King Fahd University of Petroleum & Minerals Department of Mathematics and Statistics **Math101/Calculus I** Quiz 3 One Problem ¹

Problem 1 (15 points)

Compute the derivative of y with respect to x

 $y = \sqrt{x} + \frac{1}{x}$

$$y = [1 + \ln(x)]e^{x^2 + 2}$$

 $x^2y + y^2x + y^3 = \sin(x+4)y$

$$y = \frac{x^3 + 3}{x^2 - 1}$$

$$y = 3x^2 + 3^{x^2}$$

$$x = (5y^4 - 3y)^5$$

 $^{^{1}}$ The quiz lasts 30 minutes.