Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Write Equations of Parallel and Perpendicular Lines

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

1. (4, 7), y = 5x –3 2. (3, –2), y = x + 1 3. (–9, 11), 5x –10y = 3

4. (2, 6), y = $\frac{3}{7}$x + 4 5. (7, 1), y = 2x – 2 6. (-5, -2), 8x + 2y = 16

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

7. (4, 7), y = 5x –3 8. (3, –2), y = x + 1 9. (–9, 11), 5x –10y = 3

10. (2, 6), y = $\frac{3}{7}$x + 4 11. (7, 1), y = 2x – 2 12. (-5, -2), 8x + 2y = 16

**Graph the given lines.**

13. y = $\frac{3}{4}$x + 2 and a perpendicular line passing through the point (4, 7)



14. y = -5x -1 and a parallel line passing through the point (2, 1)



15. 3x + 4y = -9 and a perpendicular line passing through the point (5, 2)

