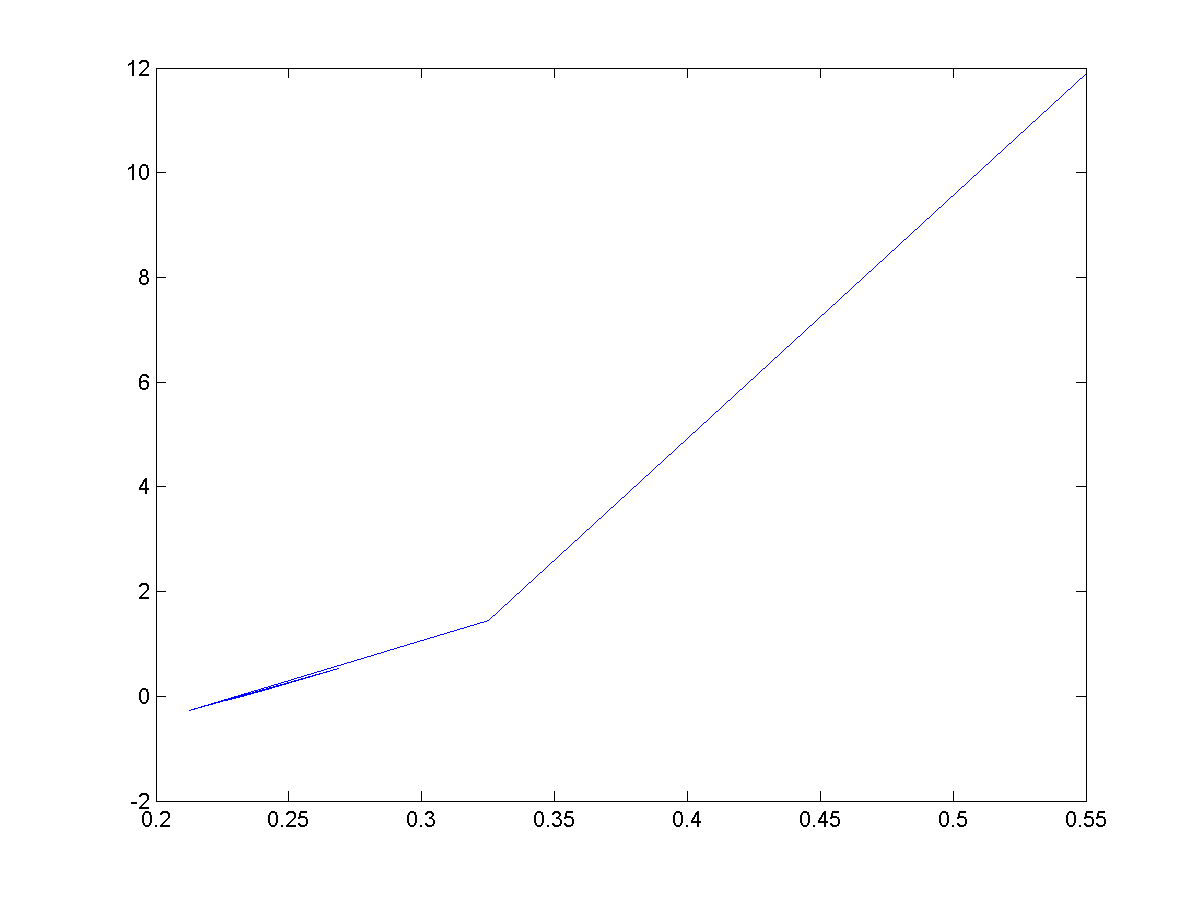
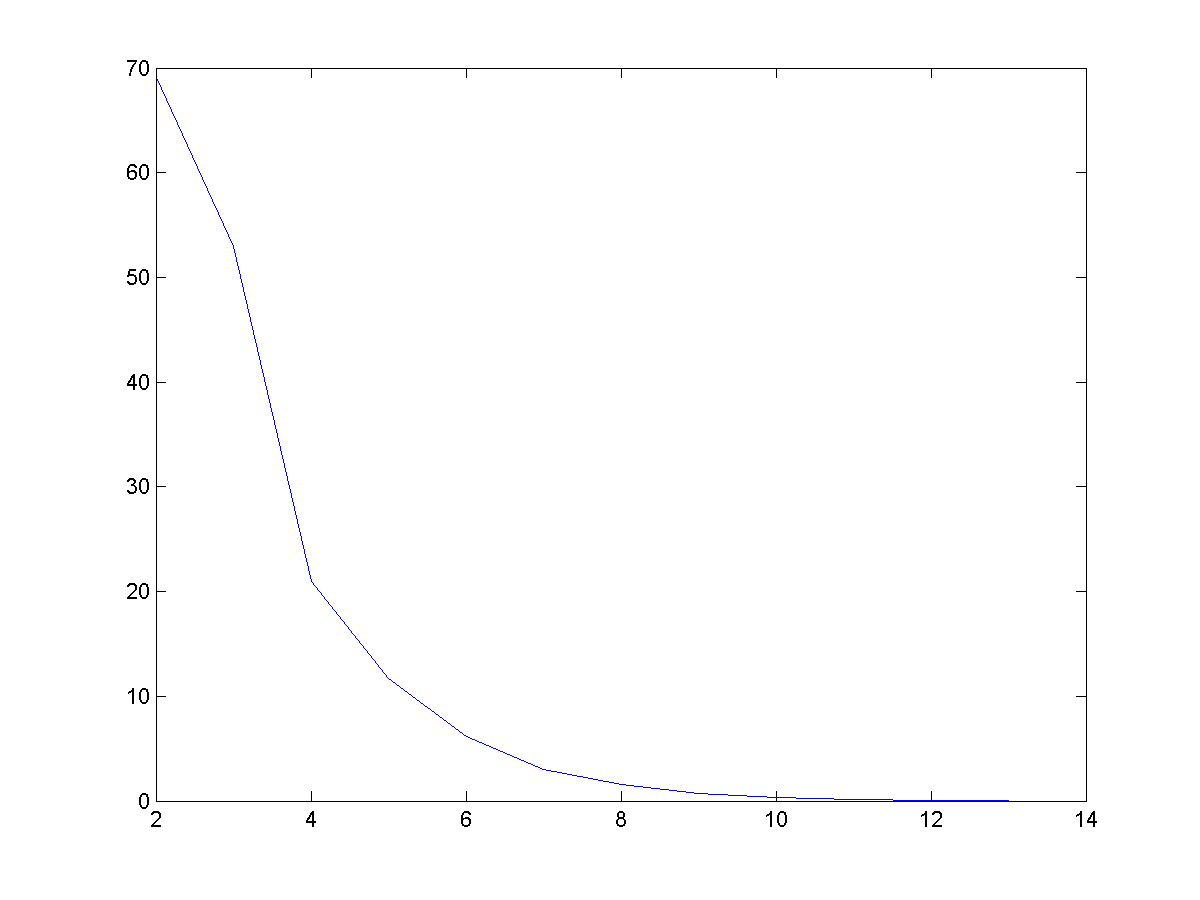
