

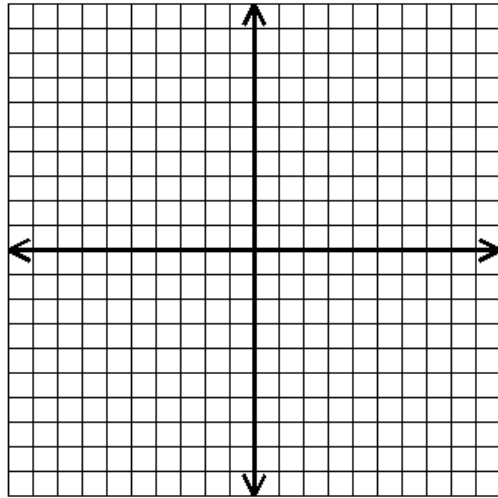
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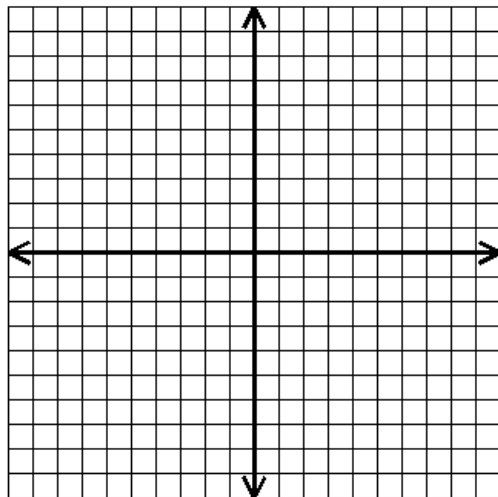
PER. \_\_\_\_\_

