

Name: \_\_\_\_\_

### Parallel and Perpendicular Lines

Find the slope, parallel slope, and perpendicular slope of the given equations.

1)  $2y = -4x + 5$

2)  $x - 3y = -9$

3)  $5x + 4y = 16$

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

Write the slope- intercept form of an equation that passes through the given point and is parallel to the graph of the given equation.

4)  $(-1, 7)$  ;  $y = -2x - 5$

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

6)  $(2, 9)$ ;  $3x - y = -3$

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

Write the slope- intercept form of an equation that passes through the given point and is perpendicular to the graph of the given equation.

7)  $(-12, 5)$ ;  $y = 3x + 6$

8)  $(-2, 4)$ ;  $x + 3y = -2$

9)  $(-5, 1)$ ;  $3y = -12x + 18$

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$m =$  \_\_\_\_\_  
 $\parallel m =$  \_\_\_\_\_  
 $\perp m =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

$y =$  \_\_\_\_\_

$y =$  \_\_\_\_\_