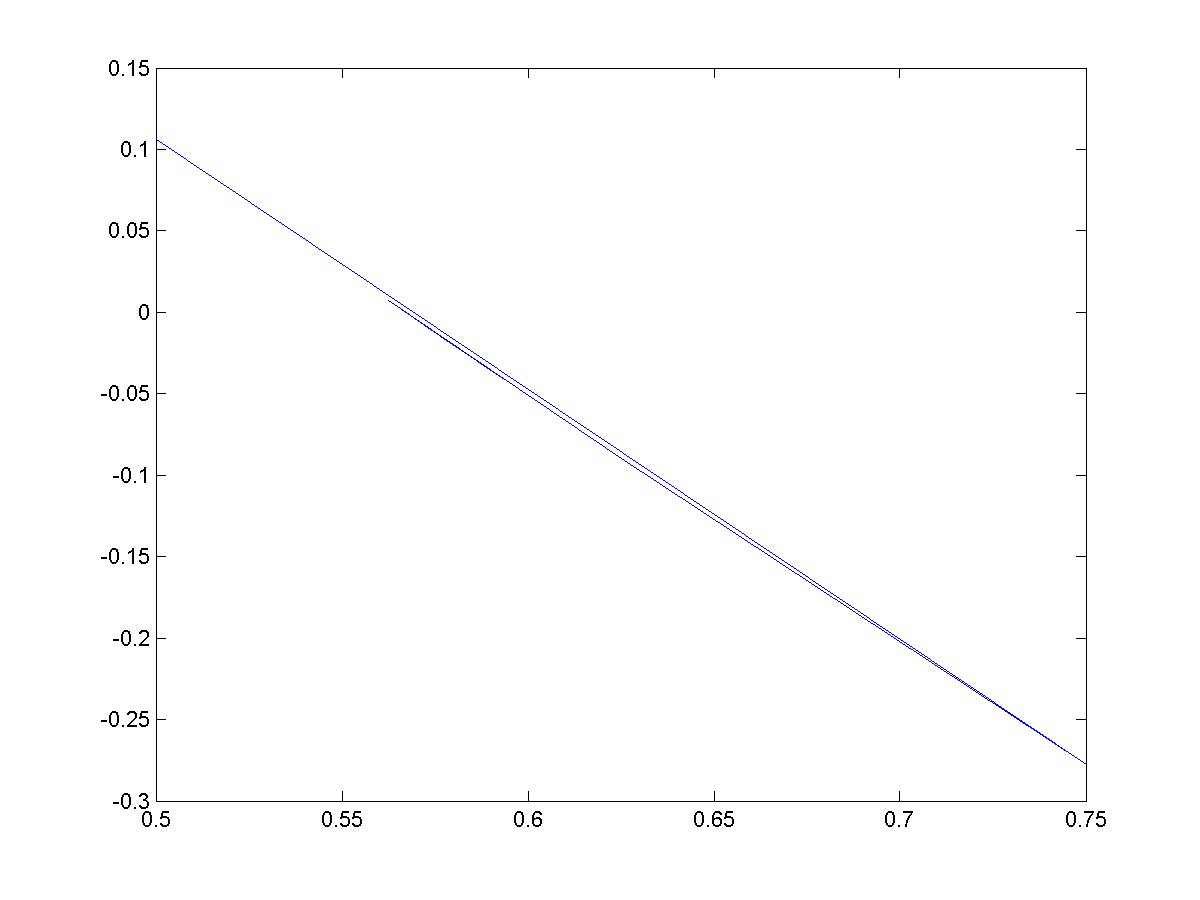
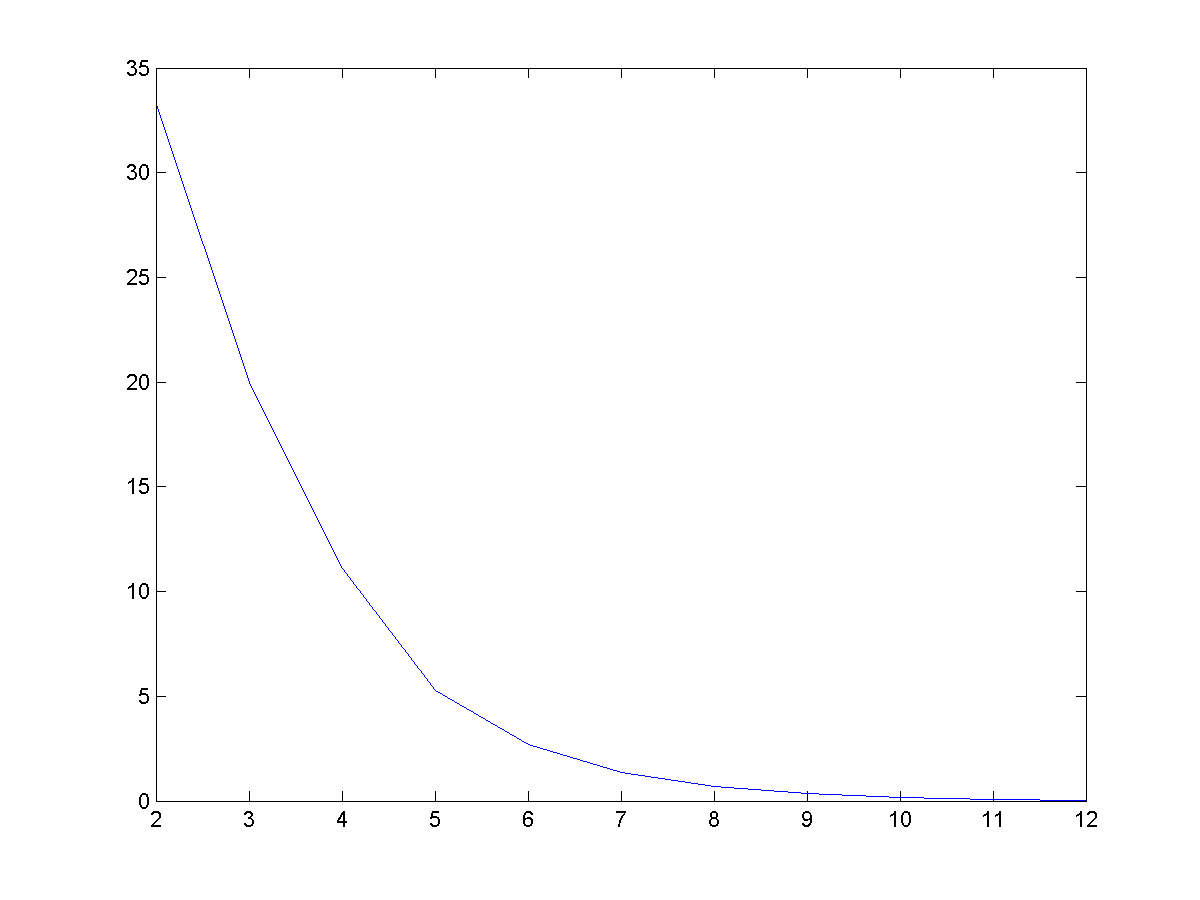
Q.1)

1. Bisection Method:

