

NAME _____ DATE _____ PER. _____

PARALLEL & PERPENDICULAR LINES – Day 1

Tell whether the lines are parallel, perpendicular, or neither.

1. _____	$y = 4x + 5$ and $y = -\frac{1}{4}x + 4$
2. _____	$y = 5x + 3$ and $y = -5x + 8$
3. _____	$y = \frac{x}{3} - 4$ and $y = \frac{1}{3}x + 2$
4. _____	$y = x$ and $y = x + 2$
5. _____	$x = 2$ and $y = 9$

Write the equation, in slope-intercept form, of the line that passes through the given point and is perpendicular to the given line.

6. _____	$(-3, 1); y = \frac{1}{3}x + 2$
7. _____	$(4, -3); y = -\frac{2}{7}x - 2$

Write the equation, in slope-intercept form, of the line that passes through the given point and is parallel to the given line.

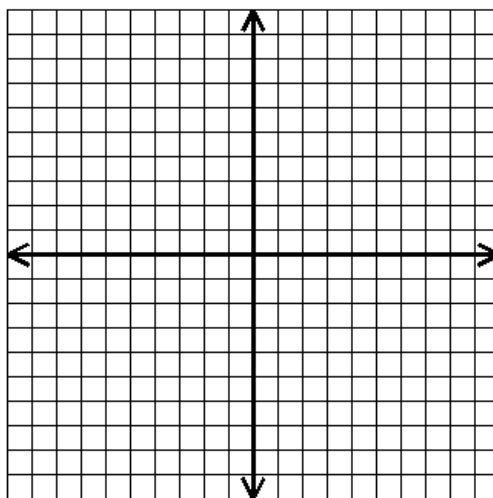
8. _____	$(-6, 4); y = -\frac{3}{2}x + 2$
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9. _____

$$(6, 1); y = \frac{1}{3}x - 4$$

REVIEW PROBLEMS. Show ALL work!

10. Graph: $2x - 3y = 6$



11. Solve $8y - 3(4 - 2y) = 6(y + 1)$

12. Solve $\frac{x - 3}{5} = \frac{x + 6}{2}$

Answers in random order: Neither, Parallel, Parallel, Perpendicular, Perpendicular, $\frac{9}{4}$,

$$y = -\frac{3}{2}x - 5, y = -3x - 8, -12, y = \frac{7}{2}x - 17, y = \frac{1}{3}x - 1, y = \frac{2}{3}x - 2$$