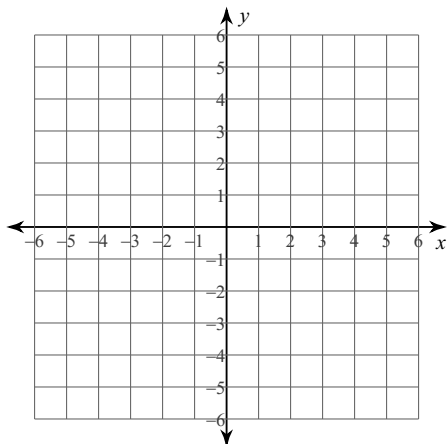


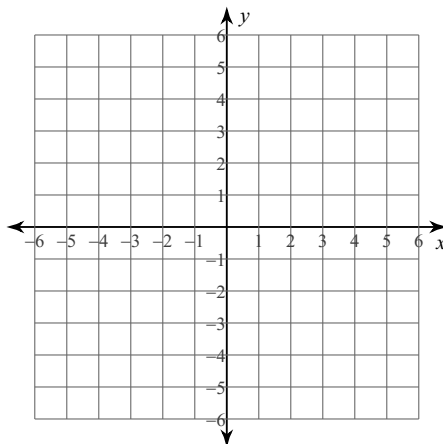
Chapter 13 - Graphing & Writing Linear Equations Review

Sketch the graph of each line.

