

## Review of 4.1 - 4.3

Date \_\_\_\_\_ Period \_\_\_\_\_

Find the slope of each line.

1)  $y = -2x + 5$

2)  $y = -6x - 2$

3)  $y = -5x - 4$

4)  $y = -2$

Find the slope of the line through each pair of points.

5)  $(19, 3), (17, -14)$

6)  $(-7, -16), (18, 12)$

7)  $(-6, -3), (-17, -4)$

8)  $(-3, -17), (-4, -13)$

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

9)  $y = -2x + 3$

10)  $y = \frac{4}{3}x - 1$

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

11)  $y = x + 3$

12)  $y = 2x - 4$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

13) Slope =  $\frac{9}{4}$ , y-intercept = 4

14) Slope =  $\frac{6}{5}$ , y-intercept = 5

15) Slope =  $\frac{1}{3}$ , y-intercept = -3

16) Slope =  $-\frac{9}{4}$ , y-intercept = 5

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

17) through:  $(4, -4)$ , slope =  $-\frac{3}{4}$

18) through:  $(-3, 4)$ , slope =  $-\frac{7}{3}$

19) through:  $(0, -5)$ , slope = -1

20) through:  $(-4, -3)$ , slope =  $-\frac{1}{4}$

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

21) through:  $(-1, 1)$  and  $(4, 2)$

22) through:  $(3, 0)$  and  $(0, -3)$

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

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

Write the slope-intercept form of the equation of each line.

25)  $y - 5 = 3(x - 1)$

26)  $y - 2 = \frac{7}{4}(x - 4)$

27)  $y - 4 = -\frac{3}{5}(x + 3)$

28)  $y - 2 = -\frac{4}{3}(x + 3)$

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

29) through:  $(-1, -4)$  and  $(-2, -1)$

30) through:  $(0, 3)$  and  $(-4, -4)$

31) through:  $(2, 0)$  and  $(2, -1)$

32) through:  $(0, 4)$  and  $(0, 5)$

Write the point-slope form of the equation of the line described.

33) through:  $(-2, 4)$ , parallel to  $y = -\frac{1}{2}x + 4$

34) through:  $(-5, -3)$ , parallel to  $y = \frac{7}{5}x - 1$

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

35) through:  $(-2, 4)$ , parallel to  $y = -x - 3$

36) through:  $(4, -3)$ , parallel to  $y = -\frac{1}{4}x - 3$

Write the point-slope form of the equation of the line described.

37) through:  $(1, -1)$ , perp. to  $y = \frac{1}{4}x - 2$

38) through:  $(-1, 3)$ , perp. to  $y = \frac{1}{7}x - 4$

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

39) through:  $(-3, -3)$ , perp. to  $y = \frac{2}{5}x + 1$

40) through:  $(-1, -3)$ , perp. to  $y = x - 1$