

1. $y' = y(4x - 3)$.

Ans.: $y = Ce^{2x^2-3x}$.

2. $t^4 s' + 3s = 0, \quad s(1) = e$.

Ans.: $s = e^{1/t^3}$.

3. $xy \, dx + (x + 1) \, dy = 0$.

Ans.: $y = Ce^{-x}(x + 1); \quad x = -1$.

4. $xy' + y = y^2, \quad y(1) = 0,5$.

Ans.: $y(1 - Cx) = 1; \quad y = 0. \quad y(1 + x) = 1$.