



D.A.V. PUBLIC SCHOOL, CRRC, Medical Road, Gaya
Sunday Test (Date –01-09-2024)

Class – Xth
Sub. – Maths

Time: 40 Min
F.M.- 20

Section - A ($2 \times 5 = 10$ Marks)

1. Find HCF and LCM of 404 and 96 and verify that $\text{HCF} \times \text{LCM} = \text{product of the two given numbers}$.
2. Find the zeroes of the following quadratic polynomial $4u^2 + 8u$ and verify the relationship between the zeroes and coefficients.
3. Quadratic polynomial $2x^2 - 3x + 1$ has zeros as α and β . Now form a quadratic polynomial whose zeros are $3 + \alpha$ and $3 + \beta$.
4. If $\frac{2}{3}$ and -3 are the zeros of the polynomial $ax^2 + 7x + b$, then find the values of a and b .
5. Find the roots of the following quadratic equation by applying the quadratic formula.
$$4x^2 + 4\sqrt{3}x + 3 = 0$$

Section - B ($5 \times 2 = 10$ Marks)

6. Prove that $\sqrt{5}$ is irrational number and hence show that $3 + \sqrt{5}$ is also an irrational number.
7. A two digit number is such that the product of its digits is 18. When 63 is subtracted from the number, the digits interchange their places. Find the number.