

Writing Linear Equations (Different Forms)

Write the equation of each line given the slope and y-intercept. (Use:  $y = mx + b$ )

1) Slope = 1, y-intercept = -3

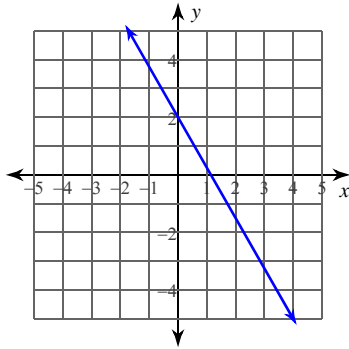
2) Slope =  $-\frac{1}{4}$ , y-intercept = -5

3) Slope =  $-\frac{7}{2}$ , y-intercept = 3

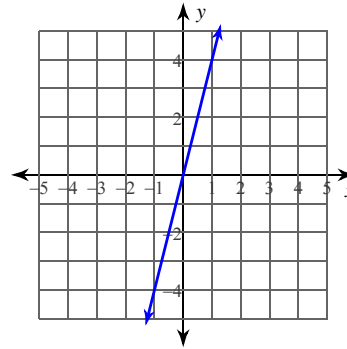
4) Slope =  $-\frac{1}{4}$ , y-intercept = -1

Write the equation of each line by calculating the slope and observing the y-intercept. (Use:  $y = mx + b$ )

5)



6)



Write the equation of the line through the given point with the given slope. (Use:  $y - y_1 = m(x - x_1)$ )

7) through: (1, -5), slope = -9

8) through: (1, -4), slope = -7

9) through: (-1, 4), slope = -4

10) through: (4, -3), slope = 0

11) through: (-3, 4), slope = 6

12) through: (5, -1), slope =  $\frac{1}{5}$

Write the equation of the line through the given points. (Use:  $y - y_1 = m(x - x_1)$ ) (HINT: label your points and calculate the slope first).

13) through: (4, 0) and (0, 0)

14) through: (-3, 2) and (3, -4)

15) through: (-5, 0) and (4, 4)

16) through: (0, 4) and (-4, 3)

17) through: (0, -1) and (-3, 1)

18) through: (0, 3) and (-4, -3)

19) through: (0, -4) and (5, -3)

20) through: (0, 3) and (-3, -4)