

Name: _____

Entry No.: _____

AMTL 100 (CALCULUS)
Quiz 1

Date: 07/10/2024

Total Marks: 15

Time: 30 mins

1. Prove that the equation $3x - 2 \sin x + 8 = 0$ has exactly one real solution. [5]

Name:

Entry No.:

2. Find the values of x where the function $f(x)$ has a local minimum, a local maximum or a point of inflection. [5]

$$f(x) = x^4 - 6x^2 + 4$$

Name:

Entry No.:

3. Find the Taylor's polynomial of order 3 of the function $f(x) = x^3 + 3x^2 - 2x + 1$ about $a = 1$. Also, find the error (remainder term). [5]