Algebra 1   Name: _____

Worksheet 3.6

Parallel and Perpendicular Lines   Date: _____Period:_____

1. Write the equation of the line that is parallel to the graph of $y = \dfrac{1}{2}x + 6$, and

    whose y-intercept is -2.

2. Write the equation of the line that is parallel to the graph of $y = -4x - 9$, and
    whose y-intercept is 3.

3. Write the equation of the line that is parallel to the graph of $3x - y = 5$, and
    whose y-intercept is (0, -7).

4. Write the equation of the line that is parallel to the graph of $2x + y = 5$, and
    whose y-intercept is (0, 4).

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

5. (3, 2), y = x + 5   6. (-2, 5), y = -4x + 2

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

9. Write the equation of the line that is perpendicular to the graph of $y = \dfrac{1}{2}x + 6$, and

    whose y-intercept is (0, -2).

10. Write the equation of the line that is perpendicular to the graph of $y = -4x - 9$, and
    whose y-intercept is (0, 3).

11. Write the equation of the line that is perpendicular to the graph of $3x - y = 5$, and
    whose y-intercept is -7.