

# Warm Up

2/26

Check Google Classroom for which Warm Ups you need to upload.

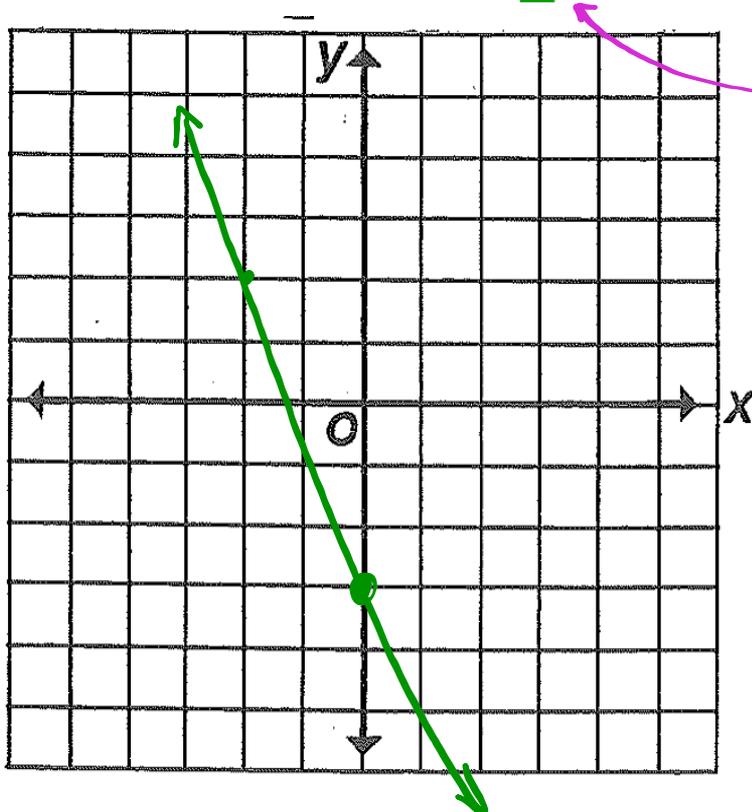


# Recap

Graphing an equation in Slope Intercept form:

$$y = -\frac{5}{2}x - 3$$

*y-int*



*slope*

$$\frac{\Delta y}{\Delta x} = -\frac{5}{2}$$

$$= \frac{5}{-2}$$

*this is the one!*

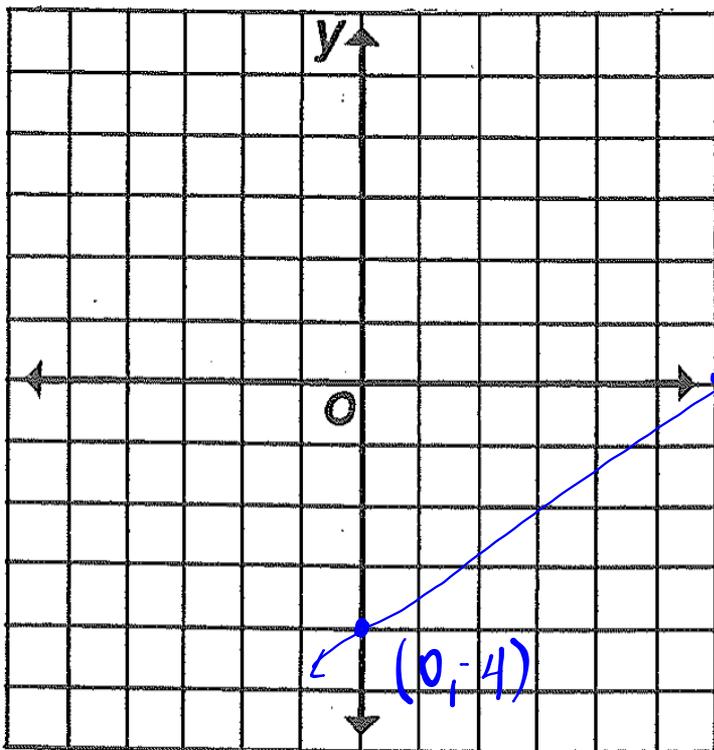
There is not enough room on the graph to find the next point using the slope written the first way.

