

King Fahd Univ. of Petroleum and Minerals  
Faculty of Sciences  
Department of Mathematical Sciences

QUIZ No. 1  
(MATH. 260-053 Sections 2 and 3)

**Name:**

**ID:**

**Prob. 1**

Find the solution of the problem

$$\begin{cases} (x^2 + 4)y' + 3xy = x \\ y(0) = 1 \end{cases}$$

**Prob.2**

Solve

$$y' = 1 + x + y + xy$$

**Prob. 3**

Solve the IVP

$$\begin{cases} y''(t) = 4(t + 3)^2 \\ y(0) = 1 \\ y'(0) = -1. \end{cases}$$