

Name: _____

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) §7.3 #26 Set up an integral for the volume of the solid obtained by rotating the region bounded by the given curves about the specified axis. Sketch the region, draw a representative rectangle, write a representative element and label the sketch completely.

$$x^2 - y^2 = 7, x = 4; \text{ about the } y = 5$$

Question 2. (5 marks) Review Chapter 7 #8 Find the volume of the solid obtained by rotating the region bounded by the given curves about the specified axis. Sketch the region, draw a representative rectangle, write a representative element and label the sketch completely.

$$y = x^2 + 1, y = 9 - x^2; \text{ about the } y = -1$$