

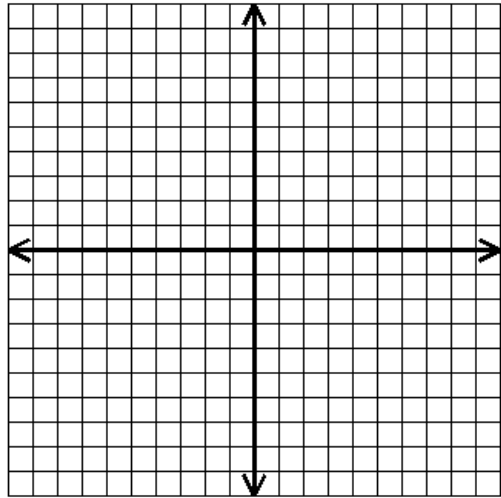
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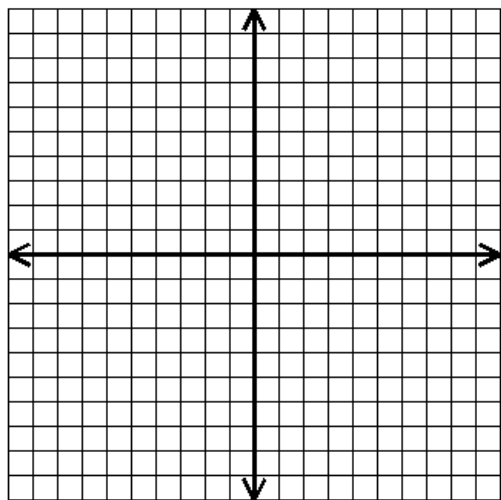
PER. \_\_\_\_\_

