Math 1271 - Lectures 010 and 030   **Name (Print):** _____

Fall 2017

Quiz 1II

09/21/17

Time Limit: 25 Minutes   Section _____

This quiz will cover sections 3.4-6 in Stewart. You may *not* use your books, notes, graphing calculator, phones or any other internet devices on this exam. You are **required** to show your work on each problem on this quiz.

1. Compute the following derivatives

    (a) (1 point) $\dfrac{d}{dx} \tan \ln(x)$

    (b) (1 point) $\dfrac{d}{dx} \cos^{-1} \left(\sqrt{x^3 + e^x} \right)$

    (c) (2 points) $\dfrac{d}{dx} x^{x^x}$

Problem	Points	Score
1	4	
2	3	
3	3	
Total:	10	

2. (3 points) Write the equation for the tangent line to the curve C defined by the equation $y^3(y - 4) = x(x^3 - 5)$ at the point $(0, 4)$

3. (3 points) Find y' for $y = \ln(\cos^2(x) + y^2)$