**Review: Equations of Linear Functions**

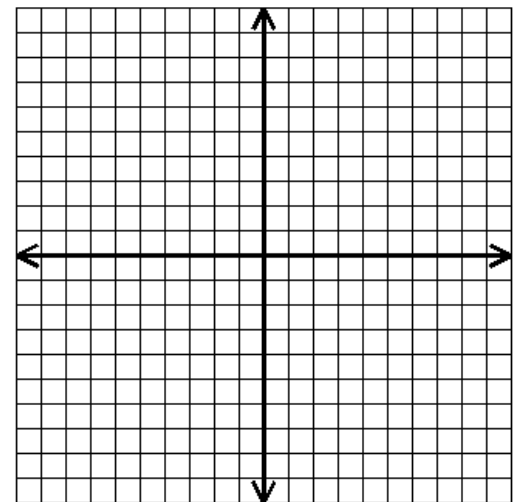
1. Graph  $6x + 2y = -14$



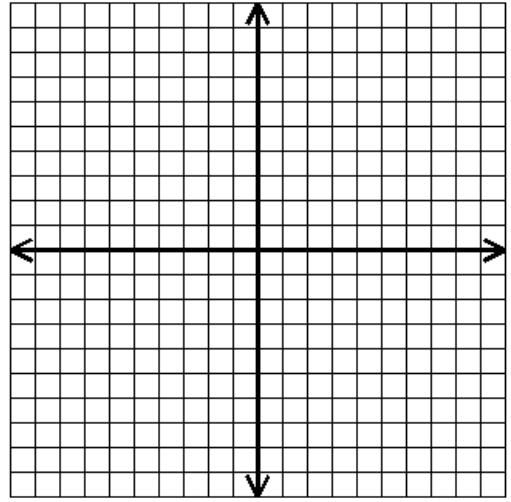
2. Graph  $x + 5y = 25$



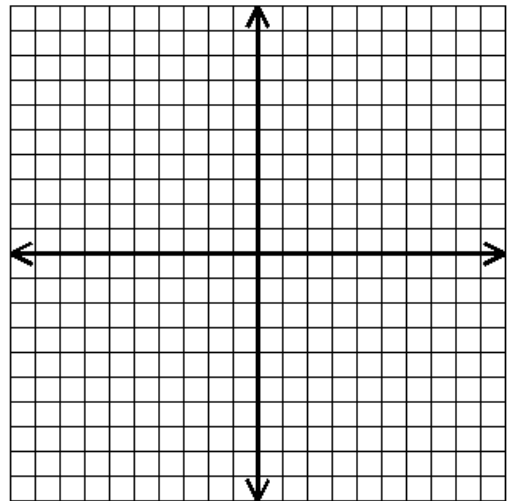
3. Graph  $4x - 3y + 9 = 0$



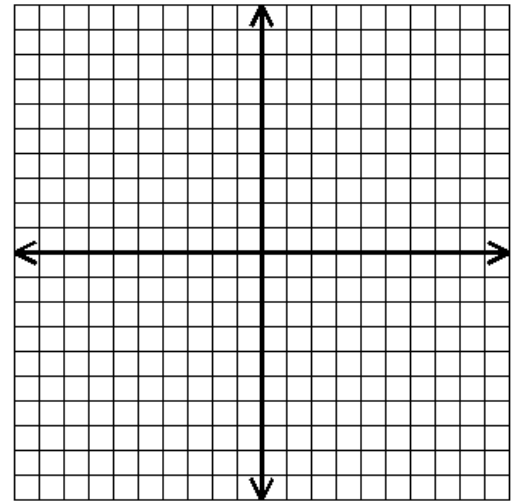
4. Graph  $x + 3 = -1$



5. Graph  $3y = 6$



6. Graph  $4x = 2(x + 2)$



7. What is the slope of a vertical line?

8. What is the slope of a horizontal line?

9. If  $(x, 4)$  is a solution to the equation  $3x + 2y = 20$ , what is the value of  $x$ ?

10. If the point  $(5, y)$  is a solution to the equation  $2x - 4y = 30$ , what is the value of  $y$ ?

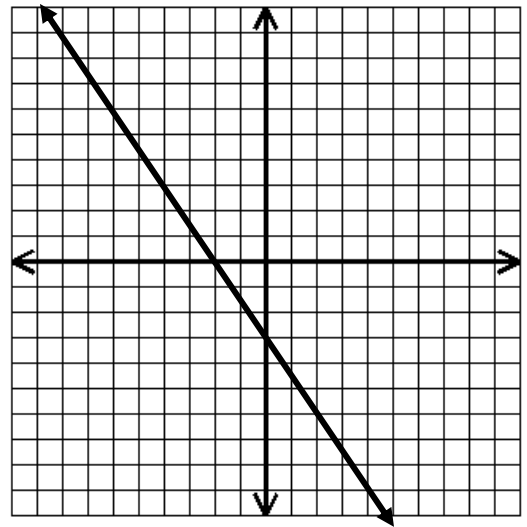
11. Use the graph shown to answer the following.

a) What is the x-intercept?

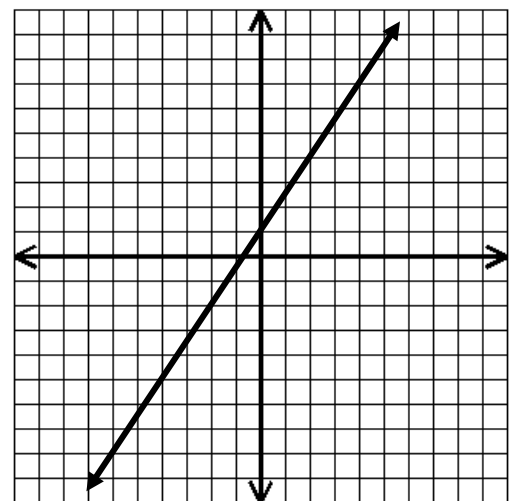
b) What is the y-intercept?

c) What is the rate of change?

d) What is the equation of the line in slope-intercept form?



