

1. *Solve* : $(e^{2y} - y \cos xy)dx + (2xe^{2y} - x \cos xy + 2y)dy = 0$

2. *Solve* : $\frac{dy}{dx} = \frac{1}{3y^2 - 3xy^2}$

3. *Solve* : $xydx + (2x^2 + 3y^2 - 20)dy = 0$