

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

## Quiz 2

This quiz is graded out of 10 marks. No books, graphing 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) Use the Trapezoidal Rule with  $n = 4$  to approximate the value of the definite integral and compare your answer to the actual value of the integral. (*i.e.* Also calculate the definite integral using the Fundamental Theorem of Calculus.)

$$\int_1^2 \frac{1}{(x+1)^2} dx$$

**Question 2.** (5 marks) Sketch the region bounded by the graphs of the algebraic functions  $f(y) = y(2 - y)$  and  $g(y) = -y$  and find the area of the region.