

Algebra 1 Bellwork Friday, January 8, 2016

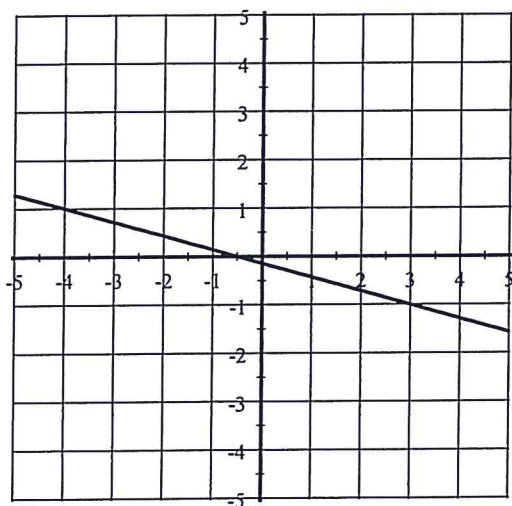
1. Write the equation, in Point-Slope Form, of the line that passes through this pair of points $(-6, 5)$ and $(-2, -9)$

EQ:

2. Write the equation, in Point-Slope Form, of the line that passes through this pair of points $(8, -3)$ and $(5, -3)$

EQ:

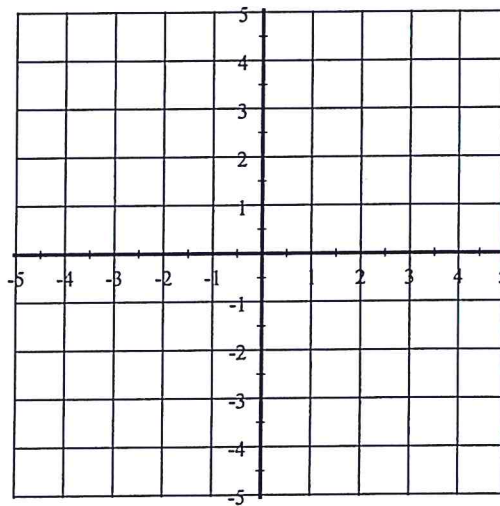
3. Write the equation, in Point-Slope Form, of the line shown in the graph below.



4. Graph this equation using at least 3 points.

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

EQ:



5. Rewrite each equation into Slope-Intercept Form (don't use any rounded decimals)

a) $y - 8 = -\frac{2}{3}(x + 12)$

b) $y + 2 = \frac{1}{6}(x - 5)$

1. Write the equation, in Point-Slope Form, of the line that passes through this pair of points $(-6, 5)$ and $(-2, -9)$

EQ:

$$y - 5 = -\frac{7}{2}(x + 6)$$

$$\text{or}$$

$$y + 9 = -\frac{7}{2}(x + 2)$$

$$m = \frac{5 - (-9)}{-6 - (-2)} = \frac{14}{-4} = -\frac{7}{2}$$

2. Write the equation, in Point-Slope Form, of the line that passes through this pair of points $(8, -3)$ and $(5, -3)$

EQ:

$$y + 3 = 0 \rightarrow y = -3$$

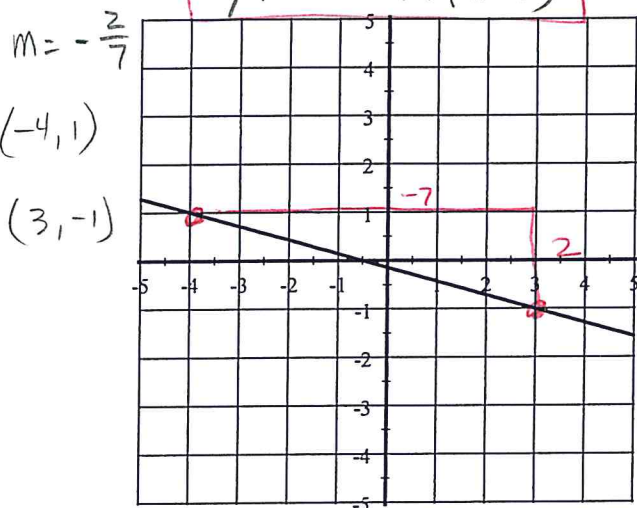
3. Write the equation, in Point-Slope Form, of the line shown in the graph below.

EQ:

$$y - 1 = -\frac{2}{7}(x + 4)$$

$$\text{or}$$

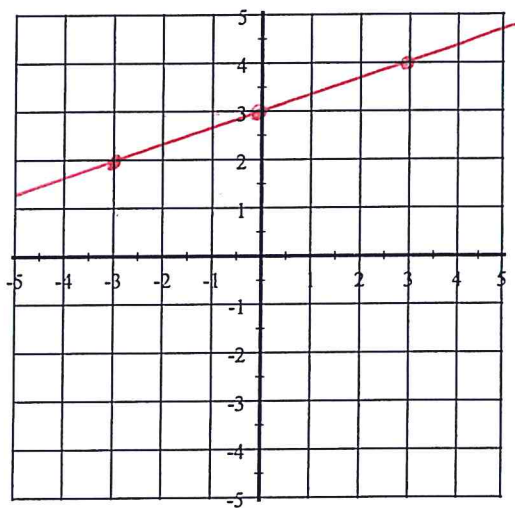
$$y + 1 = -\frac{2}{7}(x - 3)$$



4. Graph this equation using at least 3 points.

$$y - 2 = \frac{1}{3}(x + 3) \quad \text{pt } (-3, 2) \quad m = \frac{1}{3}$$

$$\text{or} \quad y = \frac{1}{3}x + 3$$



5. Rewrite each equation into Slope-Intercept Form (don't use any rounded decimals)

a) $y - 8 = -\frac{2}{3}(x + 12)$

$$y - 8 = -\frac{2}{3}x - 8$$

$$\text{+8} \quad \text{+8}$$

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

b) $y + 2 = \frac{1}{6}(x - 5)$

$$y + 2 = \frac{1}{6}x - \frac{5}{6}$$

$$\text{-2} \quad \text{-2}$$

$$y = \frac{1}{6}x - \frac{5}{6} - 2$$

$$= \frac{1}{6}x - \frac{5}{6} - \frac{12}{6} = \frac{1}{6}x - \frac{17}{6}$$

$$y = \frac{1}{6}x - \frac{17}{6}$$