

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) §5.3 #25 Evaluate the integral.

$$\int_0^{\pi/4} \frac{1 + \cos^2 \theta}{\cos^2 \theta} d\theta$$

Question 2. (5 marks) §5.4 #14 Use the Second Fundamental Theorem of Calculus to find the derivative of the function.

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