## Practice Worksheet

### Parallel and Perpendicular Lines

Write an equation of the line that is parallel to the graph of each equation and passes through the given point. Use slopeintercept form.

1. 
$$2x + y = 5$$
; (3, 1)

**2.** 
$$3x - y = 5$$
;  $(-1, -2)$ 

3. 
$$5x - 4y = 1$$
;  $(-8, 2)$ 

4. 
$$9x + 3y = 8$$
;  $(-1, -4)$ 

5. 
$$y = \frac{4}{3}x + 5$$
; (12, 3)

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

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

7. 
$$x - 6y = 2$$
; (2, 4)

8. 
$$3x + 2y = -7$$
; (1, 1)

9. 
$$5x + 4y = 8$$
; (10, 5)

10. 
$$4x + 3y = -6$$
; (2, 1)

11. 
$$y = \frac{1}{4}x - 4$$
;  $(-2, 3)$ 

12. 
$$2x + 10y = 3$$
; (2, 3)

13. 
$$x = 2y - 1$$
; (0, 0)

14. 
$$4x + 7y = 6$$
;  $(-4, 1)$ 

# 10-6 Practice Worksheet

## Parallel and Perpendicular Lines

Write an equation of the line that is parallel to the graph of each equation and passes through the given point. Use slopeintercept form.

1. 
$$2x + y = 5$$
; (3, 1)

**2.** 
$$3x - y = 5$$
;  $(-1, -2)$ 

$$3. 5x - 4y = 1; (-8, 2)$$

$$4. 9x + 3y = 8; (-1, -4)$$

5. 
$$y = \frac{4}{3}x + 5$$
; (12, 3)

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

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

7. 
$$x - 6y = 2$$
; (2, 4)

8. 
$$3x + 2y = -7$$
; (1, 1)

9. 
$$5x + 4y = 8$$
; (10, 5)

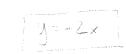
10. 
$$4x + 3y = -6$$
; (2, 1)

11. 
$$y = \frac{1}{4}x - 4$$
;  $(-2, 3)$ 

$$12. \ 2x + 10y = 3; (2, 3)$$



$$13. x = 2y - 1; (0, 0)$$



14. 
$$4x + 7y = 6$$
;  $(-4, 1)$