

Solve each equation. Check your solution.

61.  $x - 9 = 30$

62.  $25 = y + 15$

63.  $\frac{a}{15} = 6$

64.  $32 = -5p$

65.  $x + \frac{3}{4} = 8$

66.  $y - \frac{3}{4} = 8$

67.  $-\frac{4}{5}p = \frac{8}{25}$

68.  $3x = 6x - 8$

69.  $\frac{1}{3}x = \frac{3}{4}x - 9$

70.  $-5x + 8 = 4x - 10$

71.  $3y - 7 = -4y + 7$

72.  $4(2p - 3) = 6$

73.  $2(x - 1) = 4(2x + 5)$

74.  $6y - 3(3y - 1) = 5y$

75.  $\frac{2x + 15}{3} = -31$

76.  $2x - y = 6$ , for  $y$

77.  $2x - y = 6$ , for  $x$

78.  $2x - 4y = 8$ , for  $y$

79.  $4x + 5y = -25$ , for  $y$

80.  $2a + 2b = 3c$ , for  $b$

81. 25 less than a number is 40. Find the number.
82. A number less than 25 is 40. Find the number.
83. Five times a number is 95. Find the number.
84. The quotient of a number and 1.5 is 9. Find the number.
85. Eight times the difference between a number and 15 is 40. Find the number.
86. 12 less than 4 times a number is twice the number. Find the number.
87. A number divided by 6 is equal to the number increased by 6. Find the number.
88. Find two consecutive integers whose sum is 135.
89. Find two consecutive even integers whose sum is 174.
90. Find three consecutive multiples of 5, whose sum is 255.
91. A board is 75 inches. The carpenter cut it into two pieces. One piece is 11 inches less than the other piece. Find the lengths of pieces.
92. A board is 75 inches. The carpenter cut it into three pieces. The median piece is 5 inches longer than the shortest piece. The longest piece is 5 inches longer than the median piece. Find the lengths of the pieces.
93. The length of a rectangle is 7 feet longer than the width. The perimeter is 38 feet. Find its length and width.
94. A 20-gallon salt-water solution contains 15% pure salt. How much water should be added to make a new solution that is only 12% salt?
95. In an isosceles triangle, the length of each leg exceeds the base by 14 *cm*. The perimeter is 73 *cm*. Find the length of the leg and the length of the base.
96. A suit is on sale for 25% discount. You paid \$93.15, including a 8% sales tax. Find the original price of the suit.
97. There are one-dollar bills and five-dollar bills in the piggy bank. It has 80 bills with a total value of \$184. How many ones and how many fives in the piggy bank?
98. John's land is  $500 \text{ ft}^2$  less than Roger's land. Use the symbol  $J$  for John's land, and  $R$  for Roger's land. Write an equation to represent John's land.