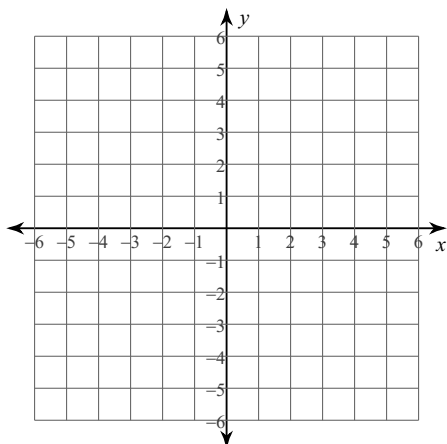
1) $4x + y = -3$



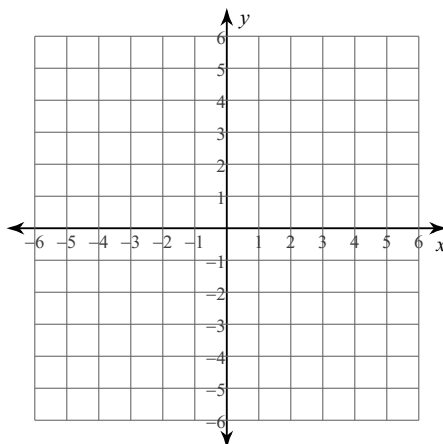
2) $2x - y = -5$



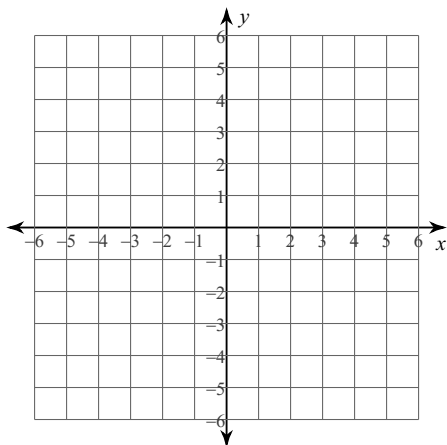
3) $2x - y = 4$



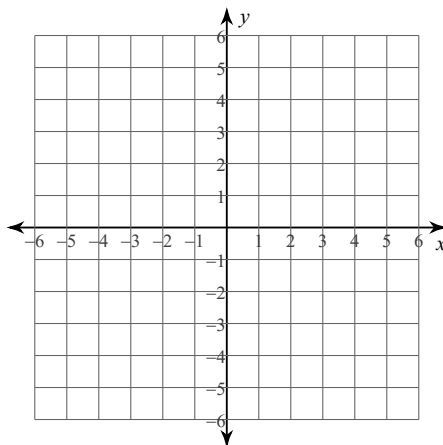
4) $3x + 5y = 25$



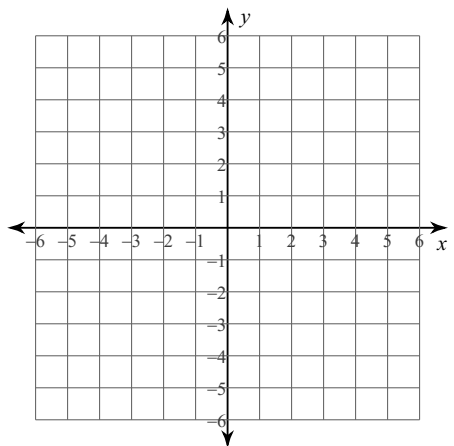
5) $y = -6x - 1$



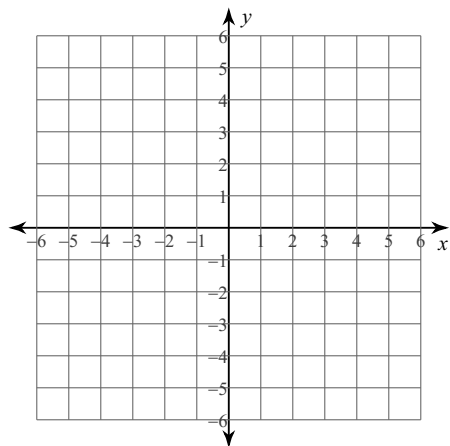
6) $y = 2x - 5$



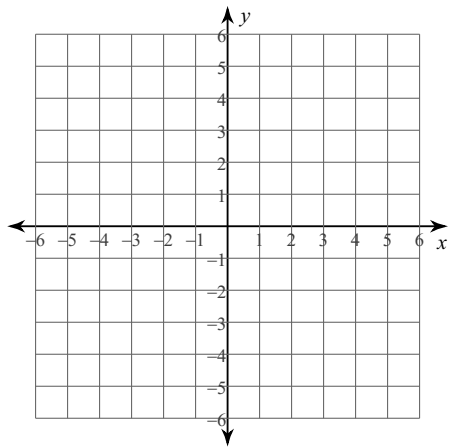
$$7) y = -\frac{1}{5}x - 2$$



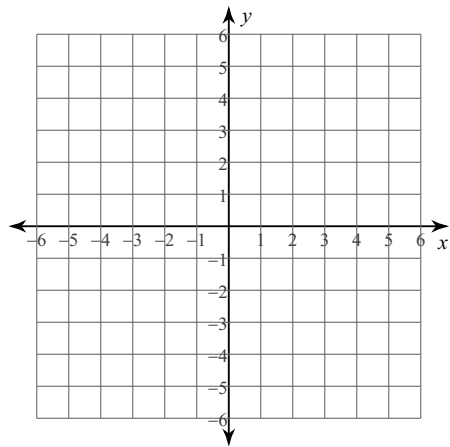
$$8) y = \frac{7}{5}x + 5$$



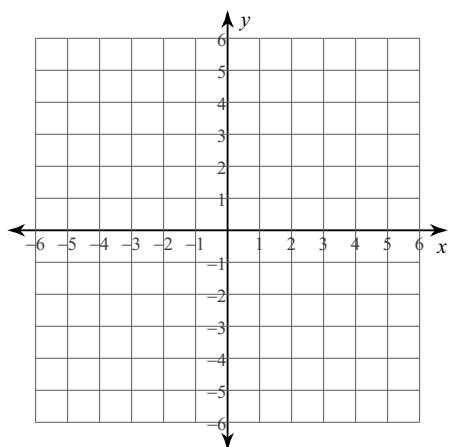
$$9) 5x + 8 - 2y = 0$$



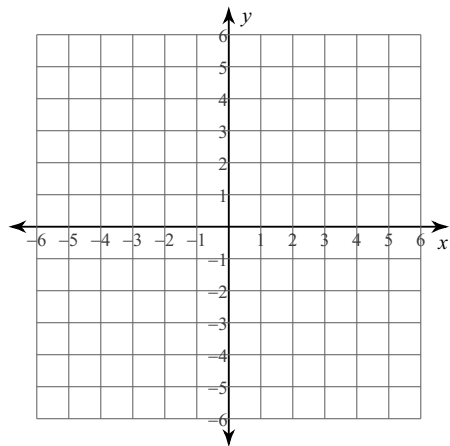
$$10) 10y + 8x = -30$$



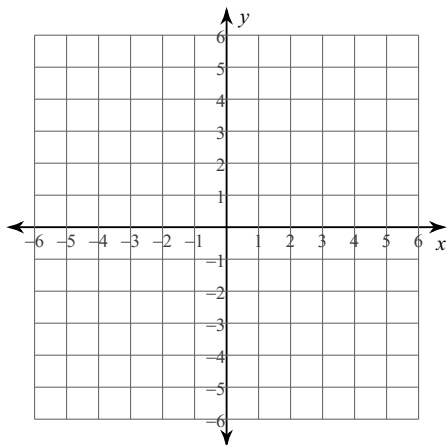
$$11) -1 = \frac{1}{5}x$$



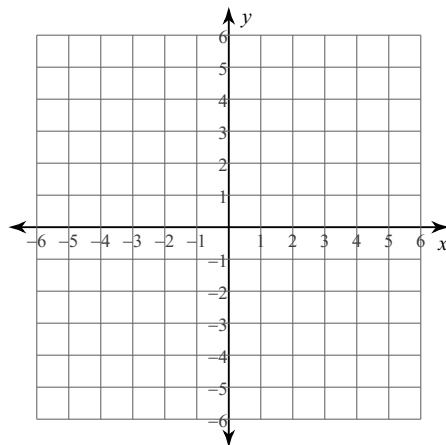
$$12) x = 4y + 20$$



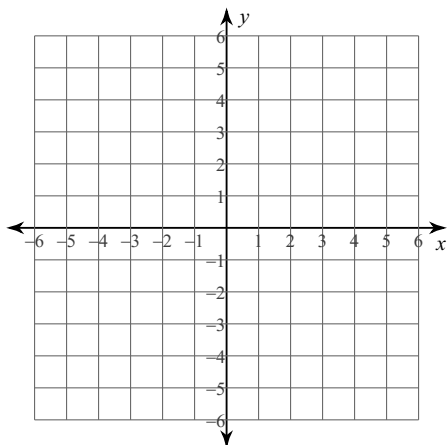
13) $2x + 6 = -2y$