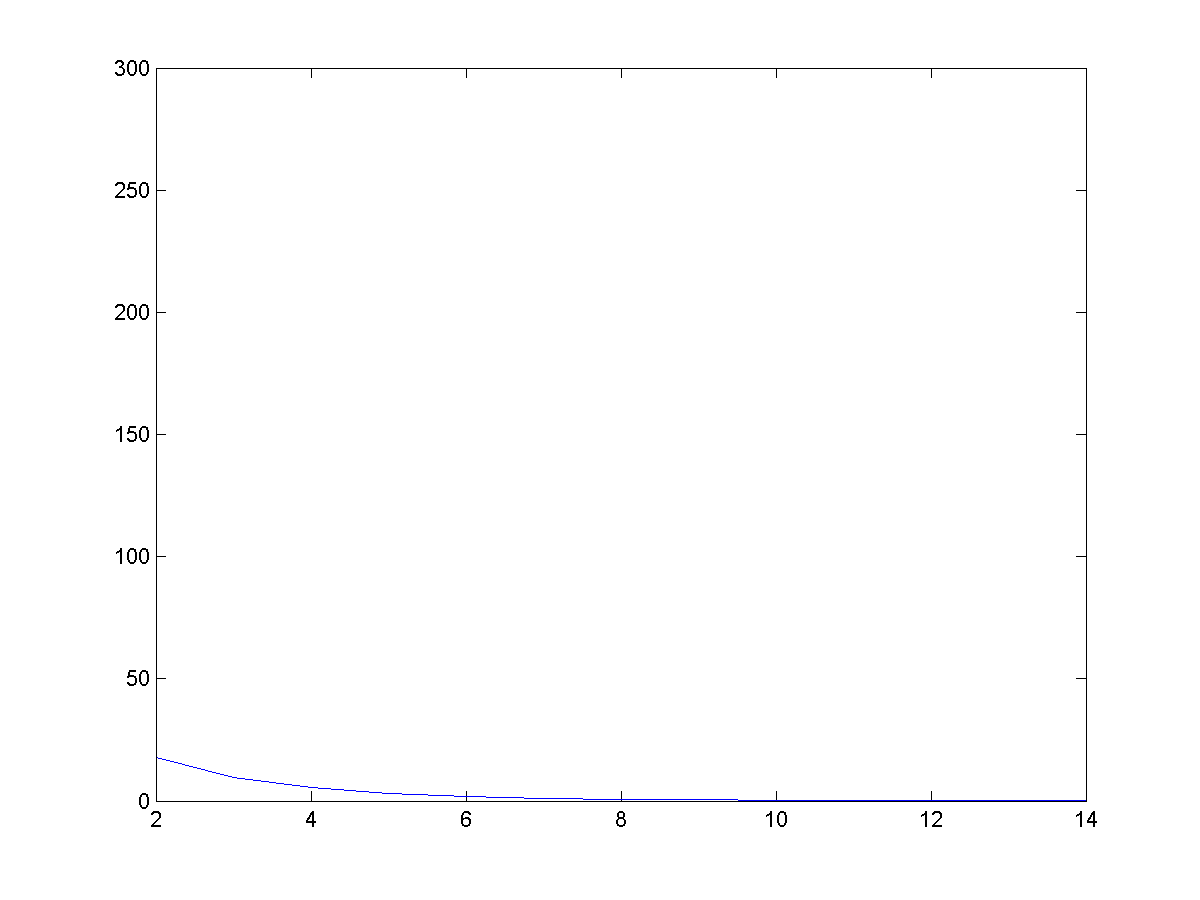
* f(x) =
* xl=0.1, xu=1.0
* Solution: x=0.2324

