

CONM Sem 7 Practical Assignment 1

1. Apply Bisection method to solve the algebraic equation
$$f(x) = x^4 + 3x^2 + x - 10 = 0, a = 1, b = 2, \epsilon = 0.00001$$
2. Apply False Position Method to solve the algebraic equation:
$$f(x) = x^3 - x - 4, a = 1, b = 2, \epsilon = 0.00001$$
3. Apply Secant Method to solve the algebraic equation:
$$f(x) = x^3 - 4$$
 starting with 1, 1.5 and $\epsilon = 0.000001$
4. Find an approximation to $\sqrt{12}$ to five decimal places using Newton Raphson Method
 $x_0 = 3.5$
5. Find the root of the following using Birge Vieta Method to five decimal places
$$f(x) = f(x) = x^3 - x^2 - x + 1, x_0 = 0.5$$