DO NOW

****Please pick up a ruler & a graphing sheet****

What is the slope of the line that passes through the points (-2,4) and (4,2)?

$x_1\ y_1 \qquad x_2\ y_2$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{2-4}{4-(-2)} = \frac{-2}{6} = \boxed{-\frac{1}{3}}$

Jan 29-7:23 AM

Homework Answers

1) m = -2

2) $m = \frac{-1}{3}$

3) m = 1

4) m = 5

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

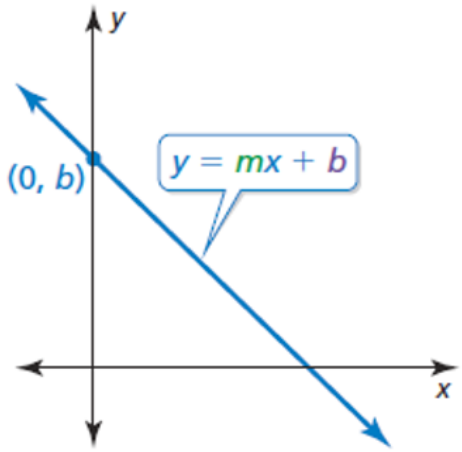
6) $m = \frac{-1}{2}$

Oct 26-6:56 AM

Slope-Intercept Form

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

m is the slope and b is the y-intercept



Jan 29-11:49 AM

Identify the slope and y - intercept for each of the following:

1) $y = -6x + 2$

$m = \frac{-6}{1}$ $b = 2$ $(0, 2)$

2) $y = 7x$

$m = \frac{7}{1}$ $b = 0$

3) $y = -3$

$m = 0$ $b = -3$

4) $y = 2x + 1$

$m = \frac{2}{1}$ $b = 1$

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

$m = \frac{1}{2}$ $b = -3$

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

$m = \frac{-3}{2}$ $b = 4$

Oct 10-11:22 AM

Steps To Graph A Line Using Slope-Intercept

1. Identify the slope (m) & y - intercept (b)
2. Plot the y - intercept
3. Use the slope to help you plot other points (rise over run)
4. Connect, arrows & label your line!

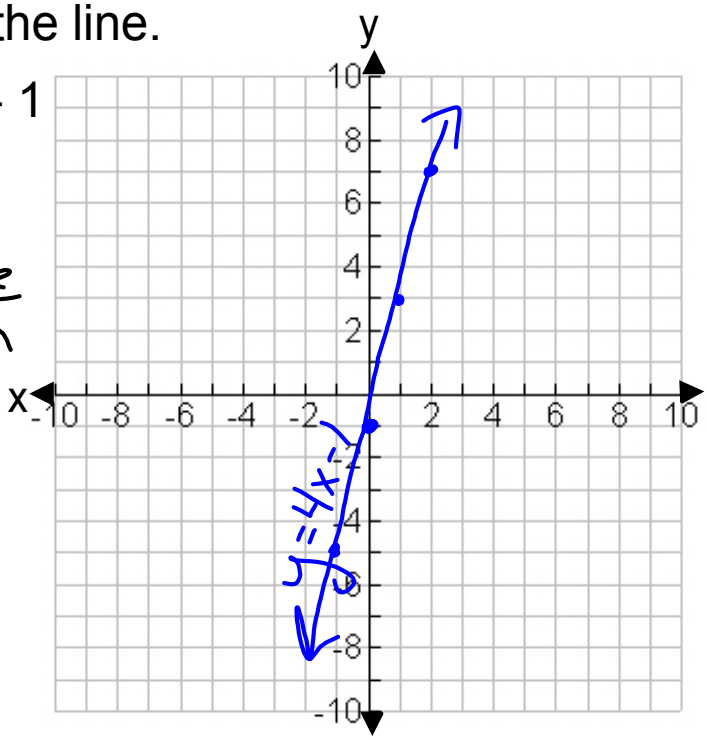
Oct 10-11:23 AM

Identify the slope and y-intercept of the line. Then graph the line.

