Name: _____

Student ID: _____

Quiz 4

This quiz is graded out of 10 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. *(5 marks)* §5.4 #14 Use the Second Fundamental Theorem of Calculus to find the derivative of the function.

$$y = \int_{\sin x}^{\cos x} (1 + v^2)^{10} \, dv$$

Question 2. *(5 marks)* §5.4 #17 Find the average value of

$$g(x) = \cos x$$

on the interval $\left[0, \frac{\pi}{2}\right]$