

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

## Quiz 9

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) §6.6 #31 Determine whether each integral is convergent or divergent. Evaluate those that are convergent.

$$\int_0^2 z^2 \ln z \, dz$$

**Question 2.** (5 marks) §7.1 #10 Sketch the region enclosed by the given curves. Then find the area of the region.

$$y = x^2, \quad y = 4x - x^2$$