

## WS 3-4

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

1)  $y = 3x + 5$

2)  $y = 7x - 4$

3)  $y = x + 2$

4)  $y = -2x$

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

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

6)  $y = -3x + 5$

7)  $y = 4x - 1$

8)  $y = -\frac{3}{4}x - 3$

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

9) through:  $(-2, 1)$ , parallel to  $y = -x - 4$

10) through:  $(3, -5)$ , parallel to  $y = -2x - 1$

11) through:  $(1, -5)$ , parallel to  $y = -8x - 3$

12) through:  $(4, -1)$ , parallel to  $y = -2x - 4$

13) through:  $(1, 4)$ , perp. to  $y = -\frac{1}{7}x - 1$

14) through:  $(-2, 3)$ , perp. to  $x = 0$

15) through:  $(-2, 3)$ , perp. to  $y = \frac{1}{3}x - 3$

16) through:  $(-3, 3)$ , perp. to  $y = 3x + 3$

**Are the line parallel, perpendicular, or neither?**

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

18)  $y = \frac{1}{2}x + 1$   
 $-4y = 8x + 3$

19)  $\frac{2}{3}x + y = 4$   
 $y = -\frac{2}{3}x + 8$

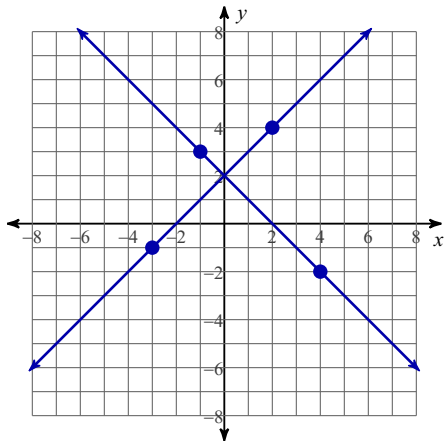
20)  $-x - y = -1$   
 $y + x = 7$

21)  $y = 2$   
 $x = 0$

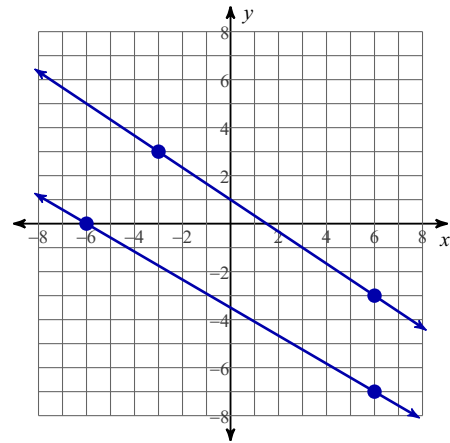
22)  $3x + 6y = 30$   
 $4y + 2x = 0$

**Are the lines shown parallel, perpendicular, or neither?**

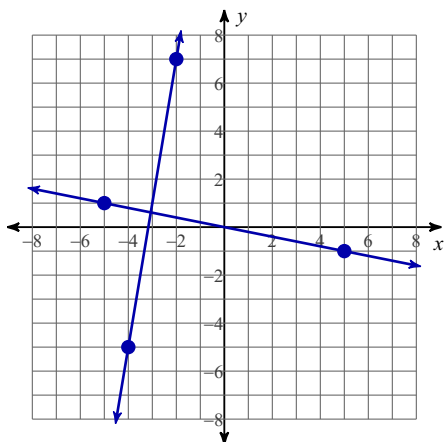
23)



24)



25)



26)

