

Class 10 Mathematics - Quadratic Equations

Name: _____

Date: _____

Medium Worksheet 1

Questions

1. Find the roots of:
 $x^2 - 8x + 15 = 0$
2. Find the roots of:
 $x^2 + 7x + 12 = 0$
3. Find the roots of:
 $2x^2 - 9x + 10 = 0$
4. Find the roots of:
 $x^2 - 11x + 28 = 0$
5. What method is used to solve all the above equations?
6. Verify the roots obtained in Question 1.

Answer Key

1.

$$x^2 - 8x + 15$$

$$= (x - 3)(x - 5)$$

$$\text{Roots} = 3, 5$$

2.

$$x^2 + 7x + 12$$

$$= (x + 3)(x + 4)$$

$$\text{Roots} = -3, -4$$

3.

$$2x^2 - 9x + 10$$

$$= (2x - 5)(x - 2)$$

$$\text{Roots} = 5/2, 2$$

4.

$$x^2 - 11x + 28$$

$$= (x - 7)(x - 4)$$

$$\text{Roots} = 7, 4$$

5. Factorisation Method

6.

$$3^2 - 8(3) + 15 = 0$$

$$5^2 - 8(5) + 15 = 0$$