

ASSIGNMENT -1

1. Find the root of the equation $x * e^x = \cos x$ in the interval $(0,1)$ using Regula Falsi method correct upto four decimal places.
2. Evaluate $\sqrt{12}$ to four decimal places by Newton's iterative method.
3. Find a real root of the equation $3x + \sin x - e^x = 0$ by the method of false position correct to four decimal places.
4. Compute root of the equation $x^2 e^{-x/2} = 1$ in the interval $[0, 2]$ using secant method. The root should be correct to three decimal places.
5. Perform the the following floating point calculations:
 - (i) $.9432 E - 4$ from $.5452 E - 3$
 - (ii) $(.4546 E 3) + (.5454 E 8)$