

Graphing Lines--Skills 12-15

**Skill #12--'y'-Form**

Rewrite each equation in Slope-Intercept Form. ( $y = mx+b$ )

$$1) x - 8y = 32$$

$$\begin{array}{r} -x \\ \hline -8y = -x + 32 \\ \hline -8 \quad | \quad -8 \quad \quad -8 \end{array}$$

$$y = \frac{1}{8}x - 4$$

$$2) 3x - 2y = 13$$

$$\begin{array}{r} -3x \\ \hline -2y = -3x + 13 \\ \hline -2 \quad | \quad -2 \quad \quad -2 \end{array}$$

$$y = \frac{3}{2}x - \frac{13}{2}$$

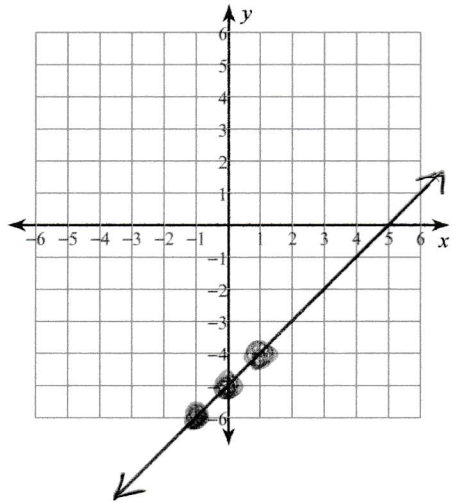
$$3) 9x + 5y = 30$$

$$\begin{array}{r} -9x \\ \hline 5y = -9x + 30 \\ \hline 5 \quad | \quad 5 \quad \quad 5 \end{array}$$

$$y = -\frac{9}{5}x + 6$$

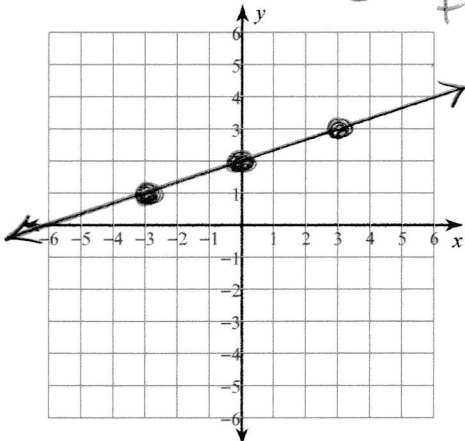
**Skill #13--Graph each line using the y-int and the slope.**  
(Rewrite in y-form when needed).

4)  $y = x - 5$



x	y
1	-4
0	-5
-1	-6

5)  $x - 3y = -6$



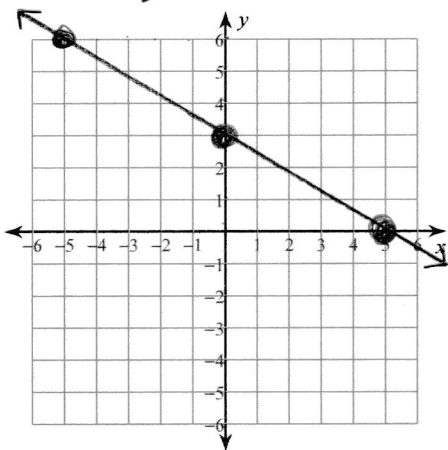
x	y
3	3
0	2
-3	1

*use multiples of 3 because of the 3 in front of "y"*

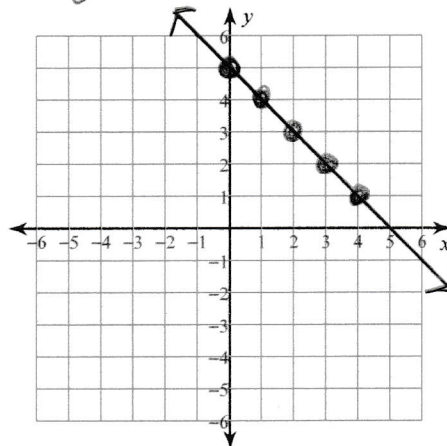
Skill#14--Graph each line using an x/y table.

(Make sure your table includes a positive number, zero and a negative number).

6)  $y = -\frac{3}{5}x + 3$   
 (3 down, 5 right)

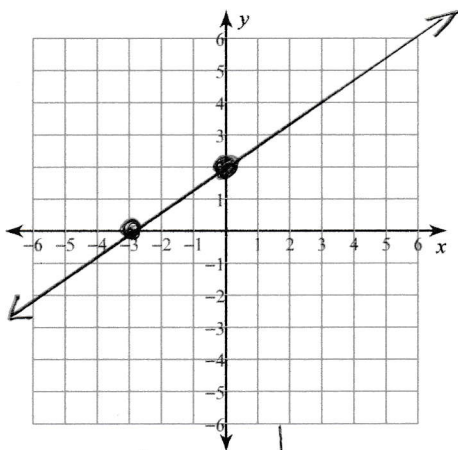


7)  $y = -x + 5$   
 (1 down, 1 right)



Skill #15--Graph each line by finding the x and y intercepts.

8)  $2x - 3y = -6$



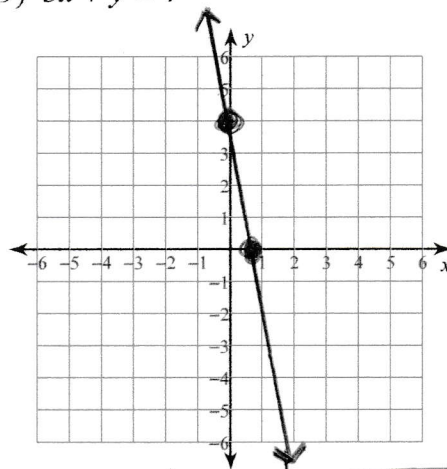
$$\frac{2x}{2} = \frac{-6}{2}$$

$$x = -3$$

$$\frac{-3y}{-3} = \frac{-6}{-3}$$

$$y = 2$$

9)  $5x + y = 4$



$$\frac{5x}{5} = \frac{4}{5}$$

$$x = \frac{4}{5}$$

$$y = 4$$

a little less than 1