Always check if the slope is negative or positive when done to make sure it is graphed correctly.

# Recap

Graphing an equation in Standard form:

$$2x - 3y = 12$$



$$\begin{aligned}2(0) - 3y &= 12 \\ -3y &= \frac{12}{-3} \\ y &= -4 \\ &\quad (0, -4)\end{aligned}$$

$$\begin{aligned}2x - 3(0) &= 12 \\ 2x &= \frac{12}{2} \\ x &= 6 \quad (6, 0)\end{aligned}$$

Find x- and y- intercepts, use those 2 points to draw line.

What if you have the following equation?

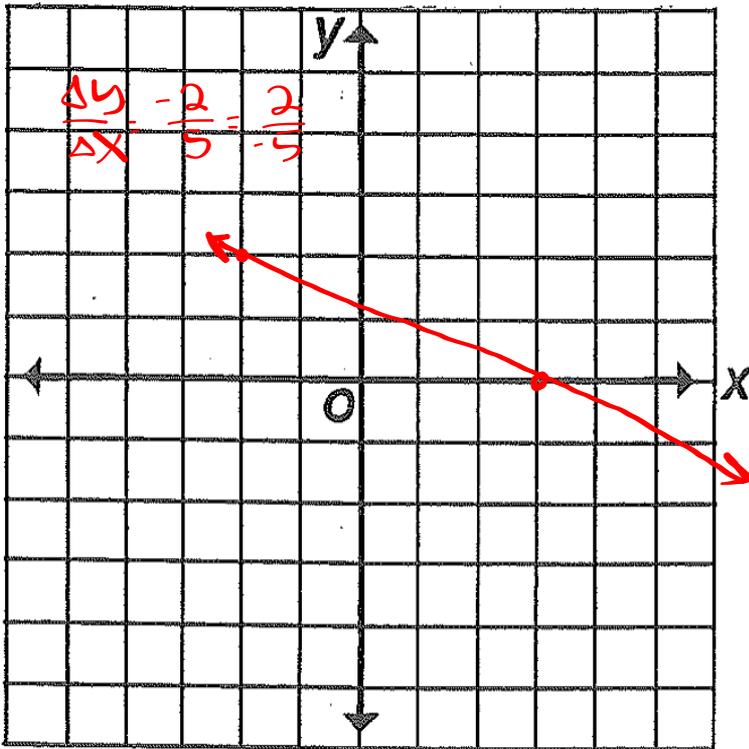
$$2x + 5y = 6$$

$$2(0) + 5y = 6$$

$$\frac{5y}{5} = \frac{6}{5}$$

$$y = \frac{6}{5}$$

Not helpful :)



$$2x + 5(0) = 6$$

$$\frac{2x}{2} = \frac{6}{2} \quad (3, 0)$$
$$x = 3$$

Only have 1 point, need another plan ...

$$\begin{array}{r} 2x + 5y = 6 \\ -2x \quad \quad -2x \\ \hline \end{array}$$

$$\frac{\Delta y}{\Delta x} = -\frac{2}{5} = -\frac{2}{5}$$

$$\frac{5y}{5} = \frac{-2x + 6}{5}$$

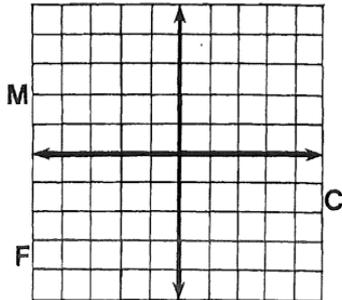
$$y = -\frac{2}{5}x + \frac{6}{5}$$

slope!

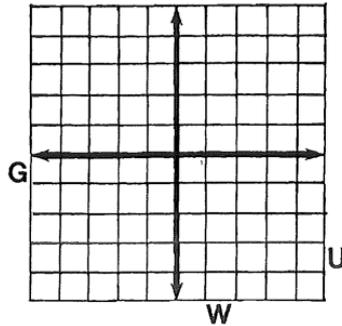
# Why Did Miss Muffet Need A Road Map?

