

Centum Preparation 100 Days plan class 12 Maths

Q.No.	DAY - 69
430	<p>Example 10.18</p> <p>Solve $\left(y + \sqrt{x^2 + y^2}\right) dx - x dy = 0$, $y(1) = 0$.</p>
431	<p>Example 10.19</p> <p>Solve $(2x + 3y) dx + (y - x) dy = 0$.</p>
432	<p>Example 10.21</p> <p>Solve $\left(1 + 2e^{x/y}\right) dx + 2e^{x/y} \left(1 - \frac{x}{y}\right) dy = 0$.</p>
433	<p>EXERCISE 10.6</p> <p>Solve the following differential equations:</p> <p>1. $\left[x + y \cos\left(\frac{y}{x}\right)\right] dx = x \cos\left(\frac{y}{x}\right) dy$</p>
434	<p>Solve the following differential equations:</p> <p>5. $(y^2 - 2xy) dx = (x^2 - 2xy) dy$</p>
435	<p>Solve the following differential equations:</p> <p>7. $\left(1 + 3e^{\frac{y}{x}}\right) dy + 3e^{\frac{y}{x}} \left(1 - \frac{y}{x}\right) dx = 0$, given that $y = 0$ when $x = 1$</p>
436	<p>Solve the following differential equations:</p> <p>8. $(x^2 + y^2) dy = xy dx$. It is given that $y(1) = 1$ and $y(x_0) = e$. Find the value of x_0.</p>