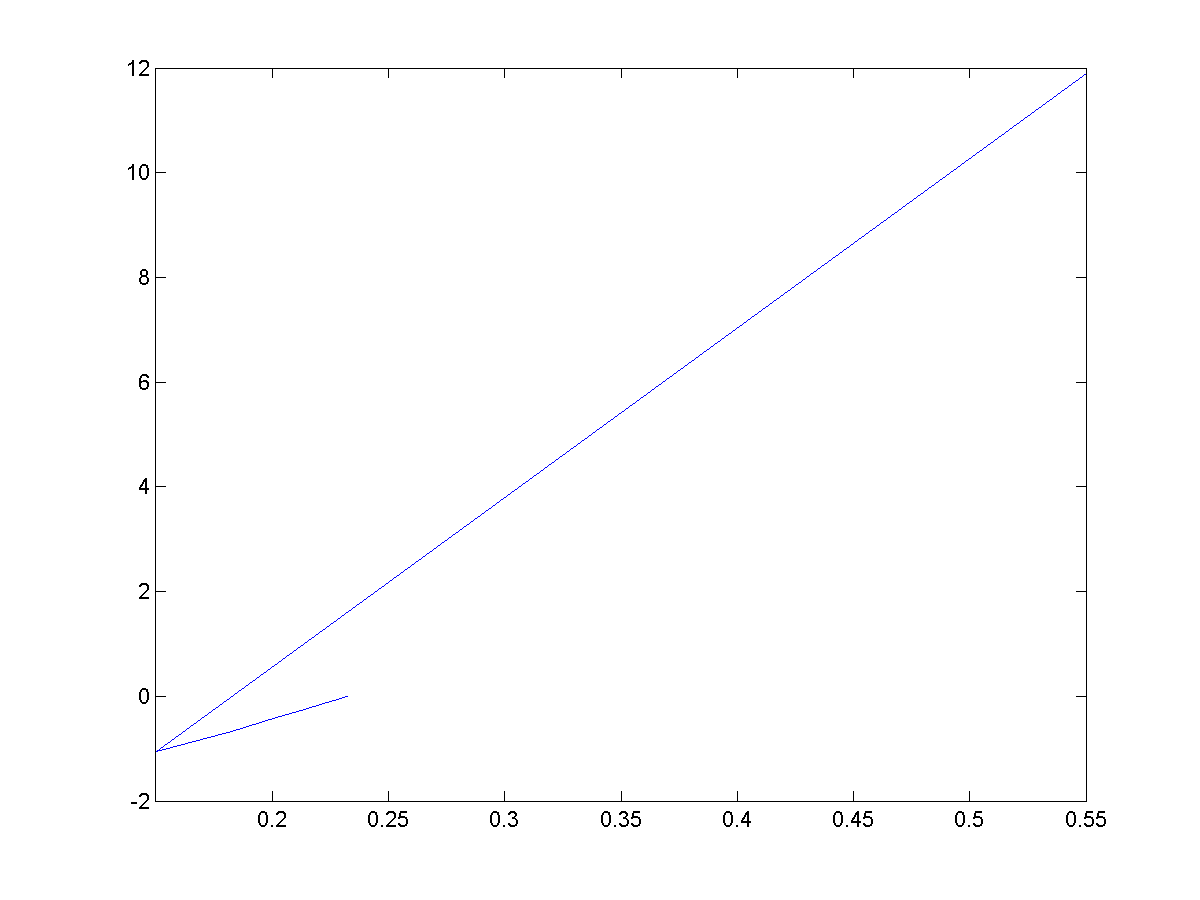
* f(x) = xl=0, xu=1.0

Solution x=0.5671