Graph any equation below. (Let each space along the axes represent 1 unit.) The graph, if extended, will cross a letter. Look for this letter in the string of letters near the bottom of the page and CROSS IT OUT each time it appears. When you finish, write the letters that have NOT been crossed out in the rectangle at the bottom of the page.

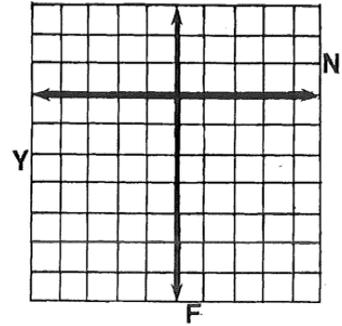
①  $2x + 3y = 6$



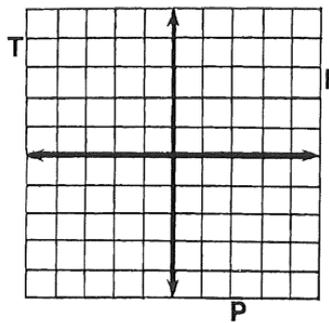
②  $-x + 2y = 4$



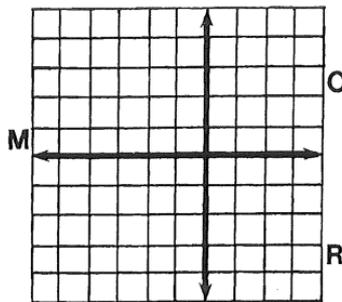
③  $3x + y = -6$



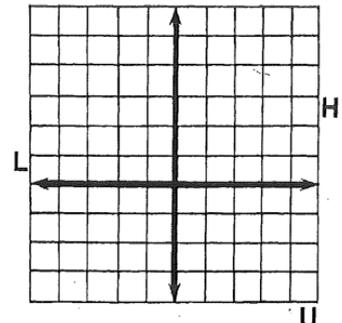
④  $4x - 3y = 12$



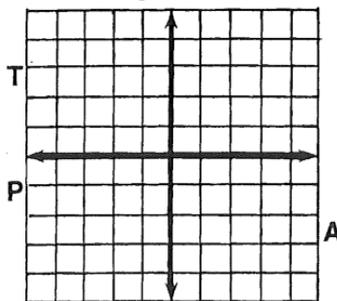
⑤  $-3x - 5y = 15$



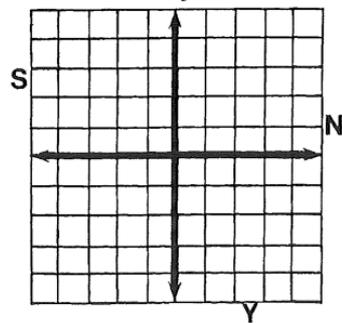
⑥  $2x + y = 5$



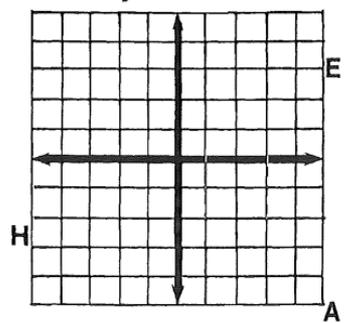
⑦  $x - 2y = -3$



⑧  $-3x + 5y = -10$



⑨  $x + y = 0$



PUSHAPNELAGONFSANTMCHIMEAPCRAWNGIFPHEANIYUN

ANSWER:

# What Happened to the Guy Who Fell Into an Upholstery Machine?

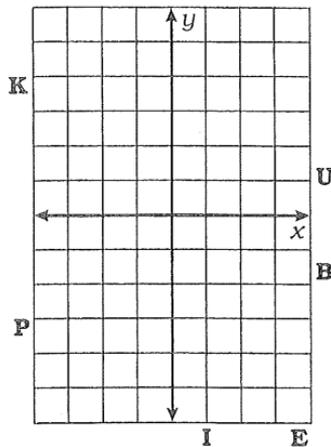


Use the slope and y-intercept to graph each equation. The graph, if extended, will cross a letter. Write this letter in the box containing the exercise number.

