

Name: \_\_\_\_\_

**Algebra 2**  
**Unit 2 REVIEW:**  
**Writing and Graphing Linear Functions in Two Variables**  
**Non-Calculator Portion**

**Target 2.1: I can graph a linear equation using a table of two values.**

**Target 2.2: I can graph a linear equation using x- and y-intercepts.**

**Target 2.3: I can graph a linear equation using slope and y-intercept.**

**Target 2.8: I can write linear equations when given the graph of the equation.**

Target 2.1: I can graph linear equations using a table.

1. What line will contain all the points in this table?

<b>X</b>	<b>Y</b>
-1	-4
2	5
4	11

2. Which set of ordered pairs  $(x,y)$  satisfies the equation  $3x - 2y = 7$ ?

A.  $\{(1.4,1), (1,0), (0.6,-1)\}$

B.  $\{(0, -3.5), (1,-2), (-1, -5)\}$

C.  $\{(3, 2), (-1,0), (-1.4, -1)\}$

D.  $\{(1, -0.6), (0,-1), (-1, -1.4)\}$

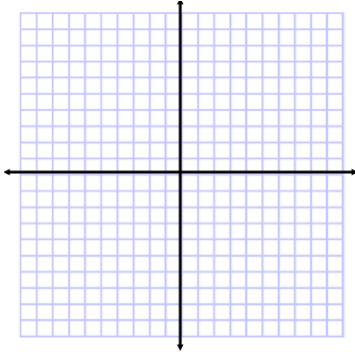
3. The cost of a ticket for an event is \$17. Make a table that shows the amount,  $y$ , Justin will spend to buy  $x$  tickets?

Target 2.2: I can graph linear equations using x- and y-intercepts.

4. Find the y-intercept for  $4x + 6y = -36$ .

5. Find the x-intercept for  $y = -\frac{1}{2}x + 8$ .

6. Isabella drew a line with an x-intercept of 5 and a y-intercept of 7. What did her line look like?

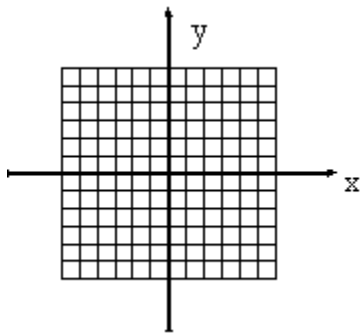


Target 2.3: I can graph linear equations using slope and y-intercept.

**Graph each of the following equations on the coordinate axis. State the slope, y-intercept or x-intercept as indicated for each.**