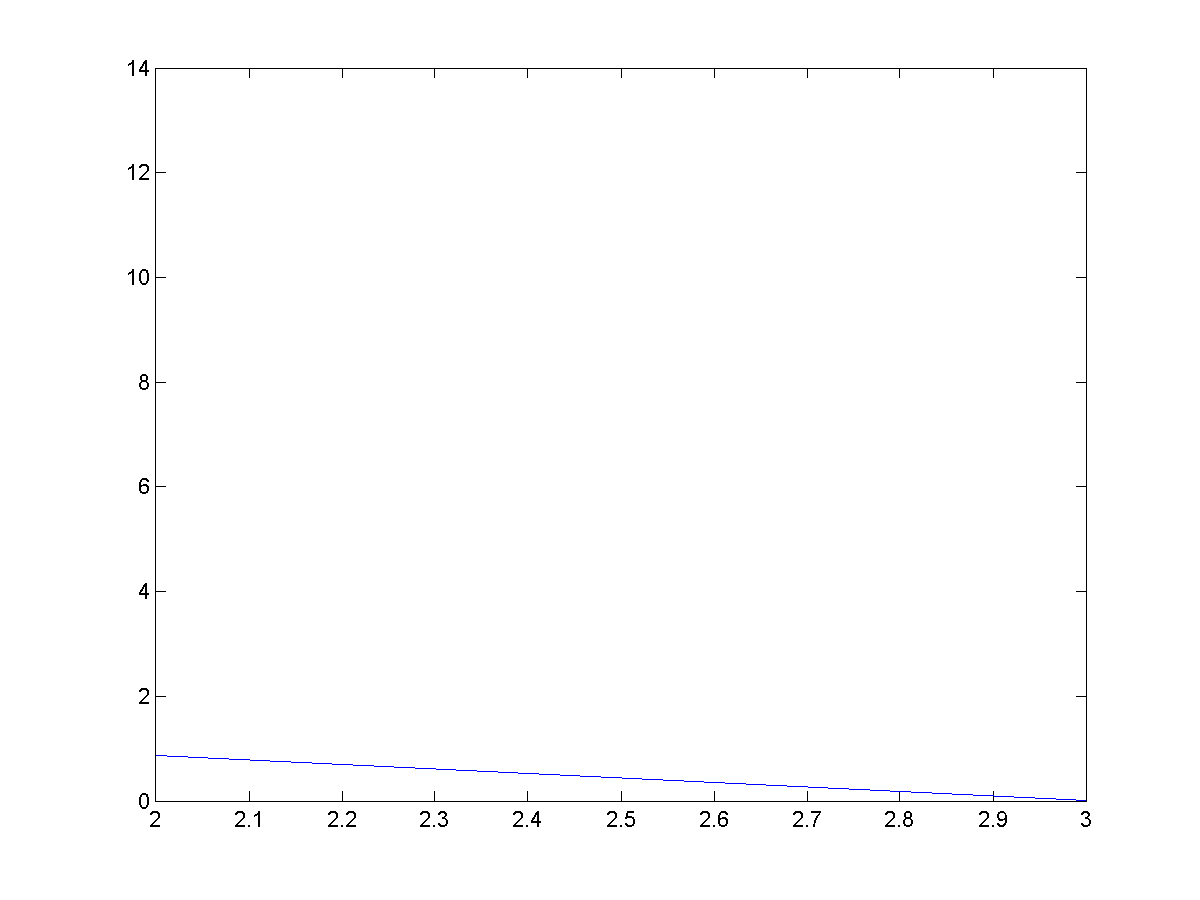
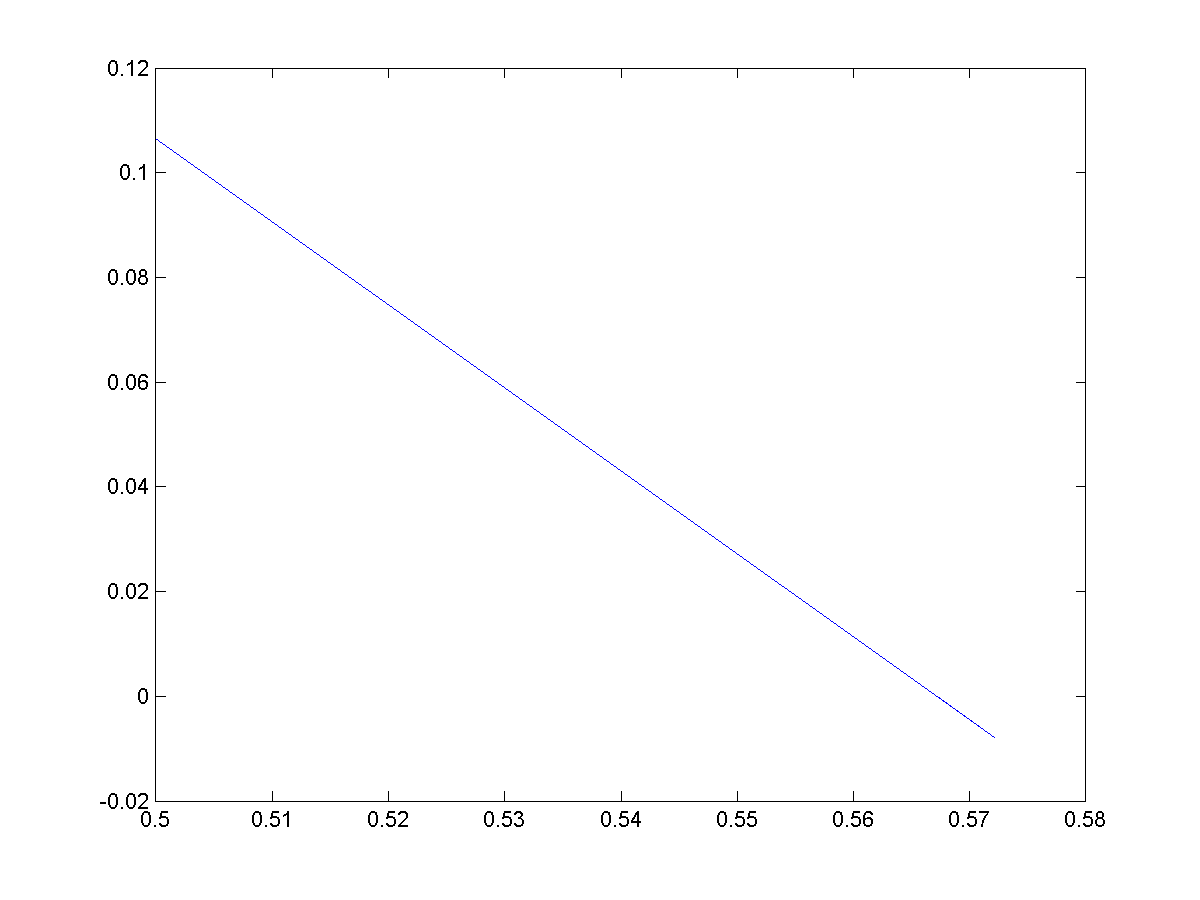
Plot f(X) vs X Plot rel error vs iteration

