

Find the slope of the line passing through each pair of points or state that the slope is undefined. Then indicate whether the line through the points rises, falls, is horizontal, or vertical.

1) $(4, 7)$ and $(8, 10)$

2) $(4, -2)$ and $(3, -2)$

3) $(-2, 4)$ and $(-1, -1)$

4) $(5, 3)$ and $(5, -2)$

Use the given conditions to write an equation for each line in point-slope form and slope-intercept form.

5) Slope = 6, passing through $(-2, 5)$

6) Slope = -3 , passing through $(-2, -3)$

7) Slope = $-\frac{2}{3}$, passing through $(6, -2)$

8) Passing through $(1, 2)$ and $(5, 10)$

9) Passing through $(-3, -1)$ and $(2, 4)$

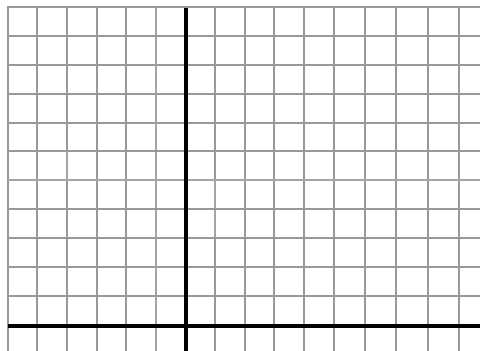
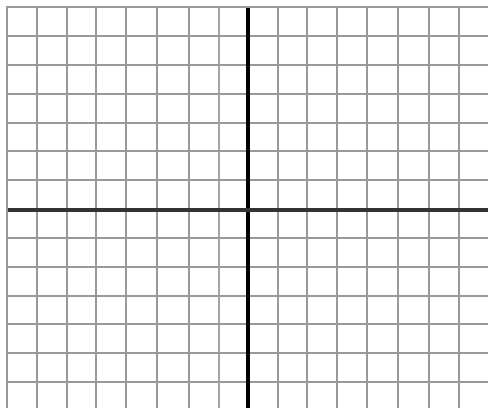
10) Passing through $(-3, -2)$ and $(3, 6)$

11) x -intercept = $-\frac{1}{2}$ and y -intercept = 4

Give the slope and y -intercept of each line whose equation is given. Then graph the linear function.

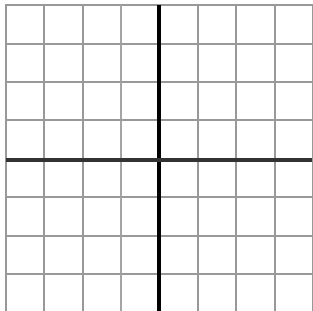
12) $y = \frac{3}{4}x - 2$

13) $y = -\frac{3}{5}x + 7$

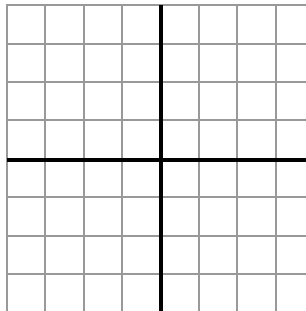


Graph each equation in a rectangular coordinate system

14) $x = -3$

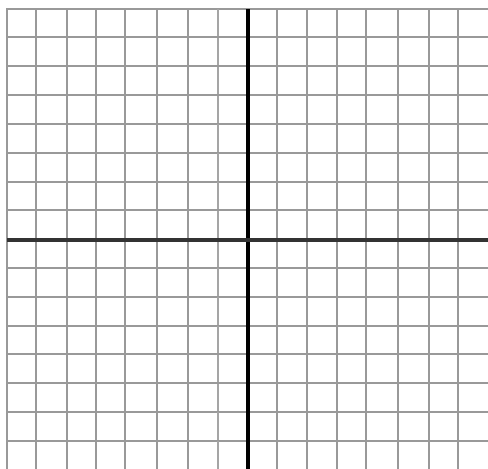


15) $y = 0$

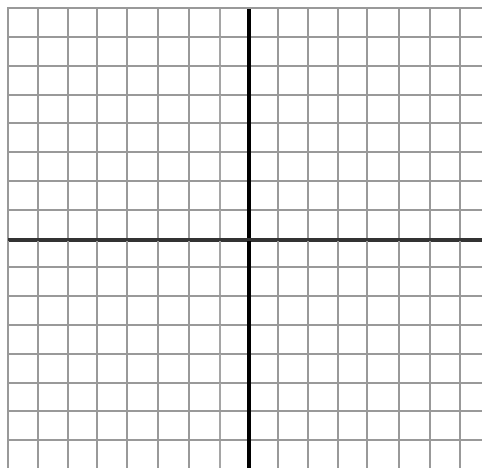


In exercises 16 and 17, a. Rewrite the given equation in slope-intercept form. b. Give the slope and y-intercept. c. Use the slope and y-intercept to graph the linear function.

16) $2x + 3y - 18 = 0$



17) $3y - 9 = 0$



Use intercepts to graph the equation.

18) $6x - 2y - 12 = 0$

