

## Day 2 Practice - Parallel and Perpendicular Lines

Date \_\_\_\_\_

**Find the slope of a line parallel to each given line.**

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

2)  $0 = x + 4y - 4$

3)  $-x - 1 = 0$

4)  $-2y = -x$

5)  $-x - y + 3 = 0$

6)  $y = 5$

**Write the slope-intercept form of the equation of the line described.**

7) through:  $(3, -3)$ , parallel to  $y = -x - 3$

8) through:  $(1, 0)$ , parallel to  $y = -4x$

9) through:  $(3, -5)$ , parallel to  $y = -2x + 5$

10) through:  $(2, 0)$ , parallel to  $y = -3$

**Find the slope of a line perpendicular to each given line.**

11)  $-2y - 3x - 2 = 0$

12)  $-4x + 2 - y = 0$

13)  $-3y + 3 = -x$

14)  $0 = y - 4$

15)  $0 = 4y - 3x + 4$

16)  $-x = 4$

**Write the slope-intercept form of the equation of the line described.**

17) through:  $(-1, 0)$ , perp. to  $y = -x + 5$

18) through:  $(-5, 0)$ , perp. to  $y = \frac{5}{2}x + 2$

19) through:  $(-3, 5)$ , perp. to  $x = 0$

20) through:  $(4, -3)$ , perp. to  $y = 2x - 2$

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

21) through:  $(-2, -2)$ , slope =  $-\frac{3}{2}$

22) through:  $(4, 2)$ , slope = 1

**Write the slope-intercept form of the equation of the line through the given points.**

23) through:  $(-1, -4)$  and  $(0, -2)$

24) through:  $(4, -2)$  and  $(0, 5)$

25) through:  $(0, 2)$  and  $(-1, -4)$

26) through:  $(3, 2)$  and  $(2, 5)$

## Day 2 Practice - Parallel and Perpendicular Lines

Date \_\_\_\_\_

**Find the slope of a line parallel to each given line.**

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

2

2)  $0 = x + 4y - 4$

 $-\frac{1}{4}$ 

3)  $-x - 1 = 0$

Undefined

4)  $-2y = -x$

 $\frac{1}{2}$ 

5)  $-x - y + 3 = 0$

-1

6)  $y = 5$

0

**Write the slope-intercept form of the equation of the line described.**

7) through:  $(3, -3)$ , parallel to  $y = -x - 3$

$y = -x$

8) through:  $(1, 0)$ , parallel to  $y = -4x$

$y = -4x + 4$

9) through:  $(3, -5)$ , parallel to  $y = -2x + 5$

$y = -2x + 1$

10) through:  $(2, 0)$ , parallel to  $y = -3$

$y = 0$

**Find the slope of a line perpendicular to each given line.**

11)  $-2y - 3x - 2 = 0$

 $\frac{2}{3}$ 

12)  $-4x + 2 - y = 0$

 $\frac{1}{4}$

13)  $-3y + 3 = -x$

$-3$

14)  $0 = y - 4$

Undefined

15)  $0 = 4y - 3x + 4$

$-\frac{4}{3}$

16)  $-x = 4$

0

**Write the slope-intercept form of the equation of the line described.**

17) through:  $(-1, 0)$ , perp. to  $y = -x + 5$

$y = x + 1$

18) through:  $(-5, 0)$ , perp. to  $y = \frac{5}{2}x + 2$

$y = -\frac{2}{5}x - 2$

19) through:  $(-3, 5)$ , perp. to  $x = 0$

$y = 5$

20) through:  $(4, -3)$ , perp. to  $y = 2x - 2$

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

**Write the slope-intercept form of the equation of the line through the given point with the given slope.**

21) through:  $(-2, -2)$ , slope =  $-\frac{3}{2}$

$y = -\frac{3}{2}x - 5$

22) through:  $(4, 2)$ , slope = 1

$y = x - 2$

**Write the slope-intercept form of the equation of the line through the given points.**

23) through:  $(-1, -4)$  and  $(0, -2)$

$y = 2x - 2$

24) through:  $(4, -2)$  and  $(0, 5)$

$y = -\frac{7}{4}x + 5$

25) through:  $(0, 2)$  and  $(-1, -4)$

$y = 6x + 2$

26) through:  $(3, 2)$  and  $(2, 5)$

$y = -3x + 11$