

Name: _____
Student ID: _____

Quiz 7

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) §6.3 #39 Make a substitution to express the integrand as a rational function and then evaluate the integral.

$$\int \frac{e^{2x}}{e^{2x} + 3e^x + 2} dx$$

Question 2. (5 marks) §6.6 #47 Determine whether the integral is convergent or divergent. Evaluate if it convergent.

$$\int_6^8 \frac{4}{(x-6)^3} dx$$