

Lab Assignment 2

1. Write functions to find a solution to the following nonlinear equations:

(a) $x - e^{-x} = 0$

(b) $\sinh x + 2x - 5 = 0$

(c) $\tanh x - 2x + 5 = 0$

using (i) bisection, (ii) Newton-Raphson, and (iii) secant methods.

2. Write a function to calculate square root of a positive number using Newton-Raphson method.

NOTE: Scilab has “sqrt” function for calculating square roots.