

Name: \_\_\_\_\_  
Student ID: \_\_\_\_\_

## Quiz 8

This quiz is graded out of 10 marks. No books, 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.** (2 marks) pg. 748 #7 Evaluate the following definite integral:

$$\int_3^6 \left( \frac{1}{\sqrt{x}} + 2 \right) dx$$

**Question 2.** (4 marks) pg. 841 #26 Evaluate the following definite integral:

$$\int_0^2 \frac{e^{2t}}{\sqrt{e^{2t} + 4}} dt$$

**Question 3.** (4 marks) pg. 837 #12 Evaluate the following definite integral:

$$\int_0^{\frac{\pi}{4}} \frac{\sec^2 x}{\sqrt{4 + \tan x}} dx$$