Writing Equations of Lines   Name _____
Parallel and Perpendicular Lines Practice

1. What is the slope of a line that is perpendicular to the line whose equation is $3x + 5y = 4$?

2. What is the slope of a line perpendicular to the line whose equation is $2y = -6x + 8$?

3. What is the slope of a line that is parallel to the line represented by the equation $x + 2y = 3$?

4. Which equation represents a line parallel to the line whose equation is $2y - 5x = 10$?

     1) $5y - 2x = 25$

     2) $5y + 2x = 10$

     3) $4y - 10x = 12$

     4) $2y + 10x = 8$

5. Which equation represents a line perpendicular to the line whose equation is $2x + 3y = 12$?

     1) $6y = -4x + 12$

     2) $2y = 3x + 6$

     3) $2y = -3x + 6$

     4) $3y = -2x + 12$

6. The lines $3y + 1 = 6x + 4$ and $2y + 1 = x - 9$ are

     1) parallel

     2) perpendicular

     3) the same line

     4) neither parallel nor perpendicular

7. Given two lines whose equations are $3x + y - 8 = 0$ and $-2x + by + 9 = 0$, determine the value of b such that the two lines will be perpendicular.

8. What is an equation of the line that passes through the point (4,-6) and has a slope of -3 in slope-intercept form?

9. What is an equation of the line that passes through the points (1,3) and (8,5) in point-slope form?

10. Write the standard form of the equation for the line that passes through the points (– 2, 3) and (7, 7) .