

Geometry

Unit: Lines and the Coordinate Plane

Section: Graphing the Equation of a Line

Review Worksheet

1) Find the equation of the line through each pair of points in Slope-Intercept Form.

a. (0, 2) and (3, 6)

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

$$b = 2$$

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

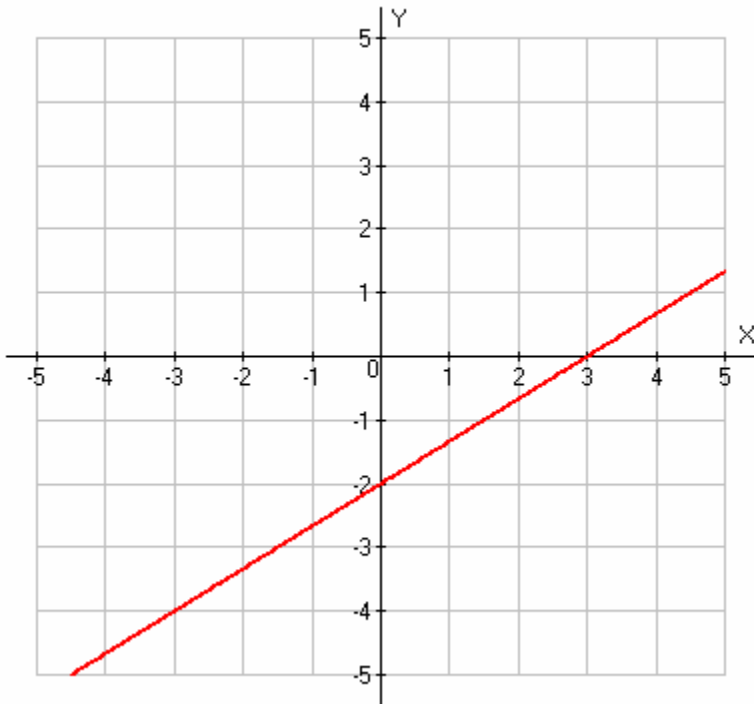
b. (-1, 6) and (3, -7)

$$m = -\frac{13}{4}$$

$$b = \frac{11}{4}$$

$$y = -\frac{13}{4}x + \frac{11}{4}$$

2) Find the equation of the line graphed below:



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

3) What is the equation of the vertical line through the point (3, 2)?

$$x = 3$$

4) What is the equation of the horizontal line through the point (3, 2)?

$$y = 2$$

5) What is the equation of the line that is parallel to $y = \frac{2}{3}x + 5$, through the point (-6, 3).

$$m = \frac{2}{3}$$

$$b = 7$$

$$y = \frac{2}{3}x + 7$$

6) What is the equation of the line that is perpendicular to $y = \frac{2}{3}x + 5$, through the point $(-6, 1)$.

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

$$b = -8$$

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

7) What are the x- and y-intercepts of the line $3x - 5y = 30$? Graph the line.

x-intercept: $x = 10$

y-intercept: $y = -6$