1) f(x) = 4x - 1

$m = \frac{4}{1}$ $\frac{\text{rise}}{\text{run}}$

$b = -1$



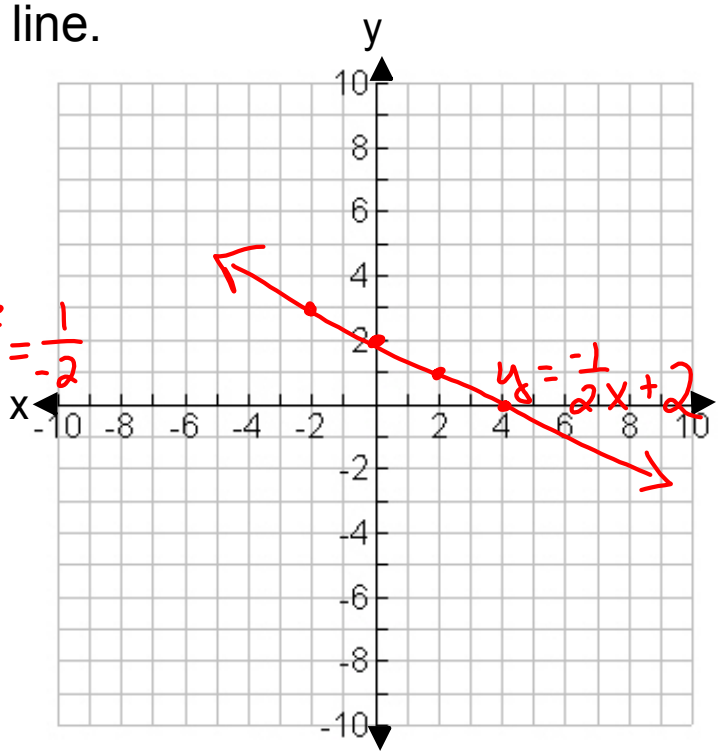
Jan 29-11:52 AM

Identify the slope and y-intercept of the line. Then graph the line.

