

Lesson 2.4 Worksheet

Name: _____

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

1.) $m = 0, b = 2$

2.) $m = -\frac{5}{4}, b = 7$

3.) $m = 6, b = 0$

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

4.) $(3, -1), m = -3$

5.) $(-4, 3), m = 2$

6.) $(-4, 2), m = \frac{3}{2}$

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

7.) $(-3, -5)$; parallel to $y = -4x + 1$

8.) $(4, 1)$; perpendicular to $y = \frac{1}{3}x + 3$

9.) $(2, 8)$; parallel to $-6x + 2y = -4$

10.) $(3, -1)$; perpendicular to $8x - 2y = -2$

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

11.) $(-1, 3), (2, 9)$

12.) $(-2, -3), (2, -1)$

13.) $(-5, -2), (-3, 8)$

Write an equation in standard form $Ax + By = C$ of the line that satisfies the given conditions. Use integer values for A , B , and C .

14.) $m = -\frac{3}{2}$, passes through $(4, -7)$

15.) passes through $(-1, 3)$ and $(-6, -7)$

Write an equation of the line that passes through the point $(3, 4)$ and satisfies the given condition.

16.) Parallel to $y = -2$

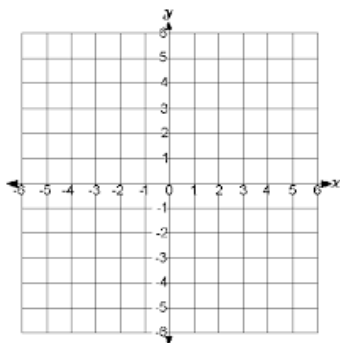
17.) Perpendicular to $y = -2$

18.) Parallel to $x = -2$

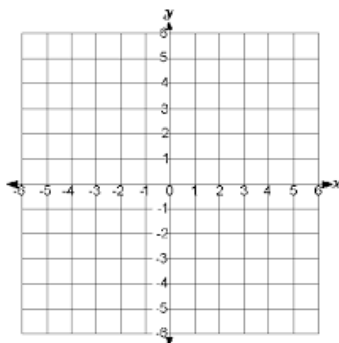
19.) Perpendicular to $x = -2$

Graph the equation using any method (make it clear which method you used to graph).

20.) $3x = -\frac{1}{2}y - 1$



21.) $5x - y = 3$



22.) $y = 2x + 6$

