

Centum Preparation 100 Days plan class 12 Maths

Q. No.	DAY - 15
82	<p>EXERCISE 3.1</p> <p>9. If p and q are the roots of the equation $lx^2 + nx + n = 0$, show that $\sqrt{\frac{p}{q}} + \sqrt{\frac{q}{p}} + \sqrt{\frac{n}{l}} = 0$.</p>
83	<p>10. If the equations $x^2 + px + q = 0$ and $x^2 + p'x + q' = 0$ have a common root, show that it must be equal to $\frac{pq' - p'q}{q - q'}$ or $\frac{q - q'}{p' - p}$.</p>
84	<p>Example 3.10</p> <p>Form a polynomial equation with integer coefficients with $\sqrt{\frac{\sqrt{2}}{\sqrt{3}}}$ as a root.</p>
85	<p>Example 3.12</p> <p>If $x^2 + 2(k + 2)x + 9k = 0$ has equal roots, find k.</p>
86	<p>Example 3.13</p> <p>Show that, if p, q, r are rational, the roots of the equation $x^2 - 2px + p^2 - q^2 + 2qr - r^2 = 0$ are rational.</p>
87	<p>Example 3.14</p> <p>Prove that a line cannot intersect a circle at more than two points.</p>