

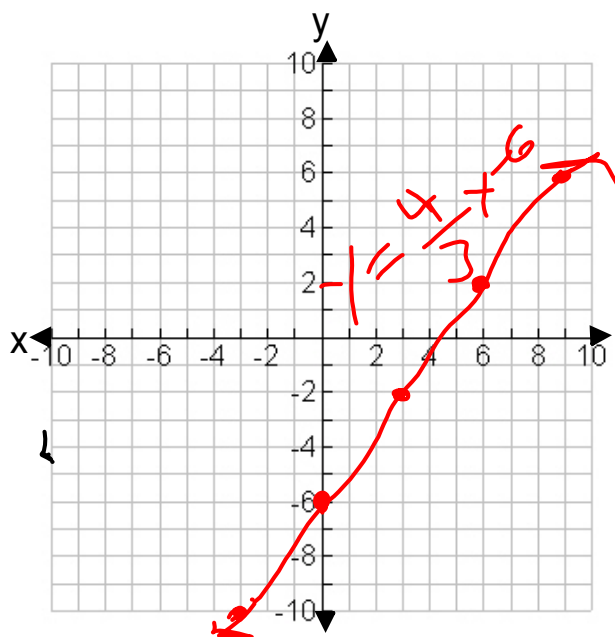
**DO NOW**

Graph the line. Identify the slope & the y-intercept

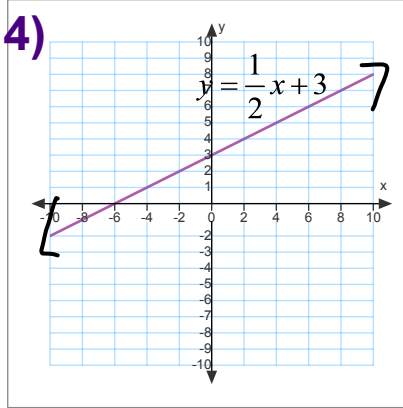
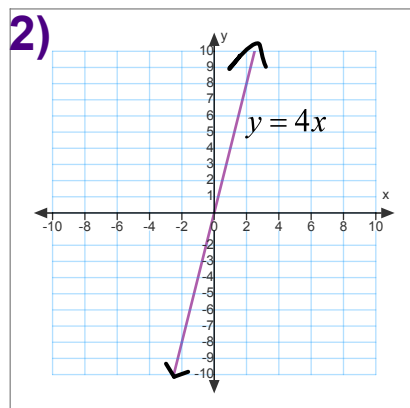
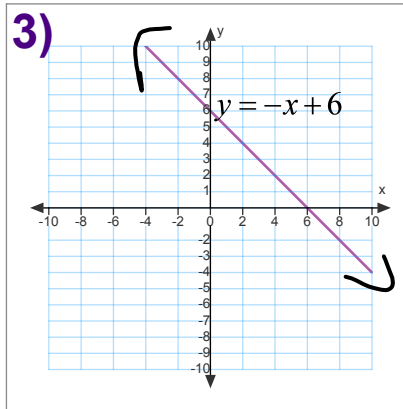
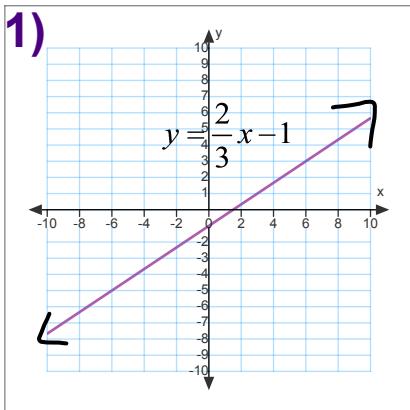
$$y = \frac{4}{3}x - 6$$

$$M = \frac{4}{3}$$

$$b = -6$$



Jan 29-11:33 AM

**Homework Answers**

Oct 13-12:09 PM

**Writing linear equations in slope-intercept form**

solve the equation for y

A linear equation written as  $y = mx + b$ 

OR

$$f(x) = mx + b$$

is in **slope-intercept form**,where  $m$  is the slope &  $b$  is the y-interceptEX: Identify the slope and y-intercept of the line  $5x - 4y = 12$ 

$$\begin{array}{r}
 \text{---} -5x \quad \text{---} -5x \\
 -4 \mid y = -5x + 12 \\
 \text{---} -4 \quad \text{---} -4 \quad \text{---} -4
 \end{array}$$

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

$$y = mx + b$$

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

$$b = -3$$

Feb 4-9:56 AM

Identify the slope and y-intercept of the line.

1)  $y + x = 8$

$$\begin{array}{r}
 \text{---} -x \quad \text{---} -x \\
 y = -x + 8
 \end{array}$$

$$m = -1$$

$$b = 8$$

2)  $x = 3y - 15$

$$\begin{array}{r}
 \text{---} +15 \quad \text{---} +15 \\
 x + 15 = 3y
 \end{array}$$

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

$$m = \frac{1}{3}$$

$$b = 5$$

Jan 29-11:50 AM

Identify the slope and y-intercept of the line.

3)  $3x - 2y = 6$   
 $\begin{array}{r} -3x \quad -3x \\ \hline -2y = \frac{-3x + 6}{-2} \\ y = \frac{3}{2}x - 3 \end{array}$   
 $m = \frac{3}{2}$   
 $b = -3$

4)  $5y + 3x = 10$   
 $\begin{array}{r} -3x \quad -3x \\ \hline 5y = \frac{-3x + 10}{5} \\ y = \frac{-3}{5}x + 2 \end{array}$   
 $m = \frac{-3}{5}$   
 $b = 2$

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Identify the slope and y-intercept of the line.

5)  $x = -3y + 12$   
 $\begin{array}{r} -12 \quad -12 \\ \hline x - 12 = -3y \\ \frac{x - 12}{-3} = \frac{-3y}{-3} \\ \frac{1}{-3}x + 4 = y \end{array}$   
 $m = \frac{1}{-3} = -\frac{1}{3}$   
 $b = 4$

6)  $7x - 3y = 6$   
 $\begin{array}{r} -7x \quad -7x \\ \hline -3y = \frac{-7x + 6}{-3} \\ y = \frac{7}{3}x - 2 \end{array}$   
 $m = \frac{7}{3}$   
 $b = -2$

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Identify the slope and y-intercept of the line.

7)  $x + y = 6$

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

$$y = -x + 6$$

$$m = -1$$

$$b = 6$$

8)  $2x - 2y = 4$

$$\begin{array}{r} 2x - 2y = 4 \\ -2x \quad -2x \\ \hline -2y = -2x + 4 \\ \hline \end{array}$$

$$y = x - 2$$

$$m = 1$$

$$b = -2$$

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Identify the slope and y-intercept of the line.

9)  $x - 4y = 8$

$$\begin{array}{r} x - 4y = 8 \\ -x \quad -x \\ \hline \end{array}$$

$$\begin{array}{r} -4y = -x + 8 \\ -4 \quad -4 \quad -4 \\ \hline \end{array}$$

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

$$m = \frac{1}{4}$$

$$b = -2$$

10)  $y + 3x = 4$

$$\begin{array}{r} y + 3x = 4 \\ -3x \quad -3x \\ \hline y = -3x + 4 \end{array}$$

$$m = -3$$

$$b = 4$$

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