Name: _____ Date: _____

Equations of Parallel and Perpendicular Lines Homework

A. Determine whether the lines are parallel, perpendicular, or neither given the equations.

1) $y = -2x + 5$; $y = 2x - 3$

2) $3x - 8y = -16$; $32x + 12y = -18$

B. Determine whether the lines through the pairs of points are parallel, perpendicular, or neither. (Hint—find the slope!)

3) (2, 5) and (-2, 7); (0, 4) and (1, 6)

4) (1, 2) and (5, 4); (0, 3) and (2, 4)

C. Write the equation in slope intercept form of the line parallel and line perpendicular to given line through given point.

	Parallel	**Perpendicular**
5) $y = 4x + 7$ through (-2, -9)	_____	_____
6) $y = \frac{2}{5}x - 2$ through (3, -7)	_____	_____
7) $3x + 4y = 16$ through (12, -5)	_____	_____