

Engineering Math III elect/elect
Assignment II

1) Command window

clc

clear all

close all

format long g

x(1) = 0.5;

k = 1;

tol = 1E-21;

max 1 = 50;

error(1) = 0;

syms x

G = (exp(0.5 * x) * (4 - x)) - 2;

G_prime = diff(G)

for k = 2: max 1;

x(k) = (x(k-1) - (subs(G, x(k-1))) / subs(G_prime, x(k-1)));

k = [k k];

error(k) = abs(x(k) - x(k-1))

if error(k) <= tol, break, end

end

table = [k' x' error']