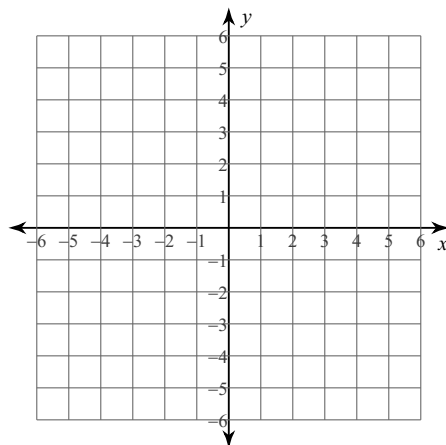
14) $-10 = -7x - 5y$



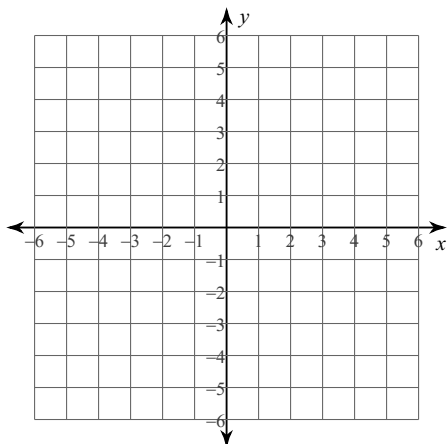
15) $-6 + 3y = -4x$



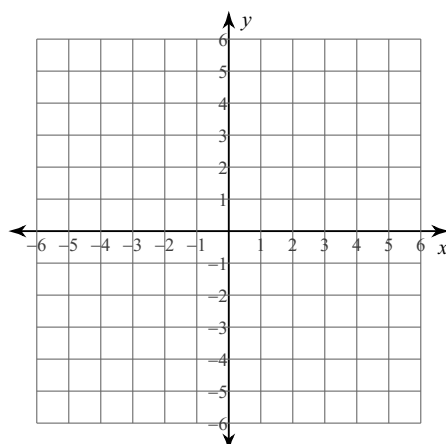
16) $0 = 10y - 40 - 16x$



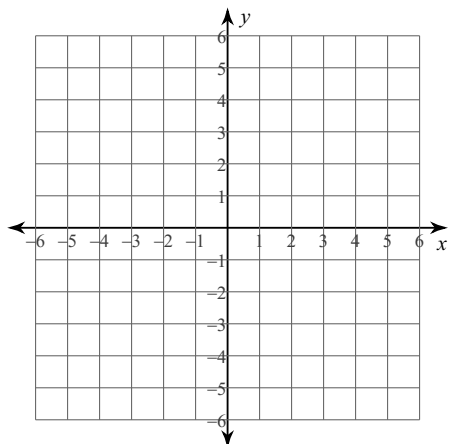
17) $-4y - x - 16 = 0$



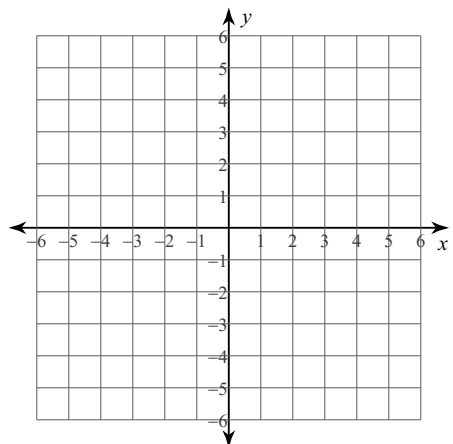
18) $-x + \frac{3}{8} + \frac{1}{8}y = 0$



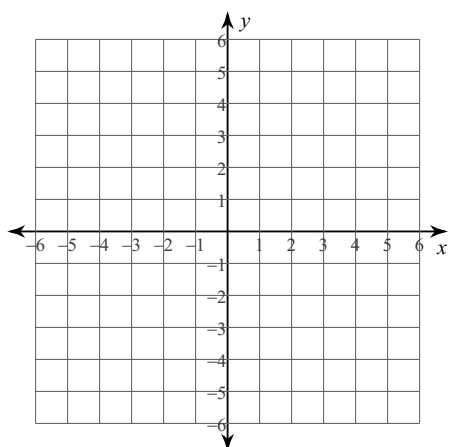
$$19) \frac{1}{2}y = 1 + \frac{2}{3}x$$



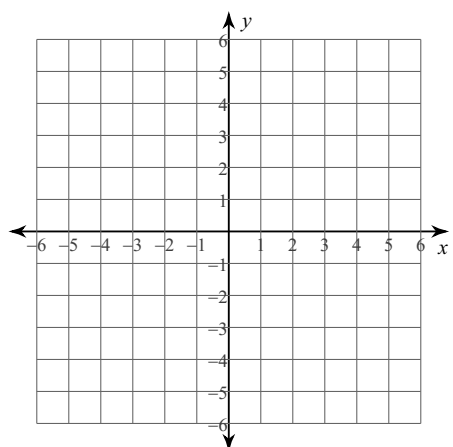
$$20) y = -1 + \frac{5}{4}x$$



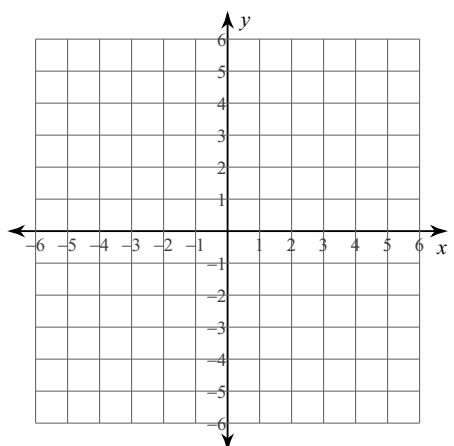
$$21) -4x + 4 = -y$$



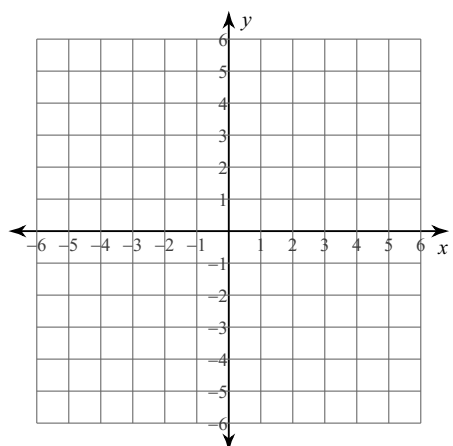
$$22) 2y = -6 - 5x$$



$$23) 0 = -2x - 4 + y$$

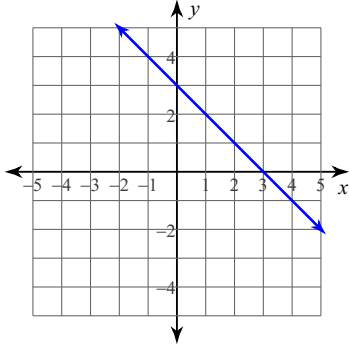


$$24) x = 2y + 8$$

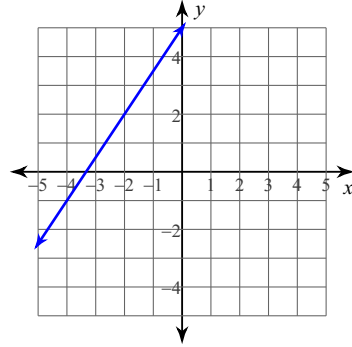


Write the slope-intercept form of the equation of each line.

