KFUPM – Department of Mathematics and Statistics – Term 153

MATH 101

QUIZ # 3: Code 1 (Duration = 15 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find $\frac{dy}{dx}$ if $y = (1 + x + x^2)^3 \cos^2(4x)$

Exercise 2 (5 points) Find an equation of the tangent line to the curve $y = \frac{\cos x}{1 + x^2}$ at (0, 1)

KFUPM – Department of Mathematics and Statistics – Term 153

MATH 101

QUIZ # 3: Code 2 (Duration = 15 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find $\frac{dy}{dx}$ if $y = (1 + 2x + x^2)^2 \sin^3(2x)$

Exercise 2 (5 points) Find an equation of the tangent line to the curve $y = \frac{\sin x}{1 + x + x^2}$ at (0, 0)

KFUPM – Department of Mathematics and Statistics – Term 153

MATH 101

QUIZ # 3: Code 3 (Duration = 15 minutes)

NAME:_____ ID:_____ Section: _____

Exercise 1 (5 points) Find $\frac{dy}{dx}$ if $y = (1 + 2x - 2x^2)^2 \tan^3(2x)$

Exercise 1 (5 points) Find an equation of the tangent line to the curve $y = \frac{\tan x}{1 + x + x^2}$ at (0, 0)