12. What is the equation of the graph shown?



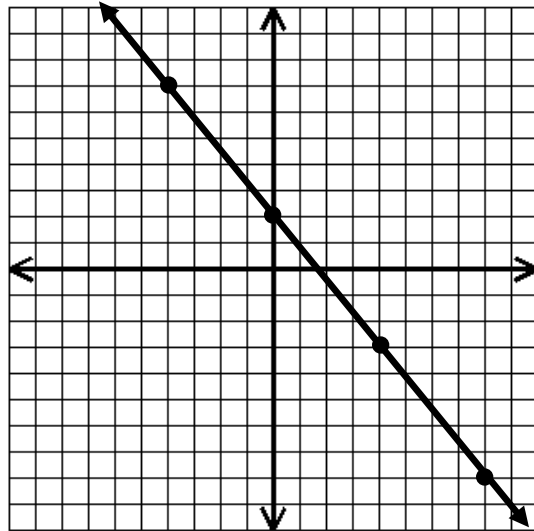
13. Determine the rate of change of the line shown.

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

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

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

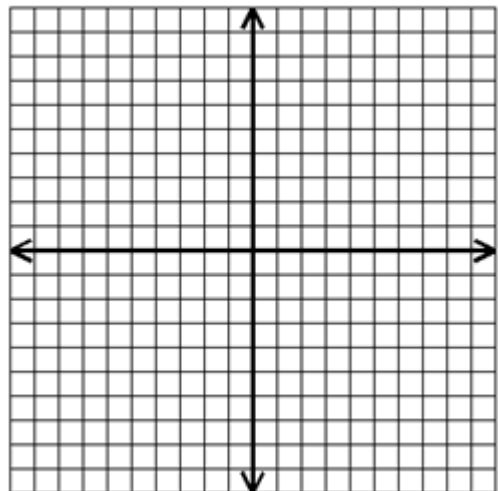
D.  $-\frac{4}{5}$



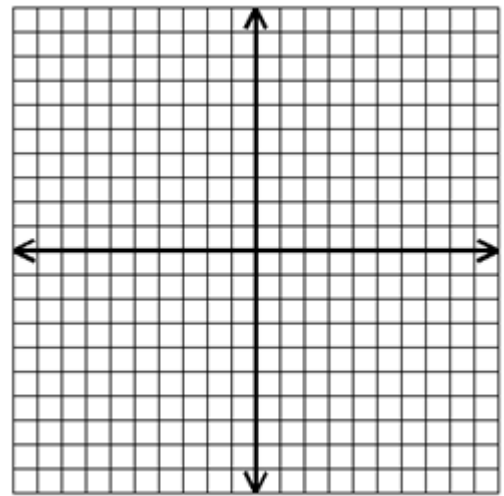
14. What is the y-intercept of  $3x - 2y = 8$ ?

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

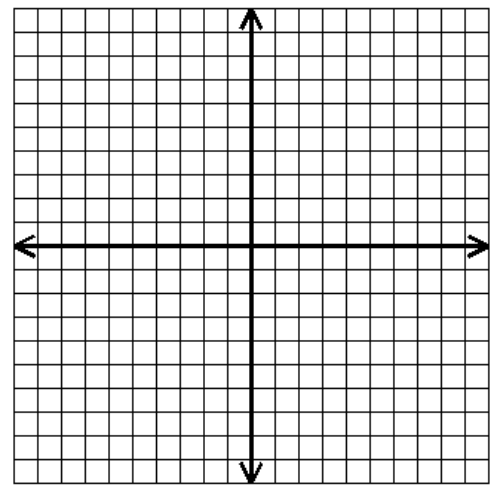
16. Graph the linear function  $y = 2x$ .



17. Graph and write the linear function that includes the points (2, -6) and (-1, 3).



18. Graph the function that represents the equation  $4x = -12 + 3y$



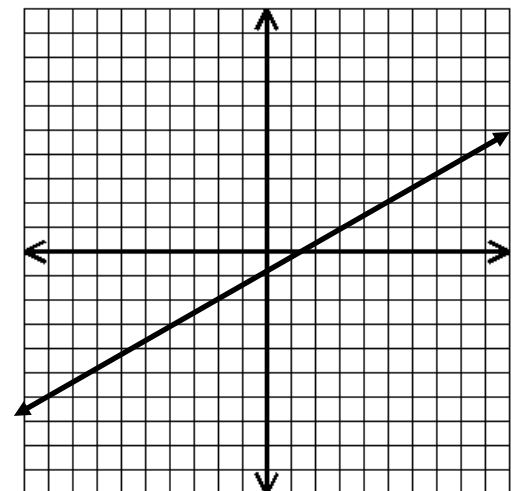
19. Which equation represents the graph shown?

