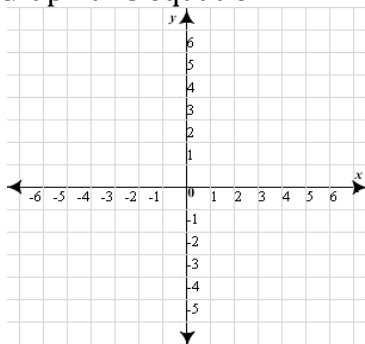
e.) What is the y-intercept of this equation?

f.) Graph this equation

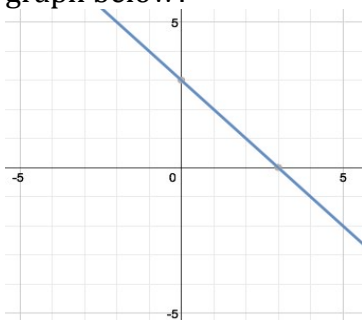


13 Given  $3y = 4x + 6$

- a.) Write this equation in slope-intercept form.
- b.) What is the slope of this equation?
- c.) What is the slope of the line parallel to this line?
- d.) What is the slope of the line perpendicular to this line?
- e.) What is the y-intercept of this equation?
- f.) Graph this equation

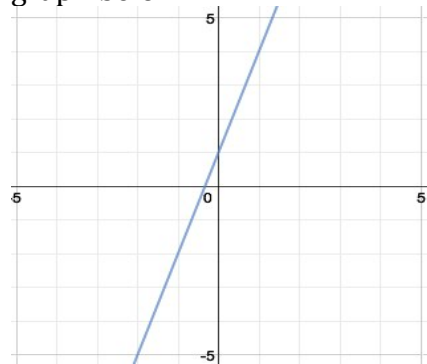


14 Which equation best describes the graph below?



- A  $y = -x - 3$
- B  $y = -x + 3$
- C  $y = -\frac{1}{2}x + 3$
- D  $y = -2x + 3$

15 Which equation best describes the graph below?



- A  $4y = 12x - 4$
- B  $4y = -12x + 4$
- C  $-12x - 4y = -4$
- D  $12x - 4y = -4$

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**Cumulative Information from Previous Tests!**

- 16 Name each property!
  - a.)  $x(y + z) = xy + xz$
  - b.)  $(x + y) + z = x + (y + z)$
  - c.)  $(x + y) + z = z + (x + y)$
  - d.)  $x + y = x + y$
  - e.) If  $x + y = z$ , then  $z = x + y$

17 Evaluate  $-x^2 - y^2$  when  $x = -3$  and  $y = -5$

18 Simplify  $4(3x + 2) + 2(x + 5)$

19 Solve  $3(x - 5) = 7x + 11$

20 Solve the following equation for  $c$   
 $a = \frac{1}{3}bc$

21 Solve  $-6x < x + 14$