

Centum Preparation 100 Days plan class 12 Maths

Q.N o.	DAY - 31
182	<p>8. Identify the type of conic and find centre, foci, vertices, and directrices of each of the following :</p> <p>(i) $\frac{(x-3)^2}{225} + \frac{(y-4)^2}{289} = 1$ (iii) $\frac{(x+3)^2}{225} - \frac{(y-4)^2}{64} = 1$</p> <p>(v) $18x^2 + 12y^2 - 144x + 48y + 120 = 0$</p> <p>(vi) $9x^2 - y^2 - 36x - 6y + 18 = 0$</p>
183	<p>Example 5.29</p> <p>Find the equations of tangent and normal to the parabola $x^2 + 6x + 4y + 5 = 0$ at $(1, -3)$.</p>
184	<p>Example 5.30</p> <p>Find the equations of tangent and normal to the ellipse $x^2 + 4y^2 = 32$ when $\theta = \frac{\pi}{4}$.</p>
185	<p>EXERCISE 5.4</p> <p>1. Find the equations of the two tangents that can be drawn from $(5, 2)$ to the ellipse $2x^2 + 7y^2 = 14$.</p>
186	<p>2. Find the equations of tangents to the hyperbola $\frac{x^2}{16} - \frac{y^2}{64} = 1$ which are parallel to $10x - 3y + 9 = 0$.</p>