1. False position method:

* f(x) = , xl=0.1, xu=1.0

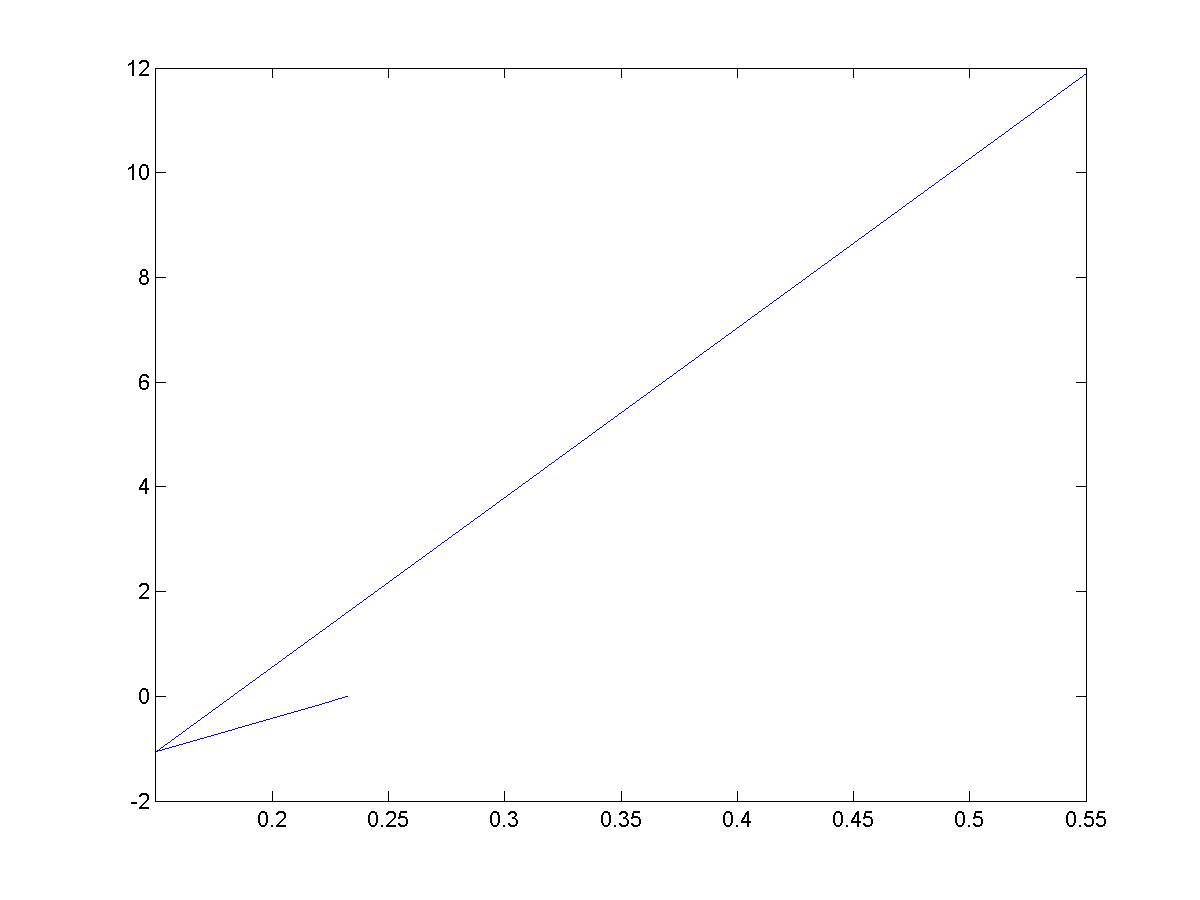
