

Parallel and Perpendicular Lines

1. Fill in the chart with the missing slopes.

Slope of the Given Line	Slope of a Line Parallel to the Given Line	Slope of a Line Perpendicular to the Given Line
$m = 7$		

2. Fill in the chart with the missing slopes.

Slope of the Given Line	Slope of a Line Parallel to the Given Line	Slope of a Line Perpendicular to the Given Line
$m = -2/3$		

3. Fill in the chart with the missing slopes.

Slope of the Given Line	Slope of a Line Parallel to the Given Line	Slope of a Line Perpendicular to the Given Line
$m = 0$		

4. Fill in the chart with the missing slopes.

Slope of the Given Line	Slope of a Line Parallel to the Given Line	Slope of a Line Perpendicular to the Given Line
$m = \text{undefined}$		

5. Determine if the lines are parallel, perpendicular, or neither

$$L_1 : y = 7x - 2$$

$$L_2 : y = -7x + 5$$

6. Determine if the lines are parallel, perpendicular, or neither

$$L_1 : y = 0.2x - 5$$

$$L_2 : y = \frac{1}{5}x - 2$$

7. Determine if the lines are parallel, perpendicular, or neither

$$L_1 : 3x - 2y - 2 = 0$$

$$L_2 : 2x + 3y - 15 = 0$$

8. Find the equation of the line that contains the given point and is parallel to the given line. Write the equation in slope-intercept form, if possible

$$(2, -4); y = 5x - 1$$

9. Find the equation of the line that contains the given point and is parallel to the given line. Write the equation in slope-intercept form, if possible

$$(-1, -2); 2x - 7y = 21$$

10. Find the equation of the line that contains the given point and is perpendicular to the given line. Write the equation in slope-intercept form, if possible

$$(3, 5); y = \frac{1}{5}x - 1$$

11. Find the equation of the line that contains the given point and is perpendicular to the given line. Write the equation in slope-intercept form, if possible

$$(0, 0); 8x - 12y = 5$$

12. Find the equation of the line that contains the given point and is perpendicular to the given line. Write the equation in slope-intercept form, if possible

$$(-4,2); 5x - 2y = 3$$