

ANSWERS FOR 2.4

For use with pages 95–98

2.4 Guided Practice

2. Given the slope, m , and the y -intercept, b , use the equation $y = mx + b$. Given the slope, m , and a point on the line, (x_1, y_1) , use the equation $y - y_1 = m(x - x_1)$. Given two points on the line, use the points to find the slope of the line, and then use the slope and one of the points to find the equation, as above.

4. $y = \frac{2}{3}x + 2$

6. $y = -3x + 17$

8. $y = 2x$

10. $y = -\frac{1}{3}x - \frac{17}{3}$

12. $c = 1.25p$
 $c = 6.25$ million cassettes

2.4 Practice and Applications

14. $y = -3x - 4$

16. $y = 4$

18. $y = -\frac{3}{4}x + \frac{7}{3}$

20. $y = 3x - 3$

22. $y = -\frac{2}{3}x + 9$

24. $y = \frac{2}{5}x - \frac{34}{5}$

26. $y = \frac{1}{2}x - 13$

28. $y = \frac{1}{2}x + 4$

30. $y = 2x + 16$

32. $y = 4x + 30$

34. $y = -3x$

36. $y = -2x - 1$

38. $y = -3x + 6$

40. $y = 3x + 6$

42. $y - 4 = 1(x - 3)$

$$m = \frac{-1 - 4}{-2 - 3} = \frac{-5}{-5} = 1$$

$$y = x + 1$$

This is the same equation as in Example 4, since the slope-intercept equation of a line is unique.

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44. $y = -\frac{5}{2}x; -20$

46. $y = \frac{1}{6}x; \frac{4}{3}$

48. $y = 2x; 16$

50. $y = \frac{5}{3}x; -3$

52. $y = \frac{1}{50}x; -250$

54. $y = -\frac{22}{3}x; \frac{15}{22}$

56. no

58. yes; $y = -2x$

60. $a = 0.138(t - 386) + 201;$
 $\approx \$510.53$

62. $V = \frac{5}{9}C + 333;$

$366\frac{1}{3}$ m/sec

64. $C = 3.65t; 120$ min or 2h

66. $A = 3w; 22.5$ in.²

68. no

70. $m = \frac{y - b}{x - 0}; m = \frac{y - b}{x};$

$mx = y - b; y = mx + b$

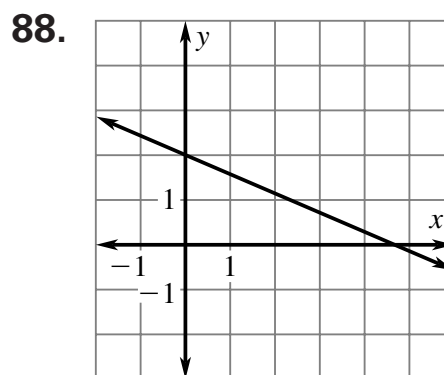
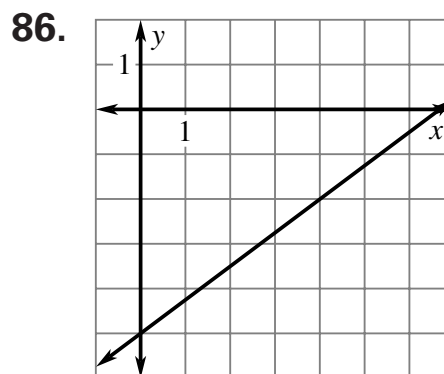
2.4 Mixed Review

72. 6; 1 74. $-\frac{3}{8}; -\frac{1}{8}$

76. $-2.08; -0.615$

78. $\frac{3}{4}$ 80. $-\frac{1}{8}$

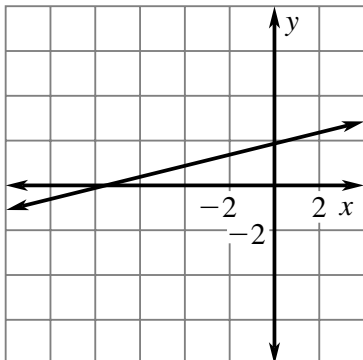
82. $-\frac{1}{3}$ 84. undefined



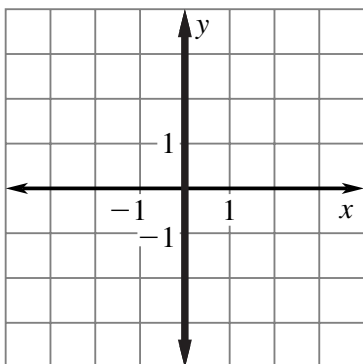
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90.



92.



94.