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

2  $y = -2x + 1$

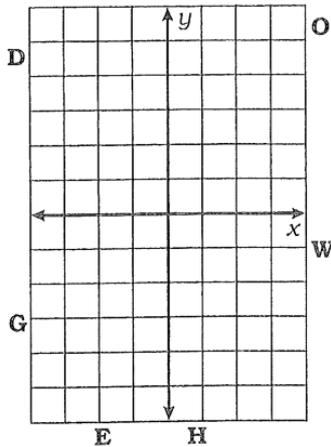
3  $y = -\frac{5}{2}x - 4$



4  $y = \frac{1}{3}x + 4$

5  $y = 3x - 1$

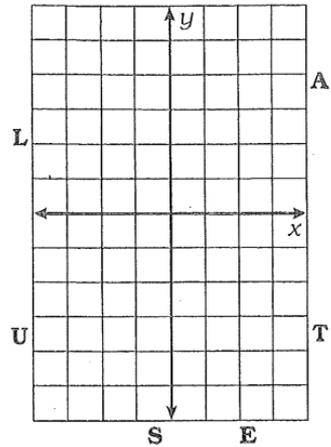
6  $y = -\frac{7}{4}x - 5$



7  $y = -\frac{1}{2}x$

8  $y = -4x + 3$

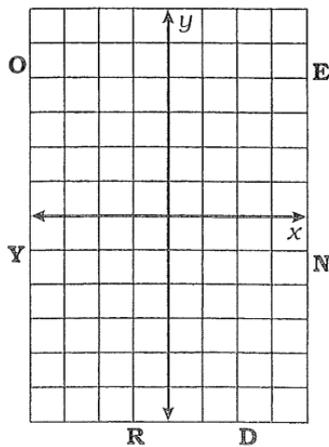
9  $y = \frac{8}{3}x - 5$



10  $y = x + 3$

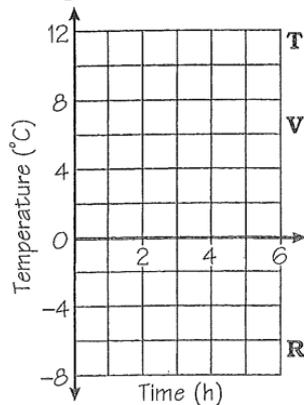
11  $y = -x - 4$

12  $y = x$



13 The temperature is  $-6^{\circ}\text{C}$  and rising at a rate of  $2^{\circ}$  per hour.

14 The temperature is  $12^{\circ}\text{C}$  and dropping at a rate of  $3^{\circ}$  per hour.

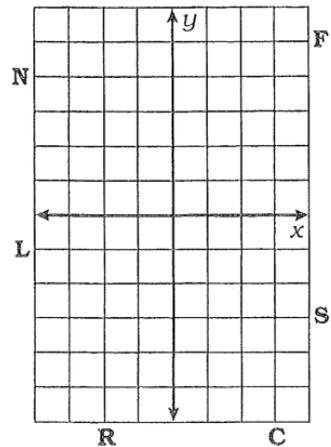


15  $y = 5$

17  $y = -1$

16  $x = -2$

18  $x = 3$



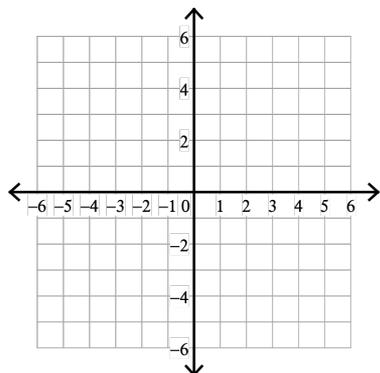
6 12 3 9 15 1 17 7 10 14 8 18 4 13 2 16 5 11

# Graphing Lines in Standard Form **More Practice**

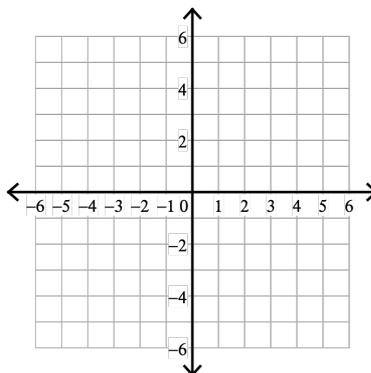
Date \_\_\_\_\_ Period \_\_\_\_\_

Sketch the graph of each line.

