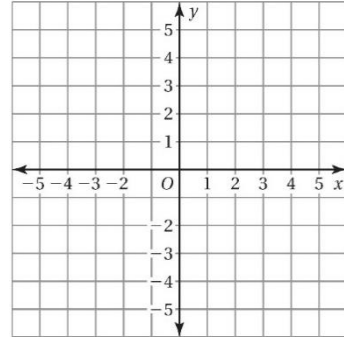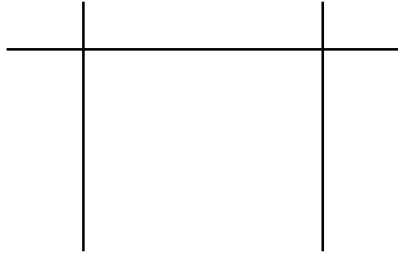Name: _____   Period: _____

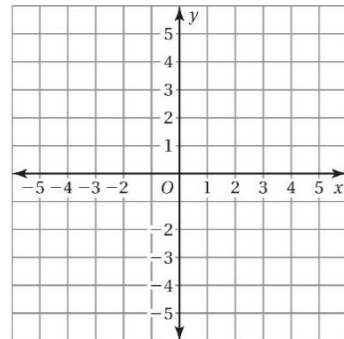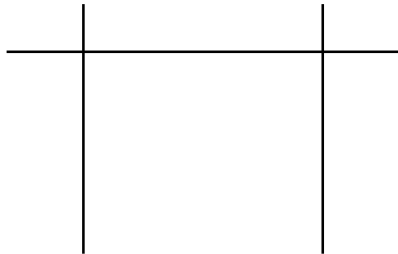# Review – Graphing Linear Equations and Finding Slope

Graph both linear equations on the coordinate plane on the right. Make sure you use an input/output table with at least 3 ordered pairs for each.
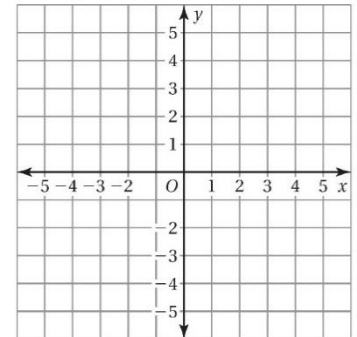
1) $y = -x - 1$

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

Graph both of the equations on the coordinate plane on the right. You may make an input/output table if you wish.

3) $y = -4$

4) $x = \dfrac{1}{2}$

5) **Slope-intercept form** is an equation written in the form $y =$ _____, where m

   represents the lines _____ and b represents the line's _____.

Solve each equation for y. Then determine the slope and y-intercept of the equation.

6) $2y = -4x + 2$

7) $x - 3y = 9$

$m =$ _____ $b =$ _____ $m =$ _____ $b =$ _____

8) $\dfrac{2}{5}y = x$

9) $-3x + \dfrac{1}{2}y = -6$

$m =$ _____ $b =$ _____ $m =$ _____ $b =$ _____

Graph each line using the given information about the slope and y-intercept.

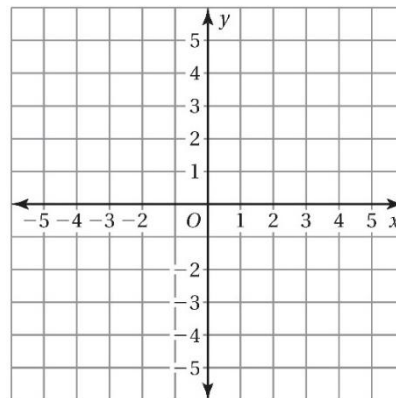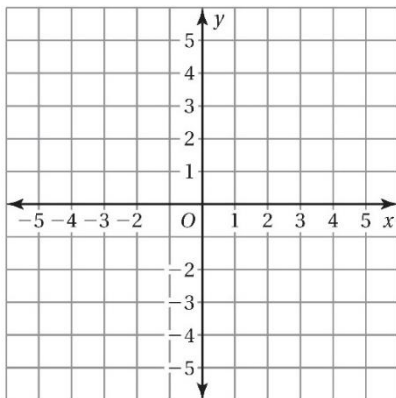10) $m = -2 \text{ and } b = 0$
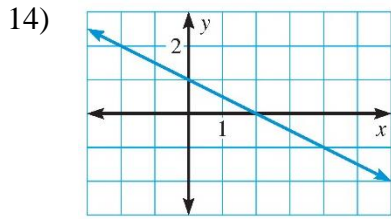
11) $m = \dfrac{1}{3} \text{ and } b = -5$
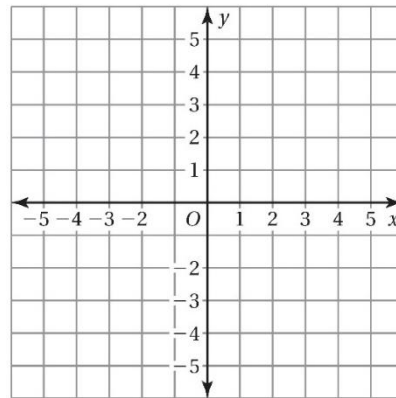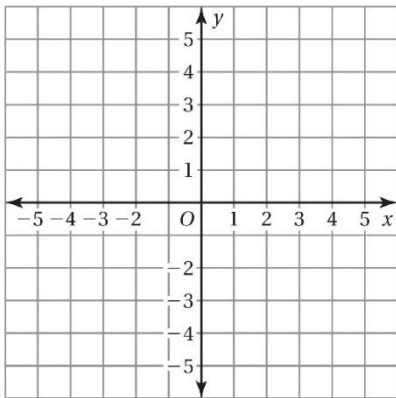
Graph each equation using the slope and the *y*-intercept only.