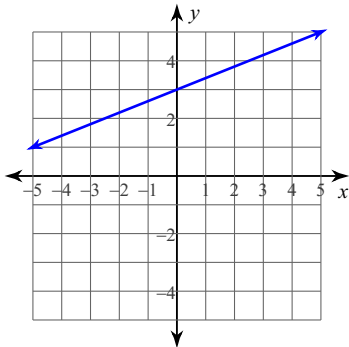
25)



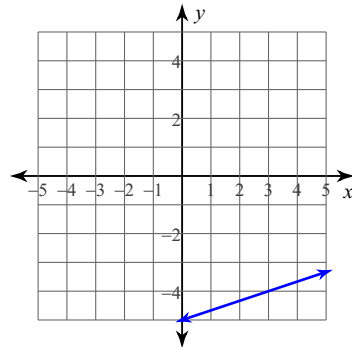
26)



27)



28)



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

29) Slope = -8 , y-intercept = -4

30) Slope = $-\frac{3}{2}$, y-intercept = -2

31) Slope = 4 , y-intercept = 3

32) Slope = $-\frac{8}{5}$, y-intercept = -3

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

33) $x - 3y = 18$

34) $x - y = 0$

35) $4x + 5y = 20$

36) $4x + 3y = -13$

37) $0 = x - 3$

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

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

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

Write the standard form of the equation of each line.

41) $y - 3 = -(x + 5)$

42) $y - 3 = -(x + 3)$

43) $y + 5 = \frac{7}{5}(x + 5)$

44) $y - 3 = x - 5$

45) $-5x - 4 = 2y$

46) $-5 - x = 0$

47) $15 + 3y = -7x$

48) $0 = 5x + 3y + 3$

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

49) $-x = -5$

50) $-4 = x$

51) $2x - 25 = -5y$

52) $2y - 6 = 0$

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

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

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

55) through: $(5, 5)$, slope = $\frac{1}{5}$

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

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

57) through: $(-4, 0)$, slope = $\frac{5}{4}$

58) through: $(5, -1)$, slope = $-\frac{1}{5}$

59) through: $(-2, -3)$, slope = 3

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

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

61) through: $(-1, 0)$, slope = 2

62) through: $(4, -4)$, slope = 0

63) through: $(3, -5)$, slope = $-\frac{4}{3}$

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

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

65) through: $(3, -4)$ and $(-4, -2)$

66) through: $(-3, 2)$ and $(1, -1)$

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

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

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

69) through: $(0, 4)$ and $(3, 1)$

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

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

72) through: $(-5, -2)$ and $(3, -3)$

Write the standard form of the equation of the line through the given points.

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

74) through: $(5, 4)$ and $(-5, 4)$

75) through: $(-3, 5)$ and $(1, -2)$

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

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

77) through: $(-1, 2)$, parallel to $y = -4x - 3$

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

79) through: $(3, 4)$, parallel to $y = 2x + 3$

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

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

81) through: $(-1, -5)$, parallel to $y = 7x - 4$

82) through: $(3, -2)$, parallel to $x = 0$

83) through: $(-4, 0)$, parallel to $y = 4x + 2$

84) through: $(3, -1)$, parallel to $y = x + 5$

Write the standard form of the equation of the line described.

85) through: $(4, -3)$, parallel to $y = -\frac{3}{2}x - 5$

86) through: $(-4, 1)$, parallel to $x = 0$

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

88) through: $(-4, -1)$, parallel to $y = \frac{4}{7}x + 4$

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

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

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

91) through: $(3, 3)$, perp. to $y = \frac{3}{2}x + 2$

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

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

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

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

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

96) through: $(-2, 3)$, perp. to $y = \frac{1}{4}x + 2$

Write the standard form of the equation of the line described.

97) through: $(5, 0)$, perp. to $x = 0$

98) through: $(5, 2)$, perp. to $y = -\frac{9}{2}x - 5$

99) through: $(-2, 3)$, perp. to $y = \frac{2}{7}x - 4$

100) through: $(-1, 2)$, perp. to $y = 0$

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

102) through: $(2, -3)$, perp. to $y = 4x$

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

104) through: $(-2, -3)$, perp. to $y = -\frac{2}{3}x + 4$

105) through: $(-5, -4)$, perp. to $y = -5x - 4$

106) through: $(1, 2)$, perp. to $y = -\frac{1}{4}x + 3$

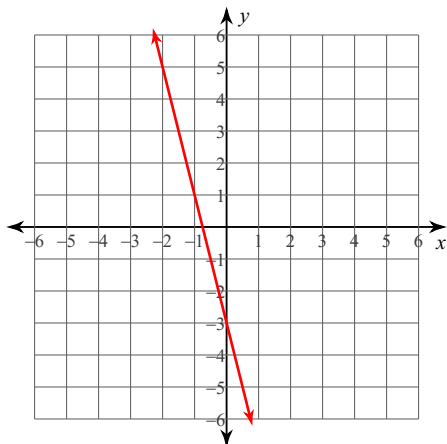
107) through: $(-1, -3)$, perp. to $y = -\frac{1}{4}x$

108) through: $(5, -3)$, perp. to $y = \frac{7}{3}x + 1$

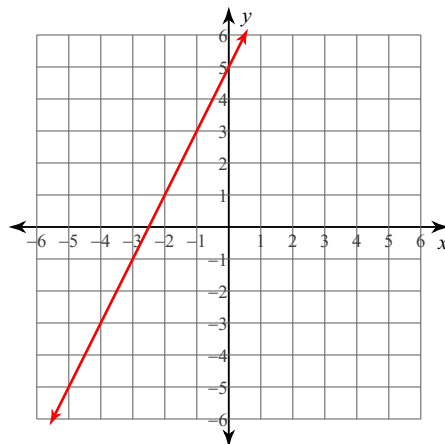
Chapter 13 - Graphing & Writing Linear Equations Review

Sketch the graph of each line.

