

Name: _____
Student ID: _____

Quiz 8

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. §3.7 #32 (5 marks) Find the limit:

$$\lim_{x \rightarrow 0^+} (\tan 2x)^x$$

Question 2. §6.6 #20 (5 marks) Determine whether the integral is convergent or divergent. Evaluate if convergent.

$$\int_1^{\infty} \frac{\ln x}{x^3} dx$$