



Laying the foundation of lifelong success

CHAPTER 4

Quadratic Equations

(Previous Years' Questions)

3 – Markers

-
1. Find two consecutive negative integers, sum of whose squares is 481. **(2026)**
 2. In a 2-digit number, the digit at the unit's place is 5 less than the digit at the ten's place. The product of the digits is 36. Find the number. **(2024)**
 3. Three consecutive integers are such that sum of the square of second and product of other two is 161. Find the three integers. **(2024)**
 4. A dealer sells an article for ₹ 75 and gains as much percent as the cost price of the article. Find the cost price of the article. **(2024)**
 5. Two water taps together can fill a tank in $3\frac{1}{3}$ hours. The tap of larger diameter takes 5 hours less than the smaller one to fill the tank separately. Find the time in which each tap can fill the tank separately. **(Comptt., 2023)**
 6. Sum of the areas of two squares is 468 m^2 . If the difference of their perimeters is 24 m, find the lengths of the sides of the two squares. **(Comptt., 2023)**

7. Three consecutive odd numbers are such that the sum of the squares of the first two numbers is greater than the square of the third by 65. Find the numbers.

(Comptt., 2023)

8. Find the value of 'p' for which the quadratic equation $px(x - 2) + 6 = 0$ has two equal real roots. (2023)

9. Find the value of 'p' for which one root of the quadratic equation $px^2 - 14x + 8 = 0$ is 6 times the other. (2023)

10. (A) The sum of two numbers is 15. If the sum of their reciprocals is $\frac{3}{10}$, find the two numbers.

OR

- (B) If α and β are roots of the quadratic equation $x^2 - 7x + 10 = 0$ find the quadratic equation whose roots are α^2 and β^2 . (2023)

11. (A) A natural number, when increased by 12, equals 160 times its reciprocal. Find the number.

OR

(B) If one root of the quadratic equation $x^2 + 12x - k = 0$ is thrice the other root, then find the value of k . **(2023)**



EDU सारथी