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

$m = \frac{-1}{2}$ $\frac{\text{rise}}{\text{run}} = \frac{1}{-2}$

$b = 2$



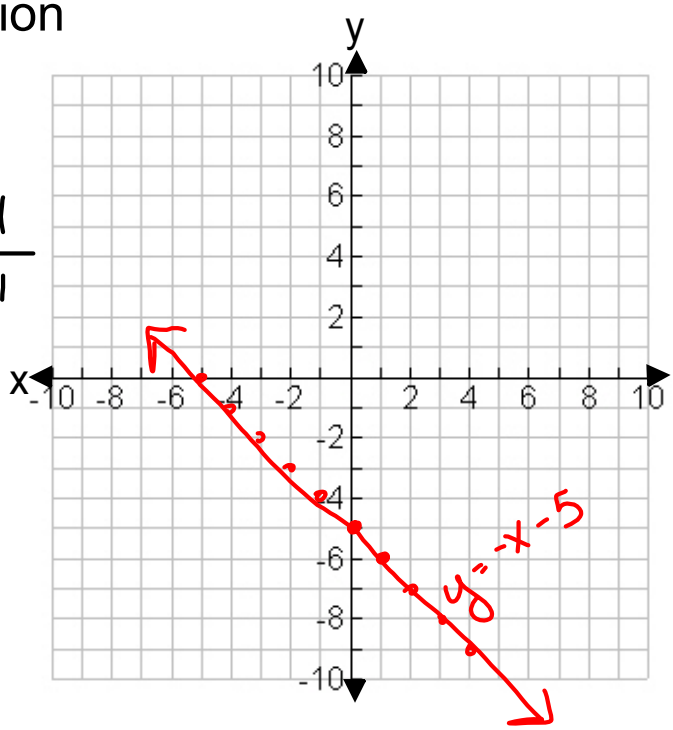
Jan 29-11:52 AM

Graph the equation

3) $y = -x - 5$

$m = \frac{-1}{1}$ $\frac{\text{rise}}{\text{run}}$ $\frac{1}{-1}$

$b = -5$



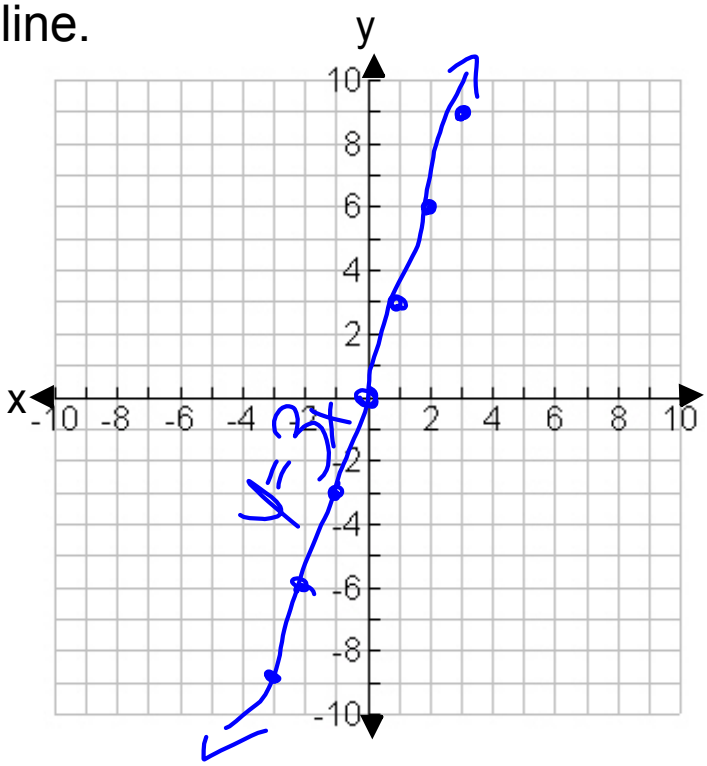
Feb 3-9:56 AM

Identify the slope and y-intercept of the line. Then graph the line.

4) f(x) = 3x

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

$b = 0$



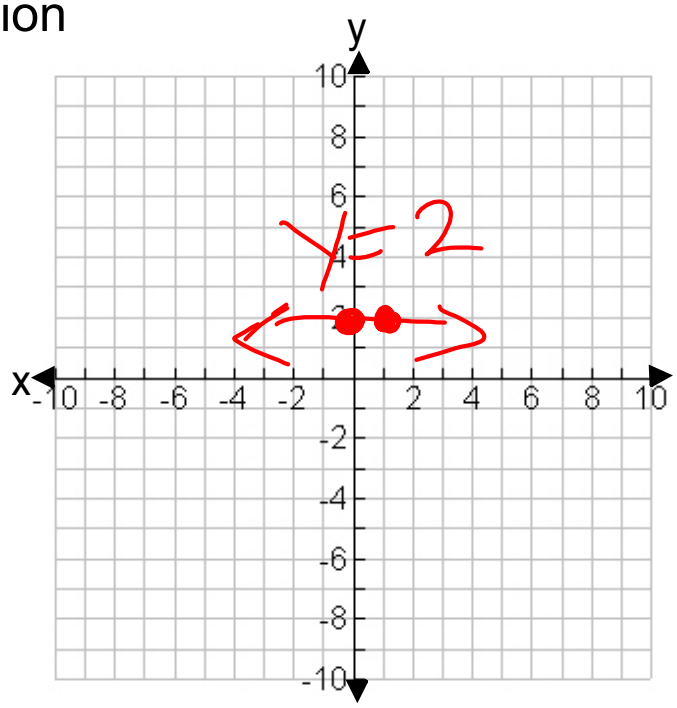
Feb 3-7:07 AM

Graph the equation

5) y = 2

$m = \frac{0}{1}$

$b = 2$



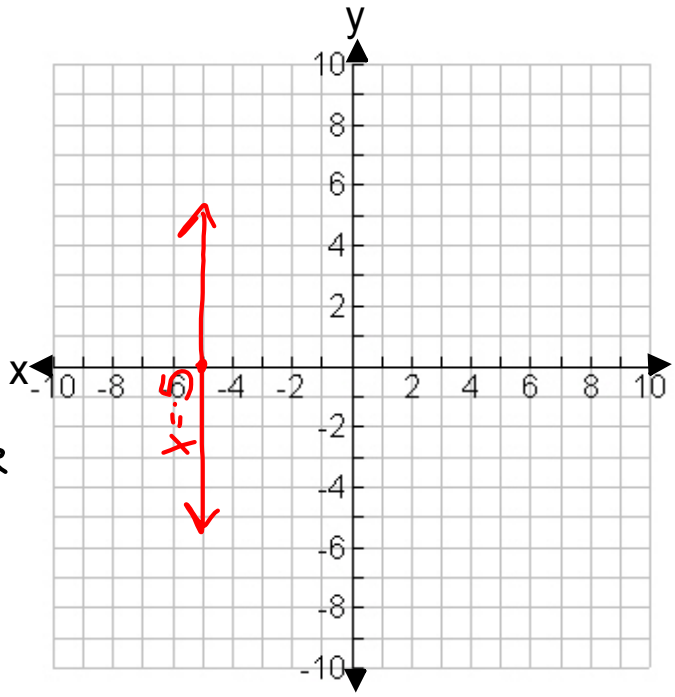
Jan 22-7:38 AM

Graph the equation

6) x = -5

No y-intercept

m = Undefined
or
No Slope



Jan 22-7:45 AM

Nov 1-8:00 AM