

Centum Preparation 100 Days plan class 12 Maths

Q. No.	DAY - 13
70	<p>Example 3.2</p> <p>If α and β are the roots of the quadratic equation $2x^2 - 7x + 13 = 0$, construct a quadratic equation whose roots are α^2 and β^2.</p>
71	<p>Example 3.3</p> <p>If α, β, and γ are the roots of the equation $x^3 + px^2 + qx + r = 0$ find the value of $\sum \frac{1}{\beta\gamma}$ in terms of the coefficients.</p>
72	<p>Example 3.4</p> <p>Find the sum of the squares of the roots of $ax^4 + bx^3 + cx^2 + dx + e = 0$, $a \neq 0$</p>
73	<p>Example 3.5</p> <p>Find the condition that the roots of cubic equation $x^3 + ax^2 + bx + c = 0$ are in the ratio $p : q : r$.</p>
74	<p>Example 3.6</p> <p>Form the equation whose roots are the squares of the roots of the cubic equation $x^3 + ax^2 + bx + c = 0$.</p>

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Example 3.7

If p is real, discuss the nature of the roots of the equation

$$4x^2 + 4px + p + 2 = 0, \text{ in terms of } p.$$