

# Initial Value Problems

Solve the initial value problem (Find C)

$$1. \quad \frac{dy}{dx} = \sec^2 x + 2x + 5 \quad x = 0 \quad y = 1$$

$$2. \quad \frac{dy}{dx} = e^x - 6x^2 \quad x = 1 \quad y = 0$$

$$3. \quad \frac{dy}{dx} = \frac{1}{x+4} \quad x = -3 \quad y = 2$$