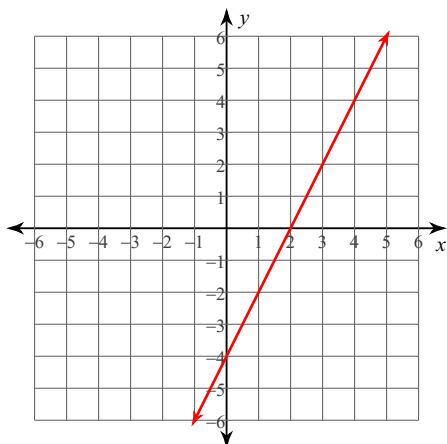
1) $4x + y = -3$



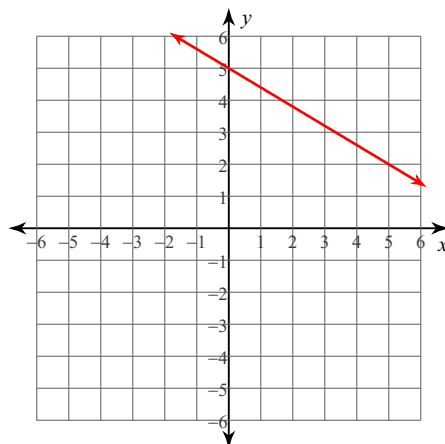
2) $2x - y = -5$



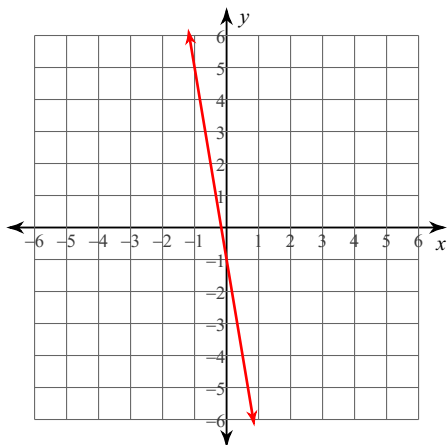
3) $2x - y = 4$



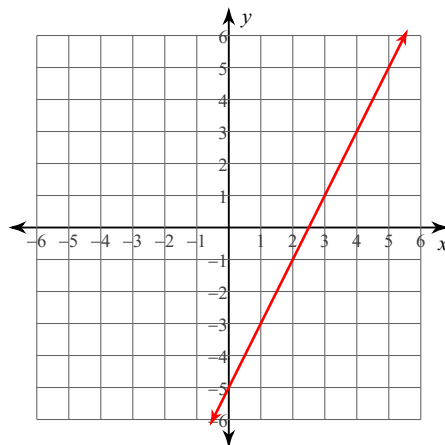
4) $3x + 5y = 25$



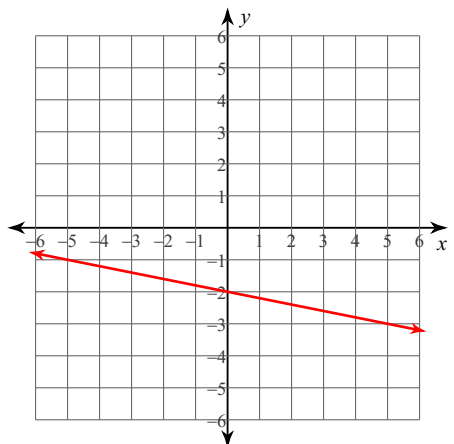
5) $y = -6x - 1$



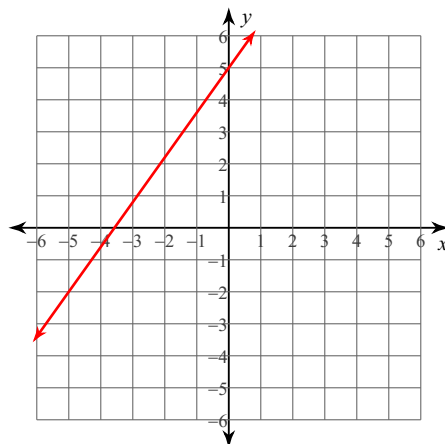
6) $y = 2x - 5$



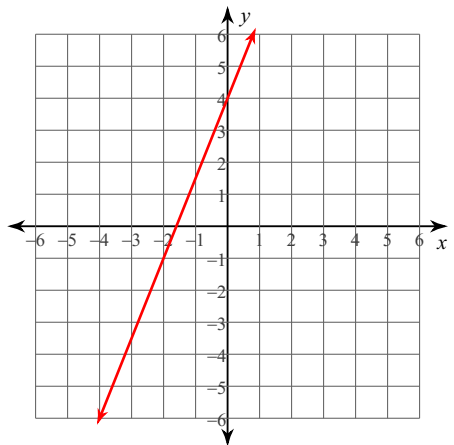
$$7) y = -\frac{1}{5}x - 2$$



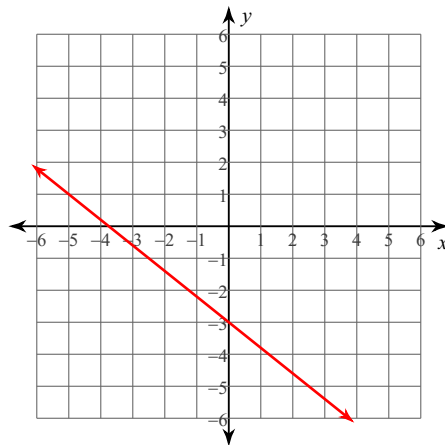
$$8) y = \frac{7}{5}x + 5$$



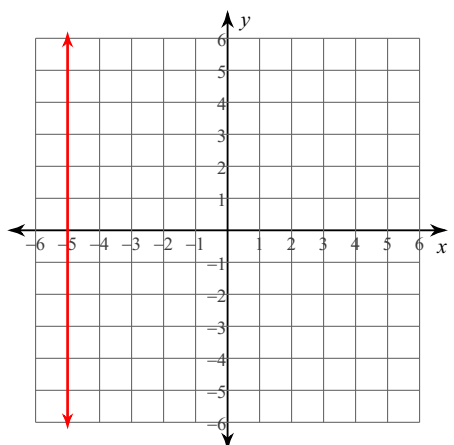
$$9) 5x + 8 - 2y = 0$$



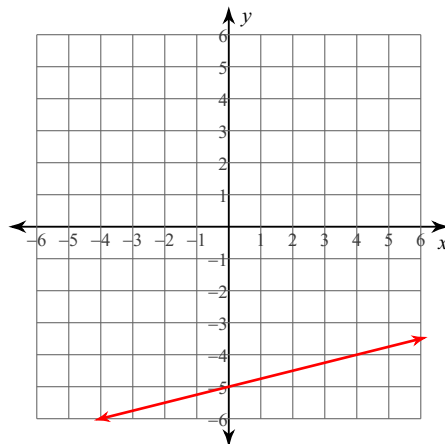