Solution x=0.2322

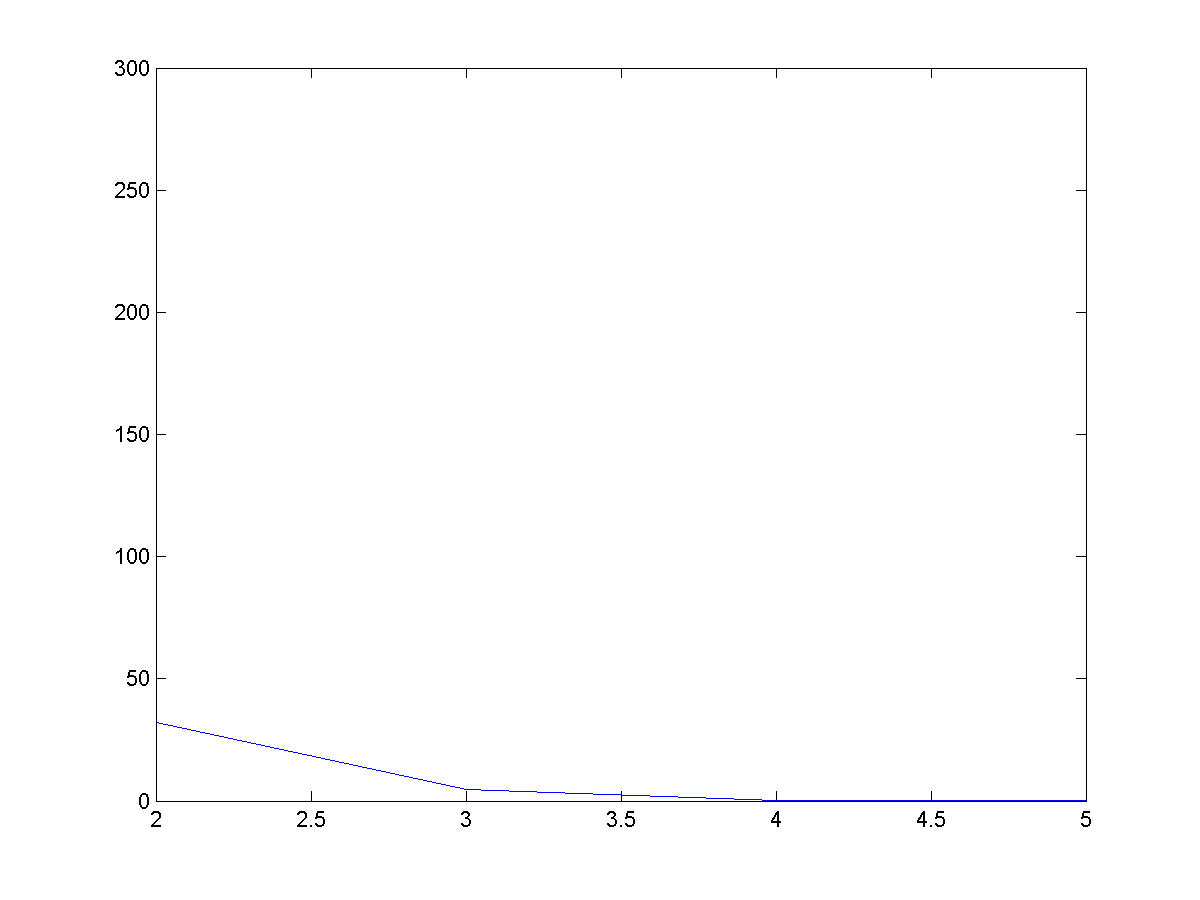
* F(x) = , xl=0, xu=1.0

