

## Unit 2B Review

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

1)  $(-14, 5), (12, -20)$   $\frac{-25}{26}$

2)  $(-14, -9), (-12, 12)$   $\frac{21}{2}$

3)  $(-6, 1), (12, 8)$   $\frac{7}{18}$

4)  $(16, -3), (-11, -19)$   $\frac{-16}{-27} = \frac{16}{27}$

5)  $(-12, -4), (-6, -17)$   $\frac{21}{18} = -\frac{7}{6}$

6)  $(-16, 8), (-15, 7)$   $-\frac{1}{1} = -1$

Write the equation of each line. Choose slope intercept or point slope form based on the given information.

7) Slope =  $\frac{10}{3}$ , y-intercept = 5

$$y = \frac{10}{3}x + 5$$

9) Slope = 4, y-intercept = -4

$$y = 4x - 4$$

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

$$y = -4 - \frac{3}{7}(x-4)$$

13) through:  $(0, -1)$ , slope = -1

$$y = -1 - 1x$$

15) through:  $(0, 2)$  and  $(1, 2)$

$$y = 2$$

$$m = \frac{0}{1} = 0$$

$$y = 2 + 0(x-1)$$

17) through:  $(-2, 0)$  and  $(2, 2)$

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

$$m = \frac{2}{4} = \frac{1}{2}$$

8) Slope = 2, y-intercept = -2

$$y = 2x - 2$$

10) Slope = 6, y-intercept = 3

$$y = 6x + 3$$

12) through:  $(-1, -1)$ , slope = 5

$$y = -1 + 5(x+1)$$

14) through:  $(-1, 2)$ , slope =  $\frac{4}{3}$

$$y = 2 + \frac{4}{3}(x+1)$$

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

$$y = 5 + \frac{9}{4}(x-4)$$

$$m = \frac{9}{4}$$

18) through:  $(0, -4)$  and  $(1, -5)$

$$y = -5 - 1(x+1)$$

$$m = \frac{-1}{1} = -1$$

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

19)  $8x - 7y = -41$   $y = \frac{8}{7}x + \frac{41}{7}$

20)  $x + 2y = -10$   $y = -\frac{1}{2}x - 5$

21)  $4x + 7y = -4$   $y = -\frac{4}{7}x - 1$

22)  $2x + y = -2$   $y = -2x - 2$

23)  $y - 3 = -\frac{1}{2}(x + 4)$   $y = -\frac{1}{2}x + 1$

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

25)  $y - 4 = -(x + 3)$   $y = -x + 1$

26)  $y + 3 = -\frac{6}{5}(x - 5)$   $y = -\frac{6}{5}x - 9$