Student Name:_____ Student Number: _____ Serial No.:_____

Instructor: M. Z. Abu-Sbeih Math - 132.1 Quiz No. 5 Date: 15-12-2013.

Problem 1: (4 points) Find the limit if it exists:

$$\lim_{x\to 0} \frac{\sin x}{1+\cos x}$$

Problem 1: (10 points) Find y'

(a) $y = \dfrac{1+\csc x}{\sin x}$

(b) $y = \sec^3(x^2)$

Problem 2: (10 points) Evaluate the integral

(a) $\int (1+\sin x)\cos x\, dx$

(b) $\int \dfrac{\sec^2 x}{1+\tan x}\, dx$