A.  $y = \frac{5}{3}x - 1$

C.  $y = \frac{3}{5}x + 1$

B.  $y = \frac{3}{5}x - 1$

D.  $y = \frac{-3}{5}x - 1$



20. Which shows  $2x + y - 6 = 0$  in slope intercept form?

A.  $y = 2x - 6$

C.  $y = -2x + 6$

B.  $y = -2x - 6$

D.  $y = 2x + 6$

21. The function  $w(x) = 250x$  represents the number of words  $w(x)$  Sam can read in  $x$  minutes.

- a) What is the independent variable?
- b) What is the dependent variable?
- c) How many words can Sam read in 6 minutes?

22. Mrs. Daniel packs reams of paper into boxes. The box has a mass of 18 ounces, and each ream of paper weighs 22 ounces. If the function  $y = 22x + 18$  describes the total mass, the independent variable represents the —

- A. total mass of a box filled with reams of paper
- B. total number of boxes filled with reams of paper
- C. mass of each ream of paper inside a box
- D. number of reams of paper packed in a box

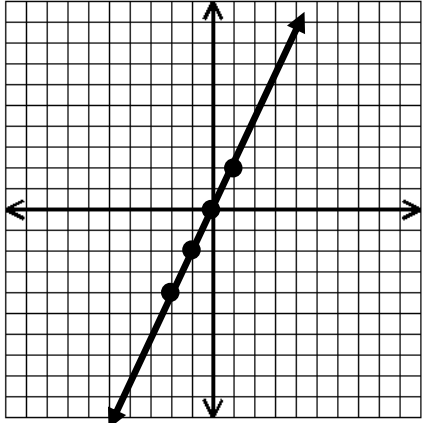
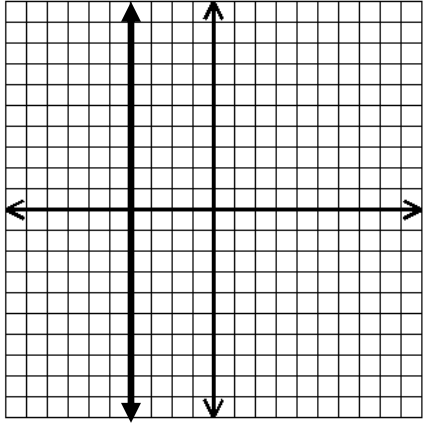
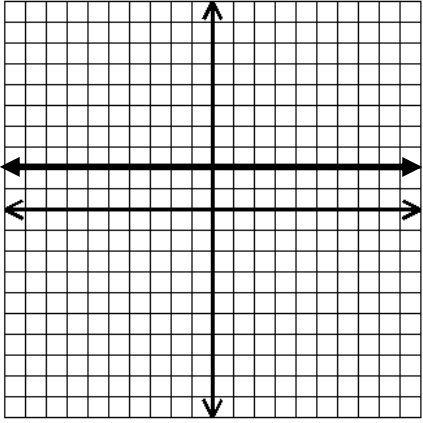
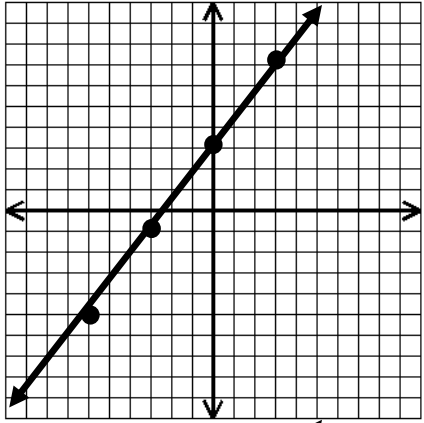
