Name:_____ Period:_____Date:_____

Parallel and Perpendicular Lines

Section I. Determine if the lines are parallel, perpendicular, or neither.

1. $y = x + 2$
   $y = x - 3$

2. $y = -\frac{1}{2}x + 3$
   $2x - y = 4$

3. $y = -2x + 1$
   $x + 2y = 3$

4. $x - 2y = 1$
   $2x = 4y + 3$

5. $2x + 3y = 6$
   $3x - 2y = 4$

6. $y = 3x - 6$
   $x - 3y = 6$

7. Line 1 thru $(5,\ 9)$ *and* $(7,\ 13)$
   Line 2 thru $(0,\ 2)$ *and* $(4,\ 10)$

8. Line 1 thru $(7,\ 3)$ *and* $(8,\ 7)$
   Line 2 thru $(-5, -4)$ *and* $(-1, -5)$

Section II. Write an equation of the line in Slope Intercept Form that passes thru the given point and satisfies the given condition.

9. $(-2, 3)$; $parallel\ to\ y = 4x - 3$

10. $(-1, -4)$; $perpendicular\ to\ y = 2x + 5$

11. $(1, -7)$; $parallel\ to\ 6x - 2y = 9$

12. $(-6,\ 2)$; $perpendicular\ to - 2x + 4y = -12$

13. $(4, 2)$; $parallel\ to\ y = -\frac{3}{4}x - 5$

14. $(-5, -11)$; $perpendicular\ to\ y = 3$

15. $(15, -4)$; $parallel\ to\ x - 5y = -10$

16. $(-5,\ 1)$; $perpendicular\ to\ x - 2y = 14$