$$10) 10y + 8x = -30$$



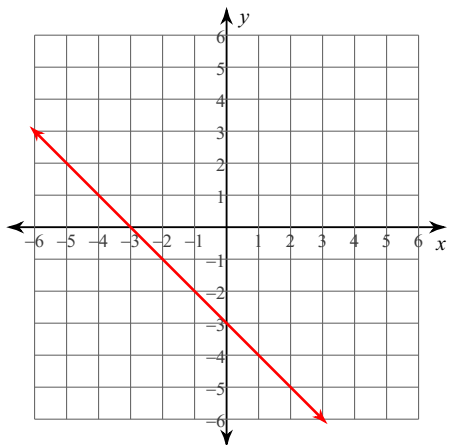
$$11) -1 = \frac{1}{5}x$$



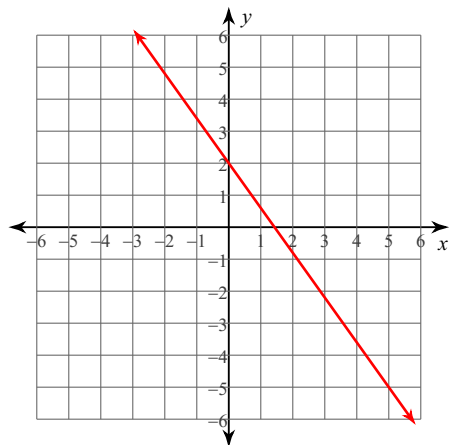
$$12) x = 4y + 20$$



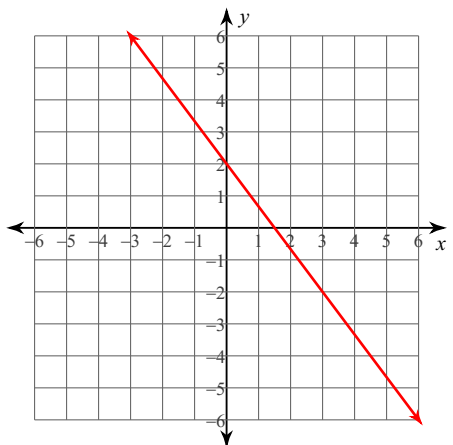
13) $2x + 6 = -2y$



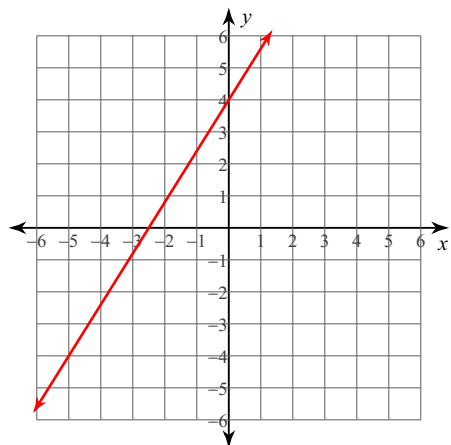
14) $-10 = -7x - 5y$



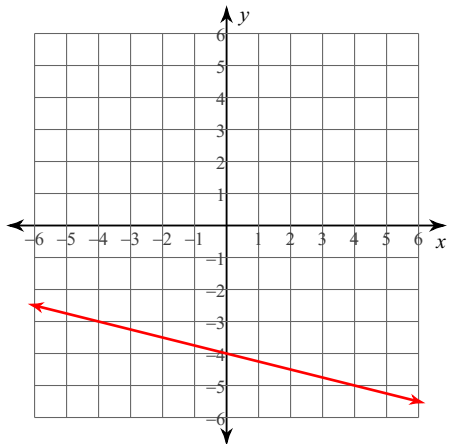
15) $-6 + 3y = -4x$



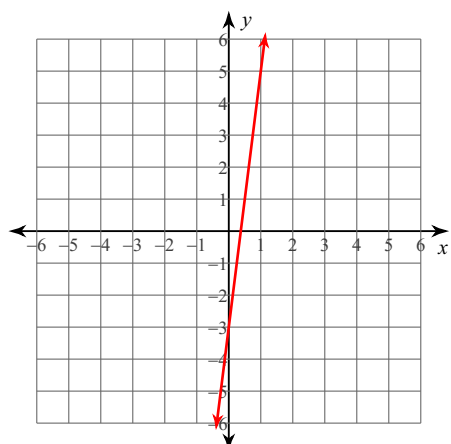
16) $0 = 10y - 40 - 16x$



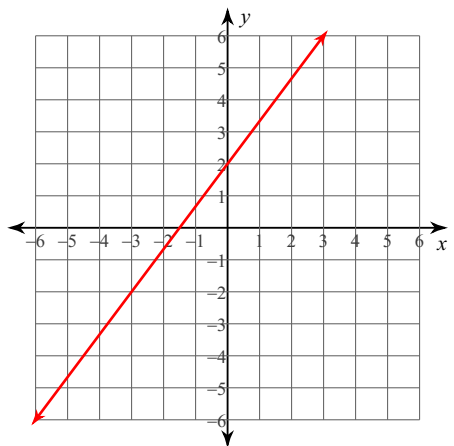
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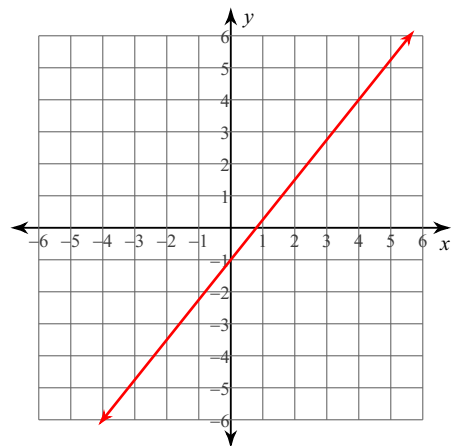
18) $-x + \frac{3}{8} + \frac{1}{8}y = 0$



