

Review of 4.1 - 4.3

Date _____ Period _____

Find the slope of each line.

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

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

3) $y = x + 2$

4) $y = 4$

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

5) $(-16, -1), (10, 4)$

6) $(-3, -12), (9, -12)$

7) $(15, 15), (-20, 0)$

8) $(-3, 4), (-7, -17)$

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

9) $y = 1$

10) $y = -6x + 5$

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

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

12) $y = \frac{1}{4}x + 5$

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

13) Slope = $-\frac{5}{2}$, y-intercept = 4

14) Slope = 1, y-intercept = 2

15) Slope = 3, y-intercept = -5

16) Slope = $-\frac{4}{3}$, y-intercept = -1

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

17) through: $(1, 2)$, slope = -1

18) through: $(-5, 2)$, slope = $-\frac{2}{5}$

19) through: $(-2, 4)$, slope = $-\frac{9}{2}$

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

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

21) through: $(0, 3)$ and $(5, -2)$

22) through: $(-1, -4)$ and $(1, -3)$

23) through: $(-1, -5)$ and $(5, -4)$

24) through: $(-4, 5)$ and $(-1, 2)$

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

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

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

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

28) $y - 2 = 5(x - 1)$

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

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

30) through: $(-1, 1)$ and $(0, 3)$

31) through: $(4, 4)$ and $(4, 1)$

32) through: $(2, 4)$ and $(0, 4)$

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

33) through: $(-4, -5)$, parallel to $y = x + 3$

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

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

35) through: $(-3, 0)$, parallel to $y = \frac{4}{3}x + 1$

36) through: $(-5, -2)$, parallel to $y = \frac{7}{6}x - 4$

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

37) through: $(0, 2)$, perp. to $y = -\frac{1}{5}x + 1$

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

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

39) through: $(-4, 4)$, perp. to $y = \frac{5}{7}x + 1$

40) through: $(-4, -4)$, perp. to $y = -\frac{7}{5}x - 5$