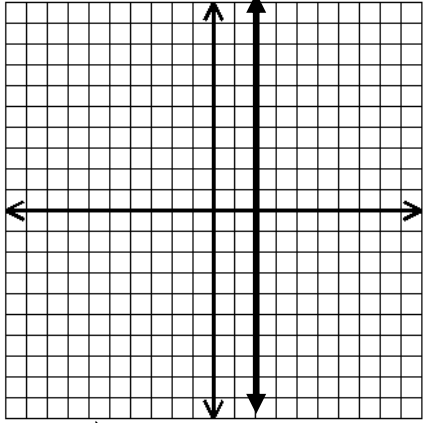
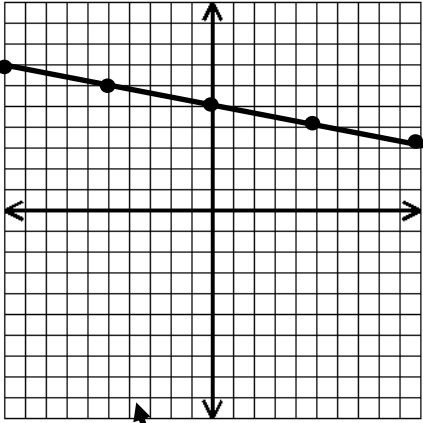
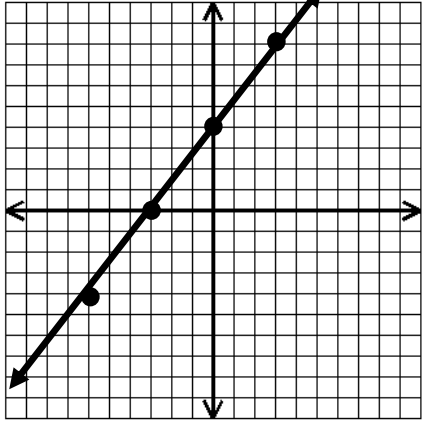
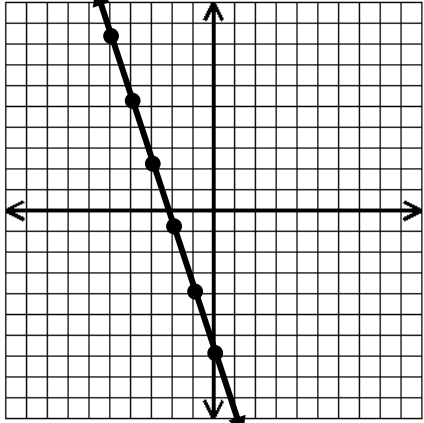
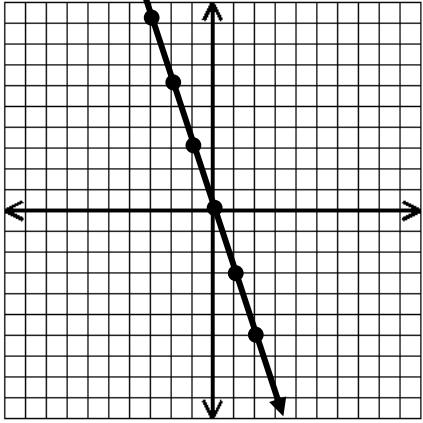
23. Cara and Samantha both have cell phones. Cara pays \$75.89 per month plus \$0.12 per text message to use her cell phone. Samantha pays \$27.41 per month plus \$0.36 per text message to use her cell phone. One month, they paid the same amount for cell phone service. How many text messages did each send?

24. Which relation contains three points that cannot lie on the graph of a function of  $x$ ?

- I.  $\{(3, 4), (4, 5), (3, 6)\}$
- II.  $\{(3, 4), (4, 4), (5, 4)\}$
- III.  $\{(3, 6), (3, 5), (3, 4)\}$
- IV.  $\{(3, 6), (4, 5), (5, 3)\}$

- A. I and II
- B. II and IV
- C. I, II, and III
- D. I and III

Answers in random order:

			
			
			
0	B	x, number of minutes	(0, -3)
$-\frac{3}{2}$	C	$y = -\frac{3}{2}x - 3$	$y = \frac{3}{2}x + 1$
-5	(0, -4)	w, number of words	1500
4	(-2, 0)	Undefined	<b>Study, study, study!</b> <b>Good Luck on your test!</b>
-2	202	D	
C	D	$y = -3x$	