

Name: _____
Student ID: _____

Quiz 5

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. §7.1 #20 (5 marks)

Sketch the region bounded by the graphs of the algebraic functions

$$f(x) = -x^2 + 4x + 1 \text{ and } g(x) = x + 1$$

and find the area of the region.

Question 2. §7.2 #32 (5 marks)

Find the volume of the solid generated by

$$y = 9 - x^2, y = 0, x = 2, x = 3$$

about the y-axis.