

## Linear Equations 3.2

### Geometry

In problems 1-2, perform the following with each equation.

A. Use a t-table to find three solutions. Find and label the x and y-intercepts. Find the slope of the graph.

B. Graph the equation.

1)  $6x + 2y = 12$

2)  $x - 3y = 3$

Put the following equations in slope-intercept form. Graph them with their x and y-intercepts. State the slope of each graph.

3)  $-2x + 4y = 8$

4)  $2x - y = 4$

5)  $-3x - 2y = 6$

6)  $4x + 5y = -10$

Given the following pairs of equations in 7 - 12, find the slope of the graph of each equation, and state whether the lines are parallel, perpendicular, or neither.

7)  $y = 2x + 5$   
 $y = 5x + 2$

10)  $3x + 4y = 12$   
 $4x = 3y + 9$

8)  $y = \frac{3}{2}x + 7$   
 $y = \frac{3}{2}x - 1$

11)  $x = 3$   
 $y = -2$

9)  $y = \frac{1}{5}x - 3$   
 $y = -5x + 4$

12)  $-2y = -4x + 10$   
 $5x + 10y = 5$