12) Graph $m = -2 \text{ and } b = 0$

13) Change to slope intercept form and graph
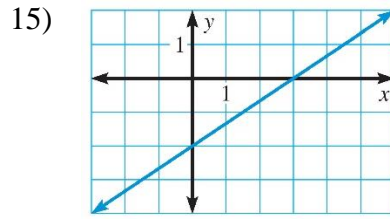$3x - 2y = -2$

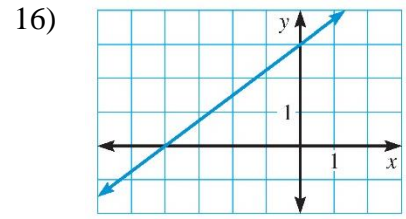Identify the *x*-intercept and the *y*-intercept of the graph.

14)

x-intercept : _____

y-intercept : _____

15)

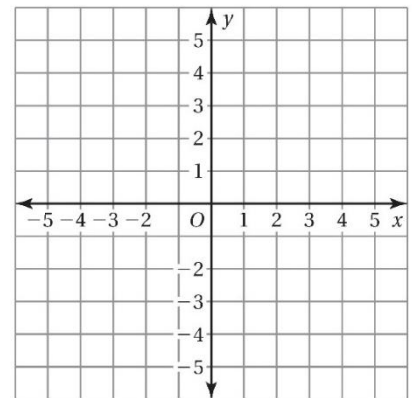x-intercept : _____

y-intercept : _____

16)

x-intercept : _____

y-intercept : _____

Find the *x*-intercept and the *y*-intercept of each equation, and then graph it.
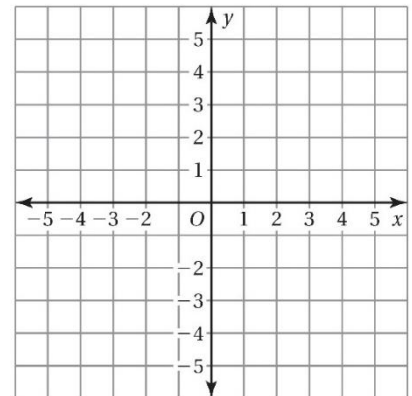
17) $-4x + 3y = -12$

x-intercept : _____   y-intercept : _____

18) $5x - 15y = 30$

x-intercept : _____   y-intercept : _____

Find the slope of a line that passes through the given points.

19) $(-2, -2)$ *and* $(3, -1)$

20) $(-3, 1)$ *and* $(-1, 5)$

21) $(-3, 12)$ *and* $(-3, 0)$

Solve the equation.

22) $\dfrac{3}{4}c + 3 - \dfrac{1}{4}c = 7$

23) $5(2 - y) + y = -6$

24) $6x - 3(x + 8) = 9$

Show whether the given ordered pair is a solution of the equation. *Show your work!*

25) $y = 3x + 4;$ $(-1, 1)$

26) $2x - 3y = 15;$ $(0,5)$

27) $y = 6 - 0.5x;$ $(3, 4.5)$

28) $y = -\dfrac{3}{4}x + 3;$ $(-8, -3)$