**Review – Writing Equations of Lines**

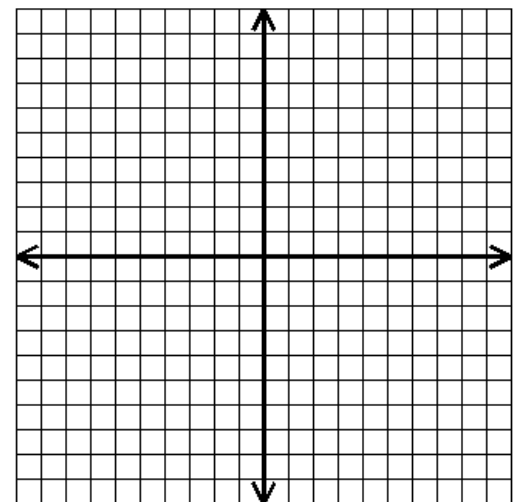
1. Graph  $3x + y = -6$



2. Graph  $x + 5y = 10$

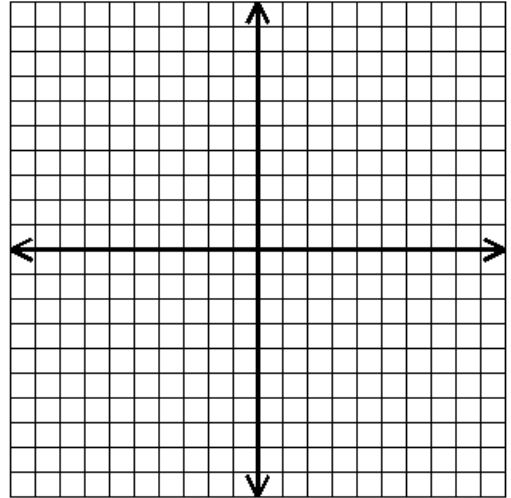


3. Graph  $2x - 3y = -9$



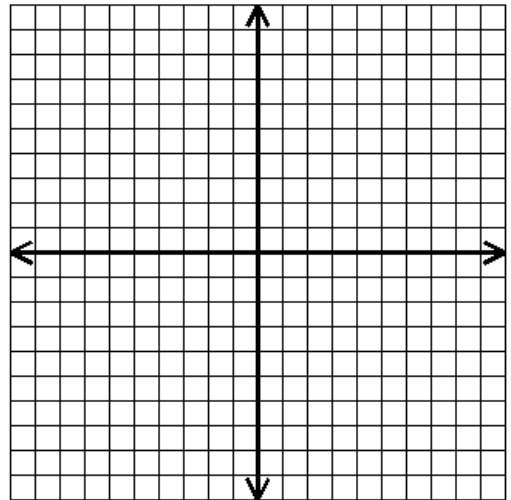
4. Graph  $x = -5$

$m =$  \_\_\_\_\_



5. Graph  $y = 4$

$m =$  \_\_\_\_\_



6. If  $(x, -1)$  is a solution to the equation  $x - 4y = 12$ , what is the value of  $x$ ?

7. If the point  $(-2, y)$  is a solution to the equation  $3x - 4y = 18$ , what is the value of  $y$ ?

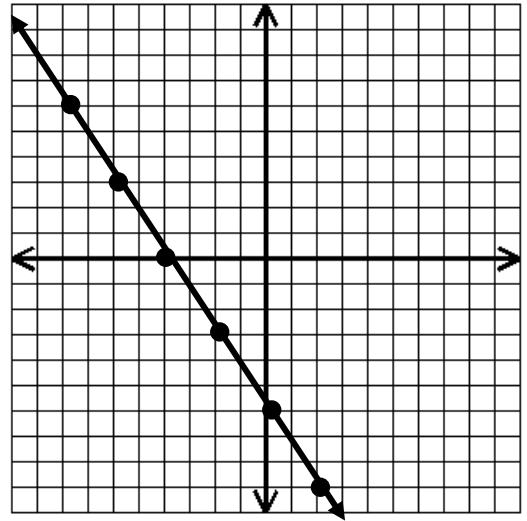
8. Using the graph shown answer the following.

a) What is the x-intercept?

b) What is the y-intercept?

c) What is the slope?

d) What is the equation of the line?



**Using the given information, write the equation of each line.**

9. passes through  $(-3, -1)$  and  $(6, -4)$

10. x-intercept of 2 and y-intercept of -3

11. slope of -4 and passes through  $(4, 7)$

12. parallel to  $y = \frac{4}{3}x + 2$  and goes through  $(-6, -2)$

13. perpendicular to  $y = 5x + 4$  and goes through  $(15, -7)$

14. slope  $-6$  and  $y$ -intercept  $5$

15. a horizontal line that passes through the point  $(9, -6)$

16. a vertical line that passes through the point  $(-3, 1)$

17.  $y$  varies directly as  $x$ , and  $y$  is  $72$  when  $x$  is  $30$

18. slope of  $-5$  and passes through  $(1, -2)$

19. perpendicular to  $x = 1$  and goes through  $(12, -5)$

20. parallel to the linear parent function and goes through (-6, -3)

21. What is the equation of a line with an undefined slope and passes through the point (-6, 3)?

**Tell whether the lines are parallel, perpendicular, or neither.**

22. \_\_\_\_\_

$$y = 2x - 1 \quad \text{and} \quad y = -\frac{1}{2}x + 3$$

23. \_\_\_\_\_

$$y = -\frac{1}{4}x - 2 \quad \text{and} \quad y = -4x - 3$$

24. \_\_\_\_\_

$$y = 5 \quad \text{and} \quad x = -3$$

25. \_\_\_\_\_

$$2x + 4y = 12 \quad \text{and} \quad y = -\frac{1}{2}x - 2$$

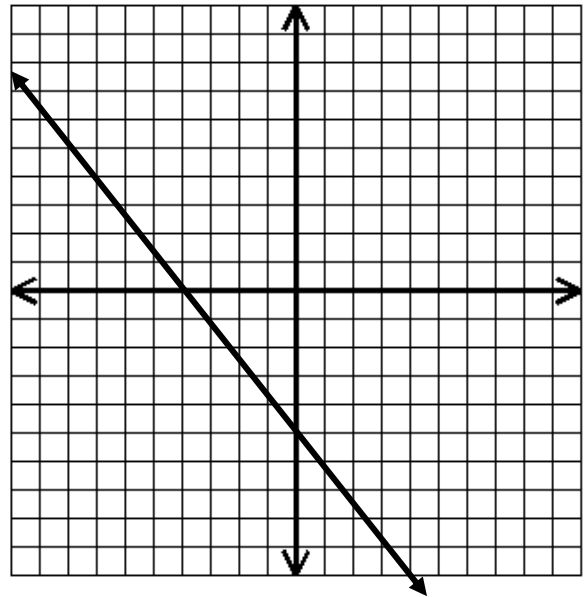
26. Find the slope of the line through the given points.

a) (-4, 2) and (-4, 5)

b) (6, 2) and (-1, 2)

27. The amount of money you earn varies directly to the number of hours worked. Cami earns \$72 at her after school job for working 9 hours. Write a direct variation equation for the amount of money  $y$  that she earns for working  $x$  hours.

