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. (5 marks) §7.2 #12 Find the volume of the solid obtained by rotating the region bounded by the given curves about the specified line. Sketch the region.

 $y = x, y = \sqrt{x}$; about x = 2

Question 2. (5 marks) §7.4 #5 Find the length of the curve.

$$y = \frac{x^5}{6} + \frac{1}{10x^3} \quad 1 \le x \le 2$$