

## Section 7.1 Extra Practice

1. What are the slope and  $y$ -intercept of each line?

a)  $y = 5x - 3$       b)  $y = 0.1x - 5.7$

c)  $y = \frac{x}{3} + 4$       d)  $y = -\frac{3}{4}x + \frac{1}{2}$

2. Sketch the graph of each line using the slope and  $y$ -intercept.

a)  $y = 2x + 3$

b)  $y = -2x + 3$

c)  $y = \frac{1}{2}x - 4$

d)  $y = -\frac{1}{2}x - 4$

3. Express each equation in slope-intercept form. Determine the slope and  $y$ -intercept of each line.

a)  $4x + 5y - 20 = 0$

b)  $x - 2y + 8 = 0$

c)  $2x - 3y = 6$

d)  $5x - y = 12$

4. Write the equation of each line in the form  $y = mx + b$ .

a)  $m = 2$ ,  $y$ -intercept:  $(0, -5)$

b)  $m = 0$ ,  $y$ -intercept:  $(0, 6)$

c)  $m = -\frac{1}{3}$ ,  $y$ -intercept:  $(0, 0)$

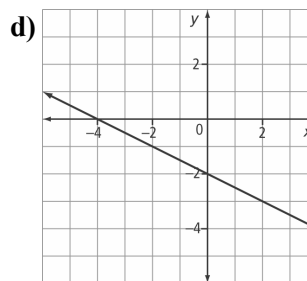
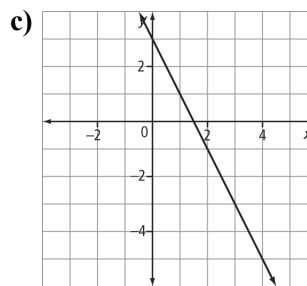
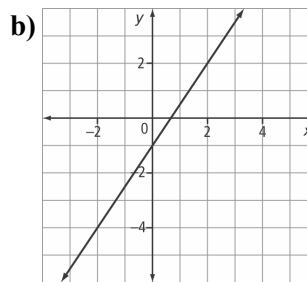
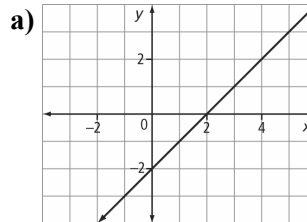
d)  $m = -6$ ,  $y$ -intercept:  $(0, 2)$

5. Write the equation of each line in the form  $y = mx + b$  and in the form  $Ax + By = C$ , where  $A$ ,  $B$ , and  $C$  are integers.

a)  $m = \frac{1}{3}$ ,  $y$ -intercept:  $(0, \frac{1}{2})$

b)  $m = -\frac{2}{5}$ ,  $y$ -intercept:  $(0, \frac{1}{4})$

6. What are the slope and  $y$ -intercept of each line? Write the equation of each line in the slope-intercept form.



7. Write the equation of each line in the form  $y = mx + b$ .

a) The slope is 2. The line passes through the point  $(1, 4)$ .

b) The  $y$ -intercept is  $-3$ . The line passes through the point  $(-2, 6)$ .

c) The line passes through the points  $(0, 4)$  and  $(2, 6)$ .