

PRE 5-1

PRACTICE:

Name _____

Graphing Lines

$y = mx + b$

Date _____ Period _____

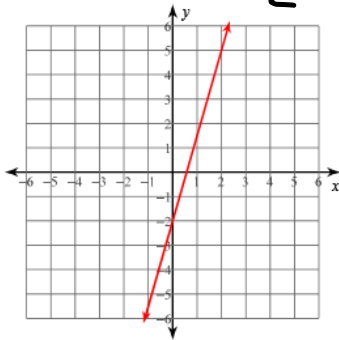
Sketch the graph of each line.

$b = y\text{-intercept}$

$m = \text{slope} = \frac{\text{rise}}{\text{run}}$

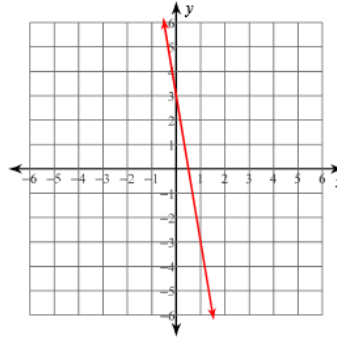
1) $y = \frac{7}{2}x - 2$

$b = 2$
 $m = \frac{7}{2} \begin{matrix} \uparrow 7 \\ \rightarrow 2 \end{matrix}$

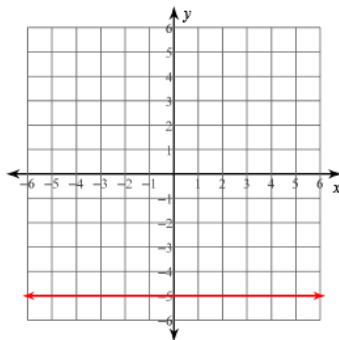


2) $y = -6x + 3$

$b = 3$
 $m = \frac{-6}{1} \begin{matrix} \downarrow 6 \\ \rightarrow 1 \end{matrix}$

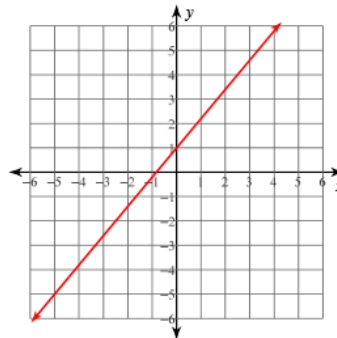


3) $y = -5$ horizontal



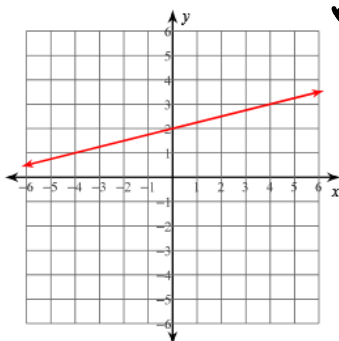
4) $y = \frac{6}{5}x + 1$

$b = 1$
 $m = \frac{6}{5} \begin{matrix} \uparrow 6 \\ \rightarrow 5 \end{matrix}$

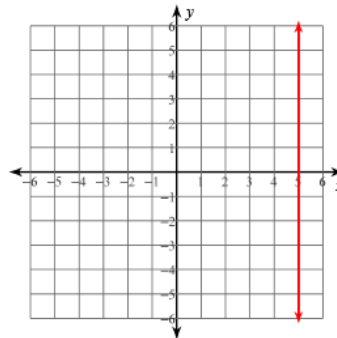


5) $y = \frac{1}{4}x + 2$

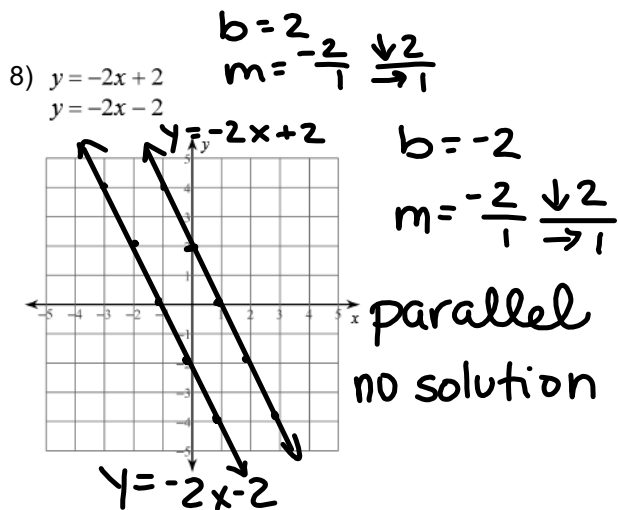
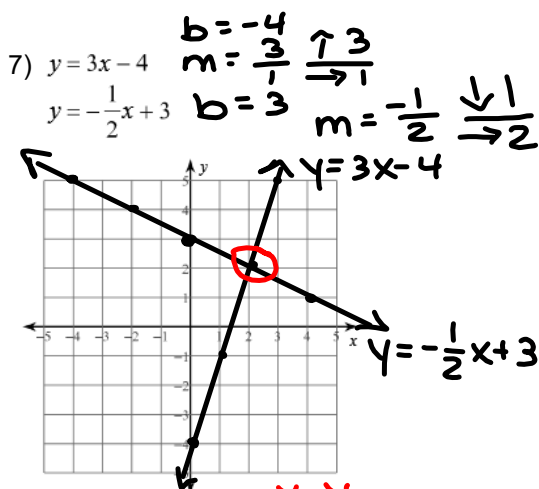
$b = 2$
 $m = \frac{1}{4} \begin{matrix} \uparrow 1 \\ \rightarrow 4 \end{matrix}$



6) $x = 5$ vertical



NOW, graph BOTH equations. Where do they intersect?



Solution (2, 2)

$y = 3x - 4$ $y = -\frac{1}{2}x + 3$
 $2 = 3(2) - 4 = 6 - 4$ $2 = -\frac{1}{2}(2) + 3 = -1 + 3$
 $2 = 2 \checkmark$ $2 = 2 \checkmark$

