Intro to Geometry (G.GPE.B.5)		Name:	
Unit One B – Equations of Parallel and Perpendicular Lines (H	IW25)	Date:	Period:
1. Write the equation of a line if: a. m = $\frac{2}{9}$ and b = 3.	b. it passes throu	ugh (4, 5) and (0, 2).	

2. Write the equation for a line parallel to one with a slope equal to 6 and passing through the point (3, -4).

3. Write an equation for a line perpendicular to one with a slope of 5 and passing through the point (-5, 2).

4. Write an equation of the line perpendicular to y = 2x - 6 that passes through the point (8, 10).

5. Put these equations into slope-intercept form by solving for y. a. y - x = 4

b. 4x - 8y = 16

Are these lines parallel, perpendicular, or neither? (Only decide once they are both in slope-intercept form.)

6. Determine whether the given equations of lines are Parallel (||), Perpendicular (\perp) or Intersecting (×).

a)
$$2x+4=y$$
 b) $y=\frac{5}{4}x$ c) $3x+5y=15$ d) $y=4x-3$
 $y=-2x-3$ $y=-\frac{4}{5}x+4$ $y=-\frac{4}{5}x+4$
|| or \perp or \times || or \perp or \times

a) parallel to y = -3x + 2 and goes through (1, 5) in slope intercept form. b) parallel to $y = \frac{1}{5}x$

b) parallel to $y = \frac{1}{5}x - 4$ and goes through (5, 2) in slope intercept form.

c) perpendicular to y = 5x + 4 through (-5,-3) in slope intercept form.

d) perpendicular to y = -2x - 1 through (-4,2) in the slope intercept form.