

Name: _____
Student ID: _____

Quiz 5

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. (3 marks) §5.5 #54 Find the average value of the function on the given interval.

$$f(x) = \sin 4x, \quad [-\pi, \pi]$$

Question 2. (3 marks) §5.5 #32 Evaluate the indefinite integral.

$$\int \frac{\sin x}{1 + \cos^2 x} dx$$

Question 3. (4 marks) §5.5 #41 Evaluate the definite integral.

$$\int_0^{\pi} \sec^2(t/4) dt$$