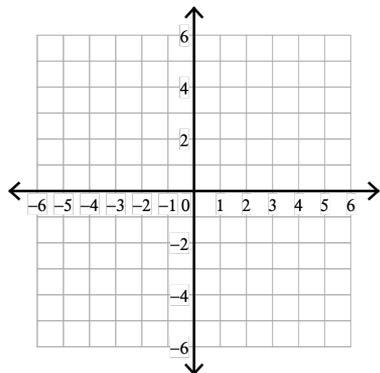
1)  $x + 2y = 6$



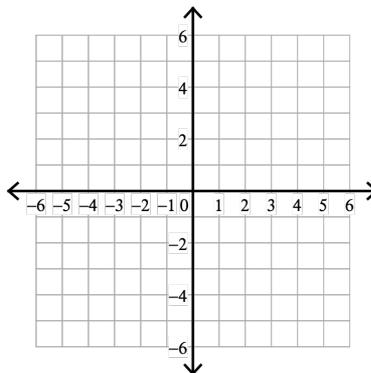
2)  $3x + 2y = -8$



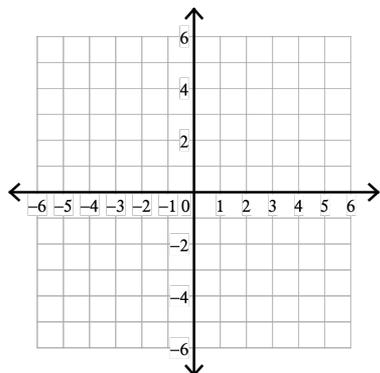
3)  $x - 3y = 0$



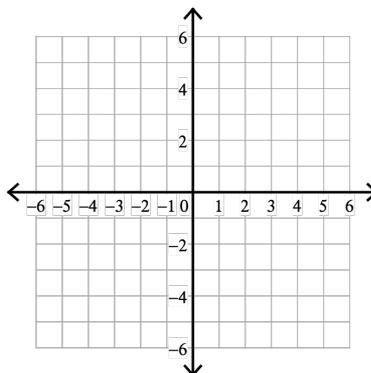
4)  $x + 5y = 25$



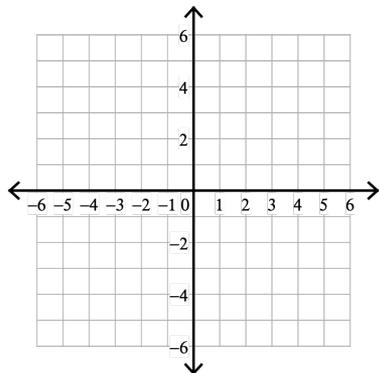
5)  $4x - y = 3$



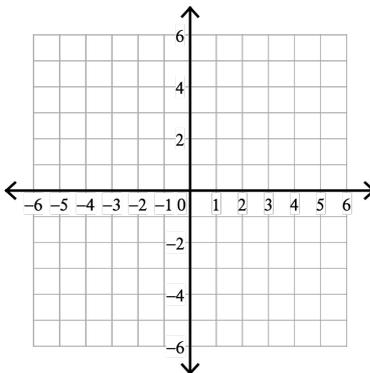
6)  $3x + 2y = 8$



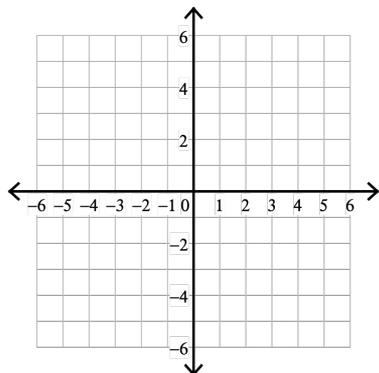
7)  $x + 2y = -4$



