Bellwork Monday, March 10, 2014

For 1 to 4, tell ifeach pair of lines parallel, perpendicular, or neither?

neither

1. $y = 4x - 5$

$3x - 12y = 60 - 3x$

$-3x$

$\frac{-12y}{-12} = \frac{60 - 3x}{-12} - 12 - 12$

$y = -5 + \frac{1}{4}x$

2. $y = 2x$ $m=2$

$x = -\frac{1}{2}$ vertical

Neither → m=undef

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

$6x - 3y = 9 - 6x$

$-6x$

$\frac{-3y}{-3} = \frac{9 - 6x}{-3}$

$y = -3 + 2x$ $m=2$

|| (parallel)

4. $y = -3x + 7$

$15x + 5y = 35$

$\frac{5y}{5} = \frac{35 - 15x}{5}$

$y = 7 - 3x$

neither

(same line)

5. Given the line $y = -\frac{7}{4}x + 3$

Write the equation of the line that is parallel to this line and passes through the point (-8, 10)

Write your answer in both Point-Slope and Slope-Intercept Forms:

$y - 10 = -\frac{7}{4}(x + 8)$

$y = -\frac{7}{4}x - 14 = y = -\frac{7}{4}x - 4$

$+10$

6. Given the line: $y = \frac{2}{3}x - 9$

Write the equation of the line that is perpendicular to this line and passes through the point (12, -5)

$y + 5 = -\frac{3}{2}(x - 12)$