

Name: _____

Date: _____ Hour: _____

Lesson 7: Perpendicular Lines Worksheet

Explain questions with stars next to question numbers.

Write the slope-intercept form for an equation of the line that passes through the given point and is perpendicular to the graph of each equation.

1) $(4, 2)$, $y = \frac{1}{2}x + 1$

2) $(2, -3)$, $y = -\frac{2}{3}x + 4$

3) $(6, -2)$, $y = -3x - 6$

4) $(-8, -7)$, $y = -x - 8$

5) $(-9, -5)$, $3x + y = -1$

6) $(-1, 3)$, $2x + 4y = 12$

★7) Find an equation that has a y-intercept of 5 that is perpendicular to the graph of the line $4x + 3y = 8$.

8) Find an equation that has a y-intercept of 7 that is perpendicular to the graph of the line $x = 6$.

Write the slope-intercept form for an equation of the line that passes through the given point and is perpendicular to the graph of each equation.

9) $(-2, -2)$, $y = -\frac{1}{3}x + 9$

10) $(-4, -3)$, $4x + y = 7$

11) $(-3, -2)$, $y = x + 2$

12) $(-2, 3)$, $y = \frac{1}{4}x - 4$

13) $(0, 0)$, $y = \frac{1}{2}x - 1$

14) $(2, 4)$, $x - 6y = 2$

★ 15) $(1, 1)$, $3x + 2y = -7$

16) $(-3, 5)$, $5x - 6y = 9$