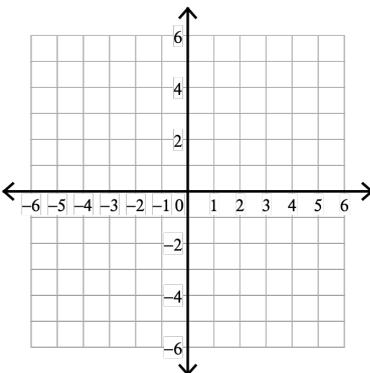
8)  $y = 1$



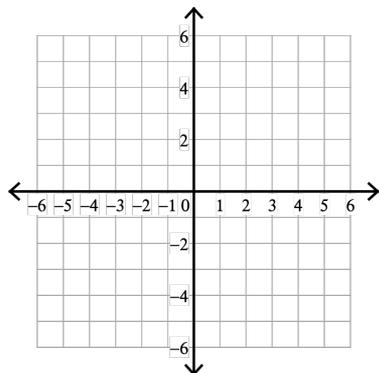
9)  $2x + y = -5$



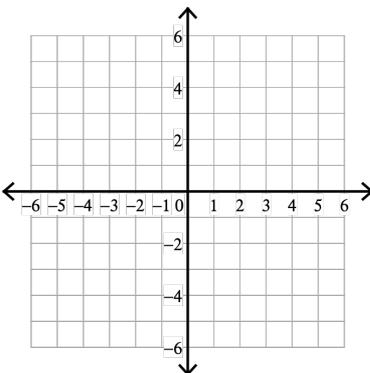
10)  $x + y = -2$



11)  $4x + 3y = 0$



12)  $2x + y = -4$

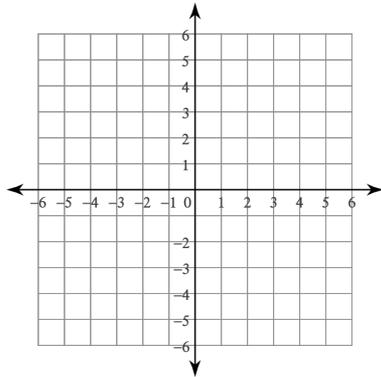


# Graphing Lines in Slope-Intercept Form

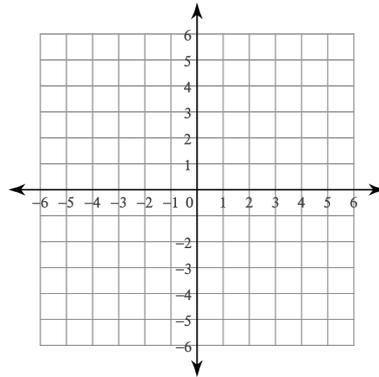
Date \_\_\_\_\_ Period \_\_\_\_\_

Sketch the graph of each line.

