

Practice 3-7

Slopes of Parallel and Perpendicular Lines

Are the lines parallel, perpendicular, or neither? Explain.

1. _____

$$y = 3x - 2$$

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

2. _____

$$y = \frac{1}{2}x + 1$$

$$-4y = 8x + 3$$

3. _____

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

$$y = -\frac{2}{3}x + 8$$

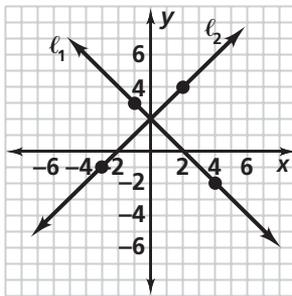
4. _____

$$y = 2$$

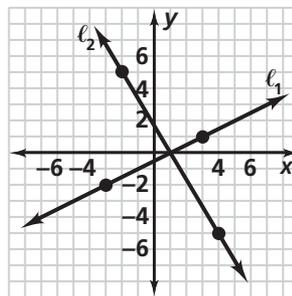
$$x = 0$$

Are lines l_1 and l_2 parallel, perpendicular, or neither? Explain.

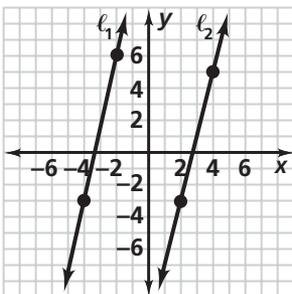
5. _____



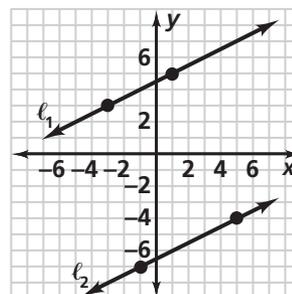
6. _____



7. _____



8. _____



Write an equation for the line perpendicular to \overleftrightarrow{XY} that contains point Z.

9. $\overleftrightarrow{XY}: 3x + 2y = -6, Z(3, 2)$ _____

Write an equation for the line parallel to \overleftrightarrow{XY} that contains point Z.

10. $\overleftrightarrow{XY}: x = \frac{1}{2}y + 1, Z(1, -2)$ _____

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