King Fahd University of Petroleum & Minerals Department of Mathematics and Statistics **Math101/Calculus I** Quiz 3 One Problem, March 27<sup>th</sup>, 2016<sup>1</sup>

## Problem 1 (15 points)

Compute the derivative of y with respect to x

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

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

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

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

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

$$x = (4y^3 - 3y^2)^4$$

 $<sup>^1{\</sup>rm The}$  quiz lasts 30 minutes.