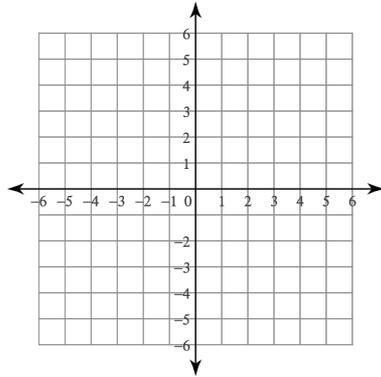
1)  $y = -8x - 4$



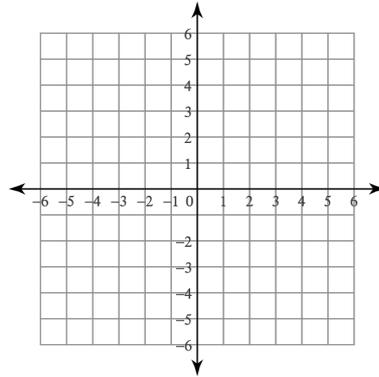
2)  $y = -x + 5$



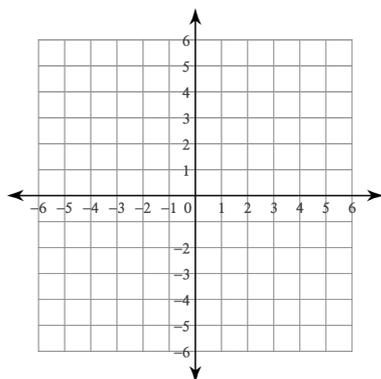
3)  $y = 2x$



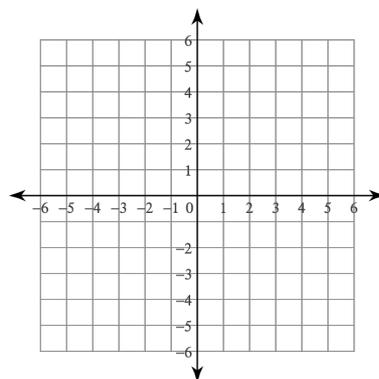
4)  $x = -4$



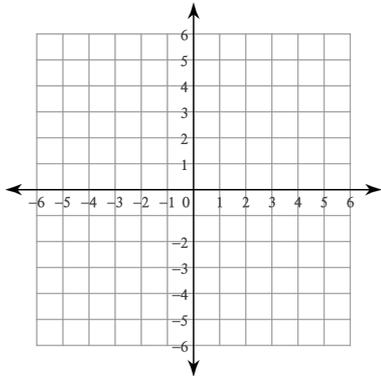
5)  $y = \frac{3}{2}x + 3$



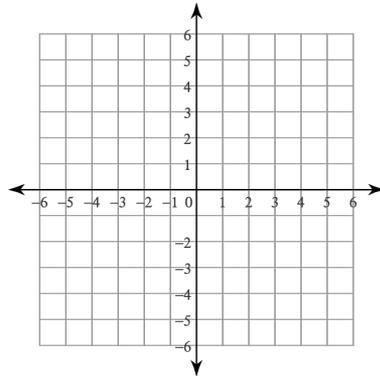
6)  $y = \frac{1}{5}x - 4$



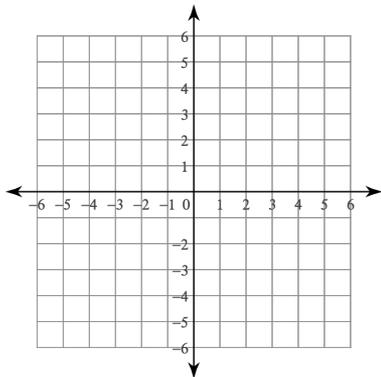
$$7) y = \frac{2}{3}x - 3$$



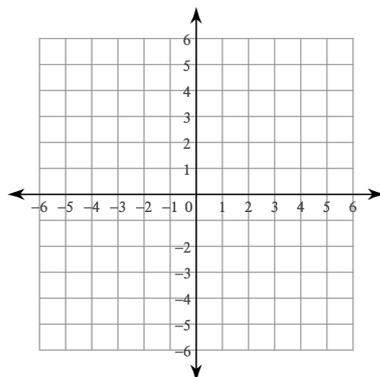
$$8) y = \frac{3}{2}x + 2$$



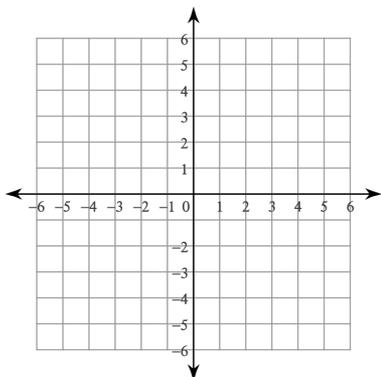
$$9) y = x$$



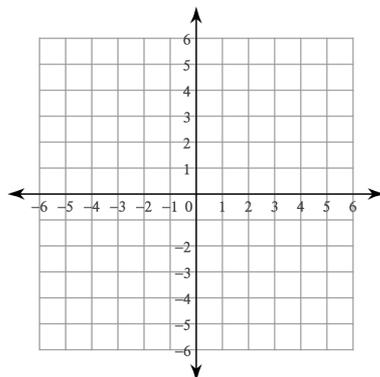
$$10) y = -\frac{4}{5}x - 5$$



$$11) y = \frac{2}{5}x + 3$$



$$12) y = -\frac{9}{4}x + 4$$



## **Homework**

Finish classwork

Do an additional 20 minutes.