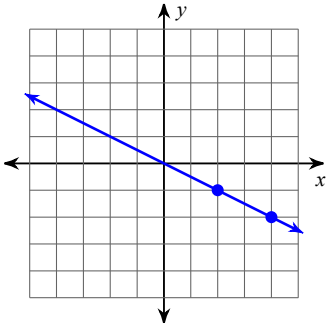


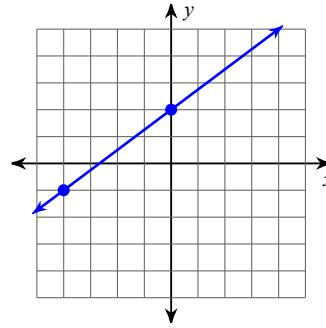
HW125 - Equations of Lines

Find the slope of each line.

1)



2)



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

3) $(-9, 12), (8, 17)$

4) $(11, -11), (-9, -17)$

Find the slope of each line.

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

6) $y = x + 5$

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

7) $y = -2x + 1$

8) $y = -\frac{8}{3}x + 5$

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

10) $y = -10x - 5$

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

11) $y = 2x - 2$

12) $x = 1$

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

13) Slope = 2, y-intercept = 4

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

15) Slope = $\frac{5}{2}$, y-intercept = 0

16) Slope = 1, y-intercept = 3

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

17) $11x + 5y = 40$

18) $y = 1$

19) $y - 2 = \frac{3}{5}(x + 5)$

20) $y + 3 = -(x - 2)$

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

21) through: $(5, -5)$, slope = 0

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

23) through: $(-3, 0)$, slope = $\frac{2}{3}$

24) through: $(-4, -1)$, slope = $\frac{2}{5}$

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

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

26) through: $(0, -5)$ and $(0, 2)$

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

27) through: $(4, -5)$, parallel to $x = 0$

28) through: $(4, 1)$, parallel to $y = x$

29) through: $(5, 4)$, parallel to $y = \frac{1}{3}x - 1$

30) through: $(-4, 2)$, parallel to $y = -\frac{3}{4}x$

31) through: $(4, 2)$, perp. to $y = -\frac{1}{5}x + 1$

32) through: $(0, 3)$, perp. to $y = \frac{5}{6}x$

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

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

34) through: $(4, 5)$, parallel to $y = 9x + 5$

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

36) through: $(-5, -5)$, perp. to $y = -\frac{8}{9}x - 5$