Slope-Intercept Form

Name: _____ Date: _____

Find the slope and y-intercept of the graph of each equation.

1. $y = 6x + 4$

m = _____

b = _____

2. $y = 2x - 3$

m = _____

b = _____

3. $y = \frac{x+2}{4}$

m = _____

b = _____

4. $2y = 6x + 16$

m = _____

b = _____

Write an equation of a line with the given slope (m) and y-intercept (b).

5. m = -1, b = -6

_____

6. m = 1, b = $\frac{3}{2}$

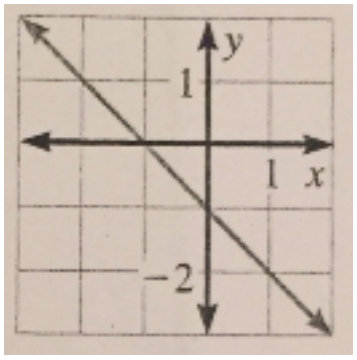
_____

7. m = $\frac{1}{2}$, b = -2

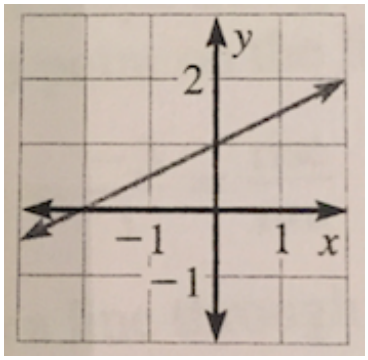
_____

Write an equation in slope-intercept form of the line.

8.



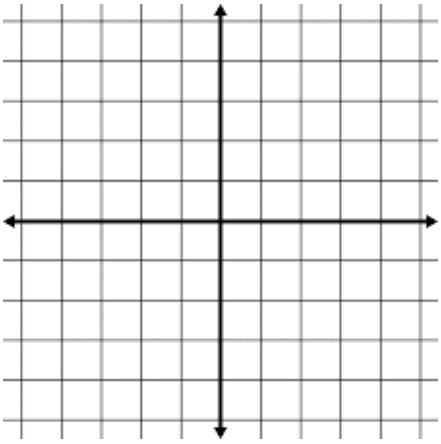
9.



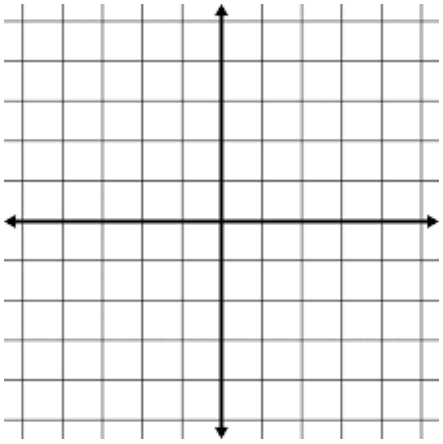
Slope-Intercept Form

Graph the equation. If necessary, write the equation in slope-intercept form first.

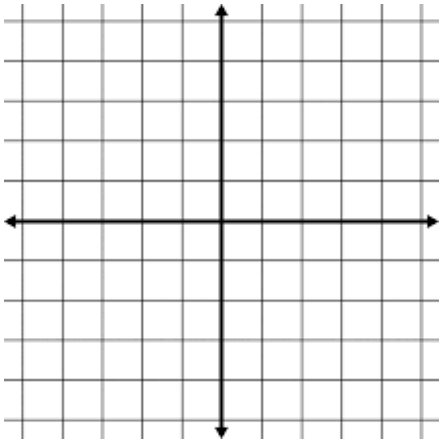
10. $y = \frac{1}{2}x - 3$



11. $4x - y - 3 = 0$



12. $4x + 5y = 15$



Write an equation, in slope-intercept form, of the line that passes through the point and has the given slope.

13. (-2, 6), m = 4

14. (2, 8), m= 0

Slope-Intercept Form

Write an equation in slope-intercept form of the line that passes through the given points.

15. (1, 5), (2, 9)

m = _____
b = _____
equation: _____

16. (4, 1), (2, 7)

m = _____
b = _____
equation: _____

17. (2, 3), (4, 3)

m = _____
b = _____
equation: _____

18. (6, -8), (6, 4)

m = _____
b = _____
equation: _____

Decide whether the graphs of the two equations are parallel lines.

19. $y = -3x + 2 \; and \; y + 3x = -4$

Write an equation of the line that is parallel to the given line and passes through the given point.

20. $y = 5x + 2$, $(3, 2)$