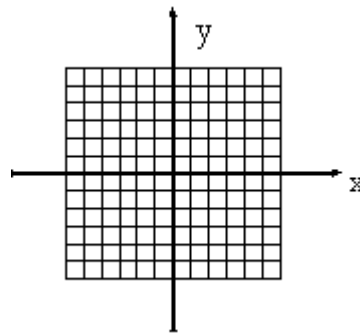
7.  $y = 3x - 4$

Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_



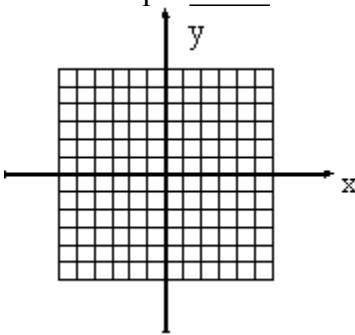
8.  $y = -2x + 1$

Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_



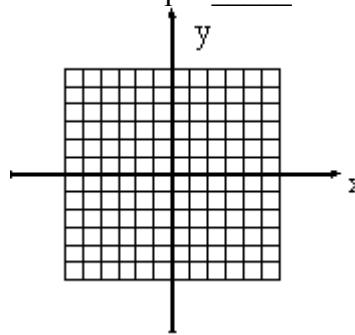
9.  $y = 2$

Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_



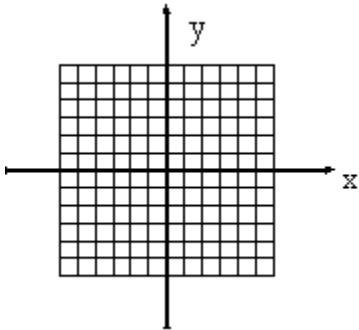
10.  $x = -4$

Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_



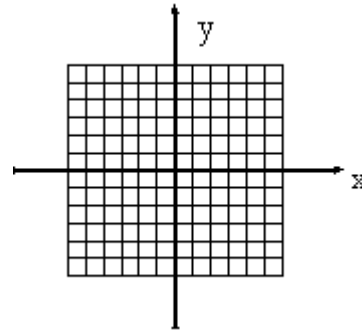
11.  $3x + 6y = 12$

Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_

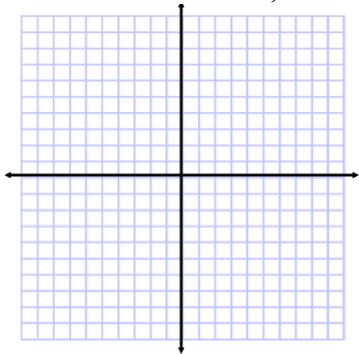


12.  $5x - 3y = 0$

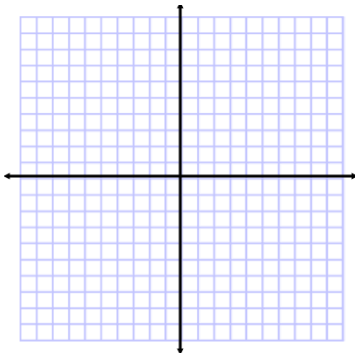
Slope: \_\_\_\_\_ Y-intercept: \_\_\_\_\_



13. The cost of a single-scoop ice cream cone is \$3.00. Each extra scoop of ice cream costs an additional \$1.25. If  $x$  is the number of extra scoops of ice cream and  $y$  is the total cost of an ice cream cone, draw a graph that represents this situation?



14. The equation  $y = \frac{1}{3}x + 4$  represents the total monthly cost,  $y$ , of a cell phone plan when  $x$  minutes are used. Draw a graph that represents this equation?

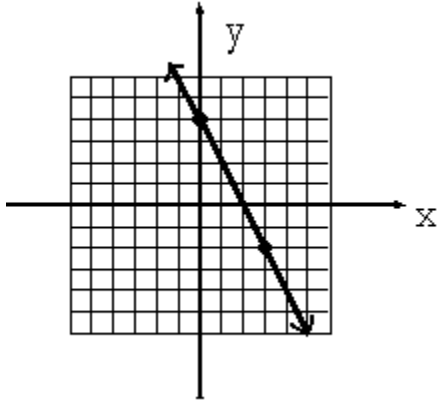


Target 2.8: I can write linear equations when given the graph of the equation.

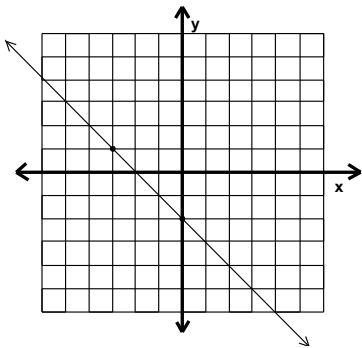
15. Find the equation for the line graphed in a) standard form and b) slope-intercept form.

a) standard form

b) slope-intercept form

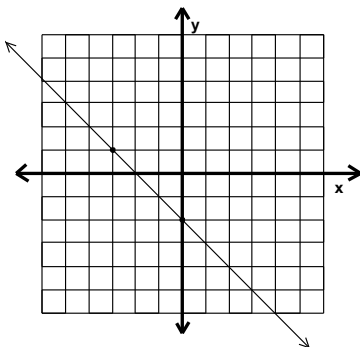


16. Which of the following is **correct** for the given graph?



- A. the x-intercept is at 4
- B. the slope is negative
- C. the point  $(-3, 2)$  is on the line
- D. the line does not fall in Quadrant I

17. Which of the following is **incorrect** for the graph below?



- A. the y-intercept is at  $-2$
- B. the slope is positive
- C. the point  $(-3, 1)$  is on the line
- D. the line falls in Quadrant

