1. Solve for x in the equation $2x^2 - 8x + 6 = 0$.
2. Find the roots of the quadratic equation $3x^2 + 12x - 5 = 0$.
3. Determine the values of x that satisfy the equation $x^2 - 7x + 10 = 0$.
4. Solve the quadratic equation $4x^2 - 9x + 2 = 0$ for x.
5. Find the roots of the equation $x^2 + 6x + 9 = 0$.
6. Determine the values of x in the equation $2x^2 + x - 5 = 0$.
7. Solve for x in the quadratic equation $5x^2 - 2x - 8 = 0$.
8. Find the roots of the equation $3x^2 - 10x + 7 = 0$.
9. Determine the values of x that satisfy the equation $x^2 - 4x + 4 = 0$.
10. Solve the quadratic equation $6x^2 + 11x - 10 = 0$ for x.
11. Find the roots of the equation $2x^2 + 3x - 5 = 0$.
12. Determine the values of x in the equation $4x^2 - 16x + 12 = 0$.
13. Solve for x in the quadratic equation $x^2 + 8x - 20 = 0$.
14. Find the roots of the equation $3x^2 - x - 4 = 0$.
15. Determine the values of x that satisfy the equation $2x^2 + 5x + 2 = 0$.
16. Solve the quadratic equation $7x^2 - 6x - 9 = 0$ for x.
17. Find the roots of the equation $x^2 - 9x + 20 = 0$.
18. Determine the values of x in the equation $5x^2 + 2x - 1 = 0$.
19. Solve for x in the quadratic equation $2x^2 + 7x + 3 = 0$.
20. Find the roots of the equation $4x^2 - 12x + 9 = 0$.
21. Determine the values of x that satisfy the equation $x^2 + 5x - 6 = 0$.
22. Solve the quadratic equation $3x^2 - 2x - 1 = 0$ for x.
23. Find the roots of the equation $6x^2 + 5x - 1 = 0$.
24. Determine the values of x in the equation $2x^2 - 5x + 2 = 0$.
25. Solve for x in the quadratic equation $x^2 + 4x + 3 = 0$.
26. Find the roots of the equation $4x^2 - 8x - 12 = 0$.
27. Determine the values of x that satisfy the equation $3x^2 + 2x - 8 = 0$.
28. Solve the quadratic equation $5x^2 - 7x + 2 = 0$ for x.
29. Find the roots of the equation $x^2 - 6x + 9 = 0$.
30. Determine the values of x in the equation $2x^2 + 3x - 5 = 0$.
31. Solve for x in the quadratic equation $4x^2 - 10x + 6 = 0$.
32. Find the roots of the equation $7x^2 + 2x - 3 = 0$.
33. Determine the values of x that satisfy the equation $x^2 - 2x - 8 = 0$.
34. Solve the quadratic equation $3x^2 + 5x - 2 = 0$ for x.
35. Find the roots of the equation $2x^2 - 9x + 4 = 0$.
36. Determine the values of x in the equation $6x^2 + 7x - 3 = 0$.
37. Solve for x in the quadratic equation $x^2 - 3x + 2 = 0$.
38. Find the roots of the equation $4x^2 - 16x - 20 = 0$.
39. Determine the values of x that satisfy the equation $5x^2 + 6x - 1 = 0$.
40. Solve the quadratic equation $2x^2 + 4x + 1 = 0$ for x.
41. Find the roots of the equation $3x^2 - x - 10 = 0$.
42. Determine the values of x in the equation $7x^2 + 5x + 1 = 0$.
43. Solve for x in the quadratic equation $x^2 + 2x - 15 = 0$.
44. Find the roots of the equation $6x^2 - 13x + 5 = 0$.
45. Determine the values of x that satisfy the equation $4x^2 + 8x + 4 = 0$.
46. Solve the quadratic equation $2x^2 - 3x - 5 = 0$ for x.
47. Find the roots of the equation $5x^2 + 2x - 1 = 0$.
48. Determine the values of x in the equation $x^2 - 7x + 10 = 0$.
49. Solve for x in the quadratic equation $3x^2 + 6x - 9 = 0$.
50. Find the roots of the equation $4x^2 - 2x - 8 = 0$.

