

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) §7.2 #6 Find the volume of the solid obtained from the region bounded by the graphs of $y = \frac{1}{x}$, $y = 0$, $x = 1$ and $x = 3$, rotated about the line $y = -1$.

Question 2. (5 marks) §7.3 #32 Set up the integral to find the volume of the solid obtained from the region bounded by the graphs of $y = x^4$ and $y = \sin\left(\frac{\pi x}{2}\right)$, rotated about the line $x = -1$.