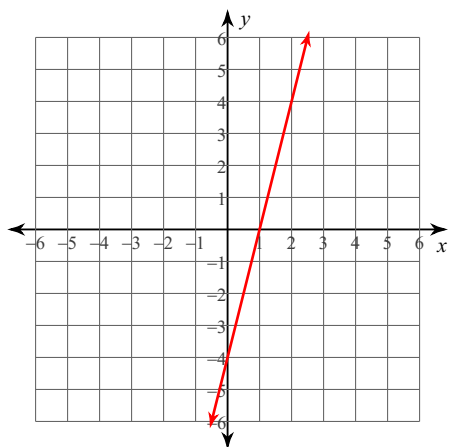
$$19) \frac{1}{2}y = 1 + \frac{2}{3}x$$



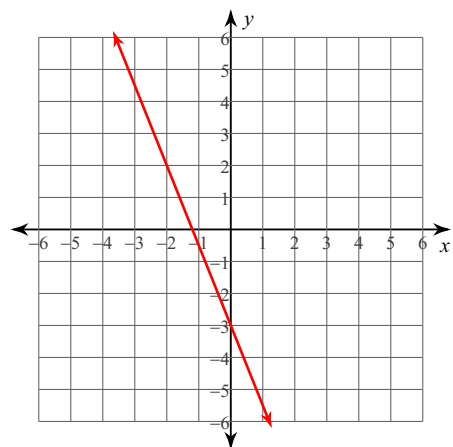
$$20) y = -1 + \frac{5}{4}x$$



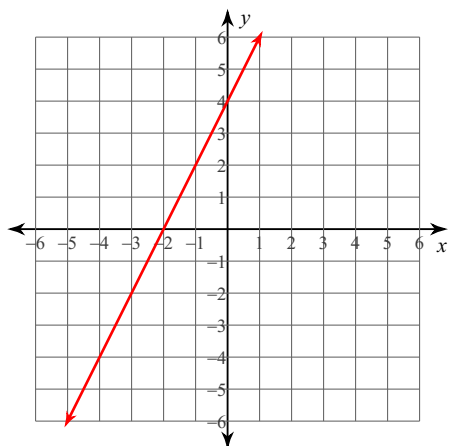
$$21) -4x + 4 = -y$$



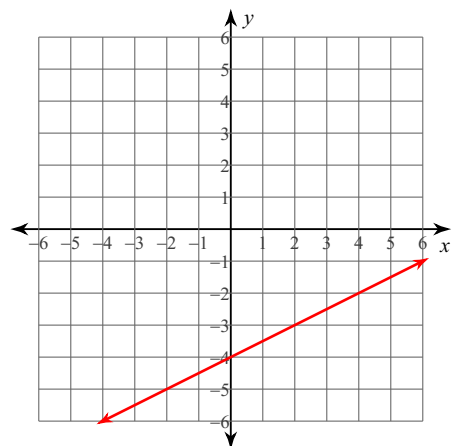
$$22) 2y = -6 - 5x$$



$$23) 0 = -2x - 4 + y$$

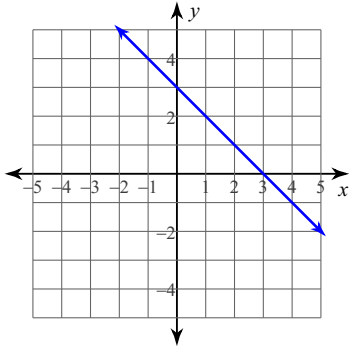


$$24) x = 2y + 8$$



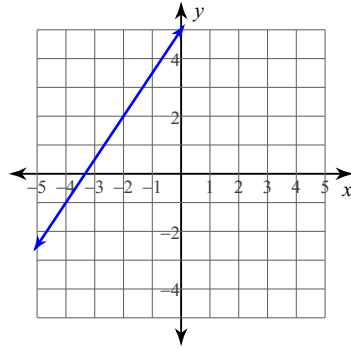
Write the slope-intercept form of the equation of each line.

25)



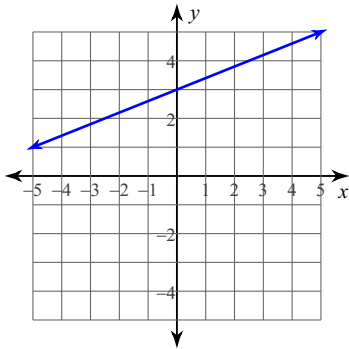
$$y = -x + 3$$

26)



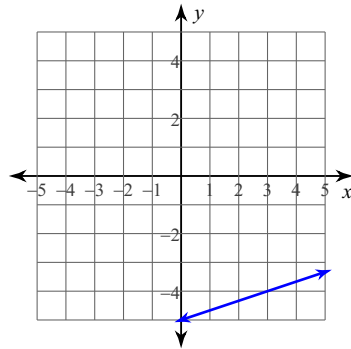
$$y = \frac{3}{2}x + 5$$

27)



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

28)



$$y = \frac{1}{3}x - 5$$

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

29) Slope = -8 , y-intercept = -4

$$y = -8x - 4$$

30) Slope = $-\frac{3}{2}$, y-intercept = -2 $y = -\frac{3}{2}x - 2$

31) Slope = 4 , y-intercept = 3

$$y = 4x + 3$$

32) Slope = $-\frac{8}{5}$, y-intercept = -3 $y = -\frac{8}{5}x - 3$

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

33) $x - 3y = 18$ $y = \frac{1}{3}x - 6$

34) $x - y = 0$

$$y = x$$

35) $4x + 5y = 20$ $y = -\frac{4}{5}x + 4$

36) $4x + 3y = -13$ $y = -\frac{4}{3}x - \frac{13}{3}$

37) $0 = x - 3$

$$x = 3$$

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

39) $y = -\frac{5}{3}(x - 2)$ $y = -\frac{5}{3}x + \frac{10}{3}$

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

Write the standard form of the equation of each line.

