



Topic: Taylor's series Method

1. Using Taylor series method find y at x = 0.1 given $\frac{dy}{dx} = 2y + 3e^x$ y(0) = 0.

2. Using Taylor series method find correct to 4 decimal places the value of y(0.1) given

$$\frac{dy}{dx} = x^2 + y^2 \quad y(0) = 1.$$

dx

3. Using Taylor series method find the value of y at x = 0.1 and 0.2 to 4 decimal places given

$$\frac{dy}{dx} = x^2 y - 1 \quad y(0) = 1.$$

dx