

Name: _____
Student ID: _____

Quiz 10

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. §4.2 #45 (5 marks) Find the inflection point(s), if any of

$$f(x) = 6x^3 - 18x^2 + 12x - 15$$

Question 2. §4.2 #61 (5 marks) Find the relative extrema, if any. Use the second derivative test, if applicable.

$$g(t) = t + \frac{9}{t}$$

Question 3. (5 marks) Find the equation of the tangent to the function $f(x) = \tan 2x$ at $x = \frac{\pi}{8}$