

Abdulazeez Zuberi  
VF ENCS1001  
Civil Engineering

Solution

Command window

clear

clc

syms x

format short g

x(1) = 0.5

k = 1

tol = 1E-21

maxi = 50

err(1) = 0

$g = (x^2(60.5x)) * (4-x) - 2$

g\_prime = diff(g)

for k = 2 : maxi

$x(k) = (x(k-1)) - ((\text{subs}(g, x(k-1))) / \text{subs}(g\_prime, x(k-1)))$

~~err(k) =~~ k = [k k]

$\text{err}(k) = \text{abs}(x(k) - x(k-1)) * 100$

if err(k) >= 101,

break

end

Table = [k' x' err']