51. The sum of two numbers 15. If the sum of their reciprocals is 3/10. Find the numbers.

52. Divide 19 into two parts such that sum of their squares is 193.

53. Divide 41 into two positive parts such that difference of their squares is 360.

54. The product of two consecutive odd numbers is 483. Find the numbers.

55. Divide 16 into two parts such that twice the square of the larger part exceeds the square of the smaller part by 164.

56. The numerator of a fraction is one more than its denominator. If it's reciprocal is subtracted from it. the difference is 11/30. Find the fraction.

57. The denominator of a fraction exceeds is numerator by 3. If one is added to both numerator and denominator, the difference between the new and the original fraction is 1/24. Find the original fraction.

58. A two digit number is such that the product of the digits is 14. When 45 is added to the number, then the digits interchange their places. Find the number.

59. A two digit number is such that the product of the digits is 18. When 63 is subtracted to the number, then the digits interchange their places. Find the number.

60. A two digit number is four times the sum of its digits and twice the product of its digits. Find the number.

61. The sum of ages of a son and his father is 35 years and the product of their ages is 150. Find their present ages.

62. The age of a father is equal to the square of the age of his son. The sum of the age of the father and five times the age of the son is 66 years. Find their present ages.

63. The length of hypotenuse of a right triangle is one unit more than twice the length of the shortest side and the other side is one unit less than twice the length of the shortest side. Find the lengths of the other two sides.

64. The hypotenuse of a right triangle is $3\sqrt{5}$ cm. If the smaller side is tripled and the larger side is doubled, the new hypotenuse will be 15 cm. Find the length of each side.

65. The hypotenuse of a right angled triangle is 6m more than twice the shortest side. If the third side is 2m less than the hypotenuse, find the sides of the triangle.

66. The area of a right angled triangle is 600 sq. cm. If the base of the triangle exceeds the altitude by 10 cm, find the dimensions of the triangle.

67. The length of a rectangle exceeds its width by 8 cm and the area of the rectangle is 240 sq. cm. Find the dimensions of the rectangle.

68. The side of a square exceeds the side of another square by 4cm. And the sum of the areas of the two squares is 400 sq. cm. Find the dimensions of the square.

69. A rectangular field is 16m long and 10m wide. There is a path of uniform width all around it, having an area of 120 sq.cm. Find the width of the path.

70. Two pipes running together can fill a cistern in 6 minutes. If one pipe takes 5 minutes more than the other to fill the cistern, find the time in which each pipe would fill the cistern.

71. The speed of a boat in still water is 11 km/h. It can go 12 Km upstream and return dowm stream to the original point in 2 hours 45 minutes. Find the speed of the stream.

72. Two trains leave a railway station at the same time. The first train travels due west and the second due north. The first train travels 35 Km/h faster than the second train. If after two hours, they are 130 Km apart, find the average speed of each train.

73. An express train makes a run of 240 Km at a certain speed. Another train whose speed is 12 Km/h less takes an hour longer to cover the same distance. Find the speed of express train in Km/h.

74. The angry Arjun carried some arrows for fighting with Bheeshm. With half the arrows, he cut down the arrows thrown by Bheeshma on him and with six other arrows, he killed the rath driver of Bheeshm. With one arrow each, he knocked down respectively the rath, flag and the bow of Bheeshm. Finally, with one more than four times the square root of arrows he laid Bheeshm unconscious of an arrow bed. Find the total number of arrows Arjun had.

75. A shopkeeper buys a number of books for Rs 80. If he had bought 4 more books for the same amount, each book would have cost him Re 1 less. How many books did he bought?

76. A person on tour has Rs 360 for his daily expenses. If he exceeds his tour by 4 days, he must cut down his daily expenses by Rs 3 per day. Find the number of days of his tour.

77. In a flight of 600 Km, an aircraft was slowed down due to bad weather. Its average speed for trip was reduced by 200 Km/h and the time increased by 30 minutes. Find the duration of flight.

78. A piece of cloth costs Rs 200. If the piece were 5 m longer and each metre of cloth costs Rs 2 less, the cost of piece would have remained unchanged. How long is piece and what is its original rate per meter?

79. Rs 6,500 were divided equally among a certain number of persons. Had there been 15 more persons, each would have got Rs 30 less. Find the original number of persons.

80. The sum S of first n natural numbers is given by S = n (n+1)/2. Find n, if the sum is 351.

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