28. What is the equation of the graph shown?



29. What are the x-intercept and y-intercept of the graph shown?

x-intercept \_\_\_\_\_

y-intercept \_\_\_\_\_

30. Write a function that can be used to find the values of  $f(x)$  in the table below.

$x$	1	2	3	4	5	6
$f(x)$	3	7	11	15	19	23

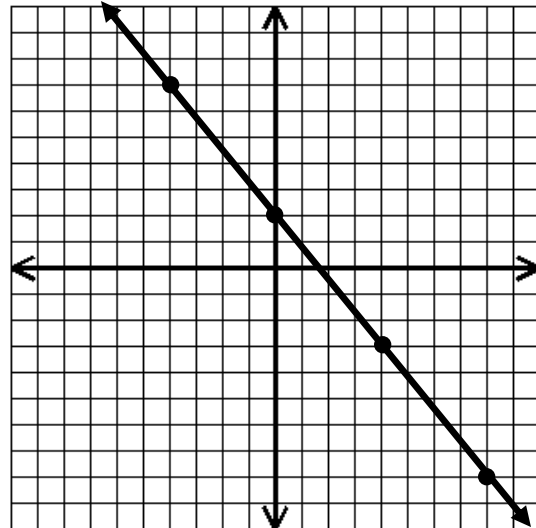
31. Determine the rate of change of the line shown.

A.  $\frac{5}{4}$

B.  $\frac{4}{5}$

C.  $-\frac{5}{4}$

D.  $-\frac{4}{5}$



32. What is the y-intercept of  $2y - 3x = -8$ ?

33. What is the slope of  $2y = -4x - 10$ ?

34. Which table identifies points on the line defined by the equation  $y - 2x = -4$ ?

A.

x	y
-4	4
-1	-2
3	-10
6	-16

B.

x	y
-2	-8
0	-4
3	2
7	10

C.

x	y
-4	12
-1	6
3	-2
5	-6

D.

x	y
-3	-2
0	4
2	8
5	14

35. Which function has  $(-2, 3)$  on its graph?

A.  $2x - y = 7$

C.  $y = 3x + 3$

B.  $y = -2x - 7$

D.  $3x + 2y = 0$

36. Sue adds charms to a charm bracelet. The table shows how the weight of the bracelet changes each time she adds a charm.

Number of Charms (x)	Weight in ounces (y)
0	2.2
1	2.65
2	3.1
3	3.55
4	4

What is the slope of the line that fits this data?

What does the slope represent?

What does the y-intercept represent?

## Answers to Review in random order:

$y = -5$	$y = -\frac{1}{3}x - 2$	$y = \frac{12}{5}x$	$(-4, 0)$	-2	
$y = -\frac{5}{4}x - 5$	$x = -3$	$y = -\frac{3}{2}x - 6$	$(0, -6)$	0	
$x = -6$	$y = -6$	undefined	parallel	0	
$y = -\frac{1}{5}x + 2$	$y = -5x + 3$	perpendicular	$(-4, 0)$	B	
$y = -6x + 5$	$y = x + 3$	perpendicular	$(0, -5)$	D	
$y = \frac{3}{2}x - 3$	$y = \frac{2}{3}x + 3$	undefined	neither	-6	
$y = -4x + 23$	$y = -3x - 6$	$f(x) = 4x - 1$	$(0, -4)$	$-\frac{3}{2}$	
$y = -\frac{1}{5}x - 4$	$y = \frac{4}{3}x + 6$	$y = 8x$	$\frac{9}{20}$ or $.45$	8	
C	The weight of each charm		The weight of the bracelet w/no charms on it		

