Name: _____ Date: _____

BLM 7–6

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: $(0, 2)$

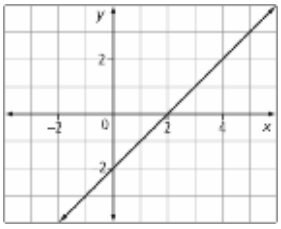
5. Write the equation of each line in the form $y = mx + b$ and in the form $Ax + By = C$, where A, B, and C are integers.

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

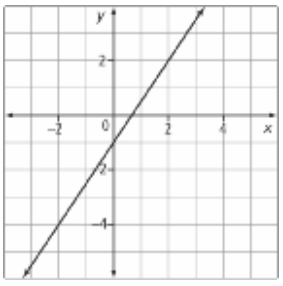
b) $m = -\frac{2}{5}$, y-intercept: $\left(0, \frac{1}{4}\right)$

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

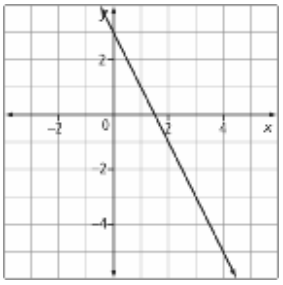
a)



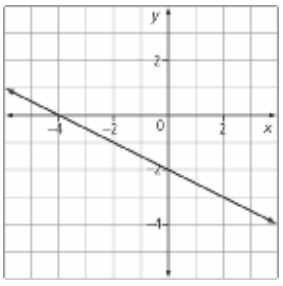
b)



c)



d)



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).