$$41) y - 3 = -(x + 5)$$
$$x + y = -2$$

$$42) y - 3 = -(x + 3)$$
$$x + y = 0$$

$$43) y + 5 = \frac{7}{5}(x + 5)$$
$$7x - 5y = -10$$

$$44) y - 3 = x - 5$$
$$x - y = 2$$

$$45) -5x - 4 = 2y$$
$$5x + 2y = -4$$

$$46) -5 - x = 0$$
$$x = -5$$

$$47) 15 + 3y = -7x$$
$$7x + 3y = -15$$

$$48) 0 = 5x + 3y + 3$$
$$5x + 3y = -3$$

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

$$49) -x = -5$$
$$x = 5$$

$$50) -4 = x$$
$$x = -4$$

$$51) 2x - 25 = -5y \quad y = -\frac{2}{5}x + 5$$

$$52) 2y - 6 = 0$$
$$y = 3$$

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

$$53) \text{ through: } (4, 4), \text{ slope} = \frac{3}{4}$$
$$3x - 4y = -4$$

$$54) \text{ through: } (4, -4), \text{ slope} = -\frac{7}{4}$$
$$7x + 4y = 12$$

$$55) \text{ through: } (5, 5), \text{ slope} = \frac{1}{5}$$
$$x - 5y = -20$$

$$56) \text{ through: } (-4, 1), \text{ slope} = \frac{1}{2}$$
$$x - 2y = -6$$

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

$$57) \text{ through: } (-4, 0), \text{ slope} = \frac{5}{4} \quad y = \frac{5}{4}x + 5$$

$$58) \text{ through: } (5, -1), \text{ slope} = -\frac{1}{5} \quad y = -\frac{1}{5}x$$

$$59) \text{ through: } (-2, -3), \text{ slope} = 3$$
$$y = 3x + 3$$

$$60) \text{ through: } (4, -2), \text{ slope} = \frac{3}{4} \quad y = \frac{3}{4}x - 5$$

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

$$61) \text{ through: } (-1, 0), \text{ slope} = 2$$
$$y = 2(x + 1)$$

$$62) \text{ through: } (4, -4), \text{ slope} = 0$$
$$y + 4 = 0$$

63) through: $(3, -5)$, slope $= -\frac{4}{3}$ $y + 5 = -\frac{4}{3}(x - 3)$ 64) through: $(4, -2)$, slope $= \frac{1}{4}$ $y + 2 = \frac{1}{4}(x - 4)$

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

65) through: $(3, -4)$ and $(-4, -2)$ $y + 4 = -\frac{2}{7}(x - 3)$ 66) through: $(-3, 2)$ and $(1, -1)$ $y - 2 = -\frac{3}{4}(x + 3)$

67) through: $(0, -4)$ and $(3, 4)$ $y + 4 = \frac{8}{3}x$ 68) through: $(-1, 4)$ and $(5, 2)$ $y - 4 = -\frac{1}{3}(x + 1)$

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

69) through: $(0, 4)$ and $(3, 1)$
 $y = -x + 4$

70) through: $(0, 3)$ and $(-1, 1)$
 $y = 2x + 3$

71) through: $(0, -4)$ and $(-3, -3)$ $y = -\frac{1}{3}x - 4$

72) through: $(-5, -2)$ and $(3, -3)$ $y = -\frac{1}{8}x - \frac{21}{8}$

Write the standard form of the equation of the line through the given points.

73) through: $(4, 2)$ and $(-1, -5)$
 $7x - 5y = 18$

74) through: $(5, 4)$ and $(-5, 4)$
 $y = 4$

75) through: $(-3, 5)$ and $(1, -2)$
 $7x + 4y = -1$

76) through: $(0, 0)$ and $(5, 4)$
 $4x - 5y = 0$

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

77) through: $(-1, 2)$, parallel to $y = -4x - 3$
 $y - 2 = -4(x + 1)$

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

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

80) through: $(-2, 3)$, parallel to $y = -x - 5$
 $y - 3 = -(x + 2)$

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

81) through: $(-1, -5)$, parallel to $y = 7x - 4$
 $y = 7x + 2$

82) through: $(3, -2)$, parallel to $x = 0$
 $x = 3$

83) through: $(-4, 0)$, parallel to $y = 4x + 2$
 $y = 4x + 16$

84) through: $(3, -1)$, parallel to $y = x + 5$
 $y = x - 4$

Write the standard form of the equation of the line described.

85) through: $(4, -3)$, parallel to $y = -\frac{3}{2}x - 5$
 $3x + 2y = 6$

86) through: $(-4, 1)$, parallel to $x = 0$
 $x = -4$

87) through: $(3, 2)$, parallel to $y = 2x - 5$
 $2x - y = 4$

88) through: $(-4, -1)$, parallel to $y = \frac{4}{7}x + 4$
 $4x - 7y = -9$

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

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

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

91) through: $(3, 3)$, perp. to $y = \frac{3}{2}x + 2$ $y - 3 = -\frac{2}{3}(x - 3)$ 92) through: $(4, -4)$, perp. to $y = \frac{4}{5}x$ $y + 4 = -\frac{5}{4}(x - 4)$

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

93) through: $(-3, 3)$, perp. to $x = 0$
 $y = 3$

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

95) through: $(-2, 5)$, perp. to $y = \frac{2}{5}x + 2$ $y = -\frac{5}{2}x$ 96) through: $(-2, 3)$, perp. to $y = \frac{1}{4}x + 2$

$y = -4x - 5$

Write the standard form of the equation of the line described.

97) through: $(5, 0)$, perp. to $x = 0$
 $y = 0$

98) through: $(5, 2)$, perp. to $y = -\frac{9}{2}x - 5$

$2x - 9y = -8$

99) through: $(-2, 3)$, perp. to $y = \frac{2}{7}x - 4$

100) through: $(-1, 2)$, perp. to $y = 0$

$x = -1$

$7x + 2y = -8$

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

102) through: $(2, -3)$, perp. to $y = 4x$

$x + 4y = -10$

$3x + 5y = 0$

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

104) through: $(-2, -3)$, perp. to $y = -\frac{2}{3}x + 4$

$2x + y = -1$

$3x - 2y = 0$

105) through: $(-5, -4)$, perp. to $y = -5x - 4$

106) through: $(1, 2)$, perp. to $y = -\frac{1}{4}x + 3$

$x - 5y = 15$

$4x - y = 2$

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

108) through: $(5, -3)$, perp. to $y = \frac{7}{3}x + 1$

$4x - y = -1$

$3x + 7y = -6$