Solution x=0.5671

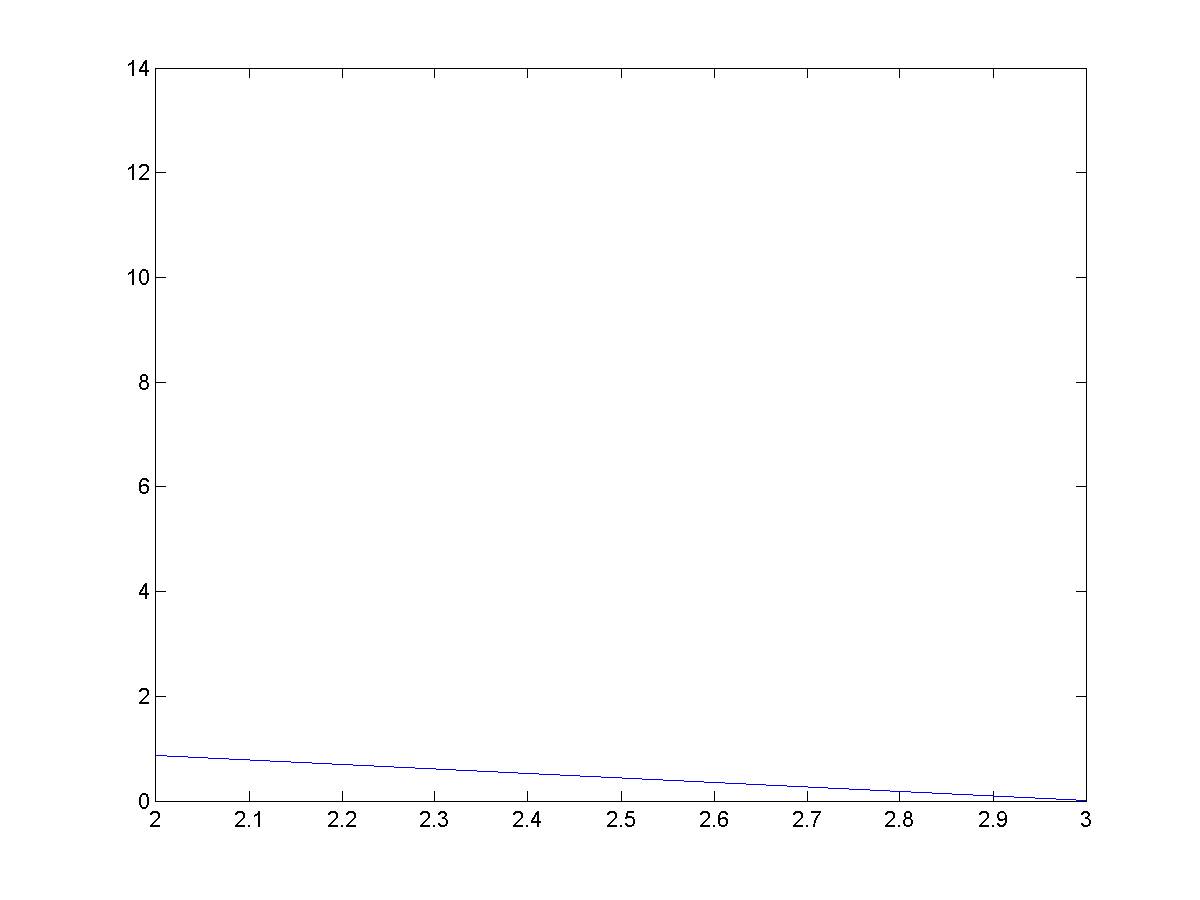
1. Modified false position method:

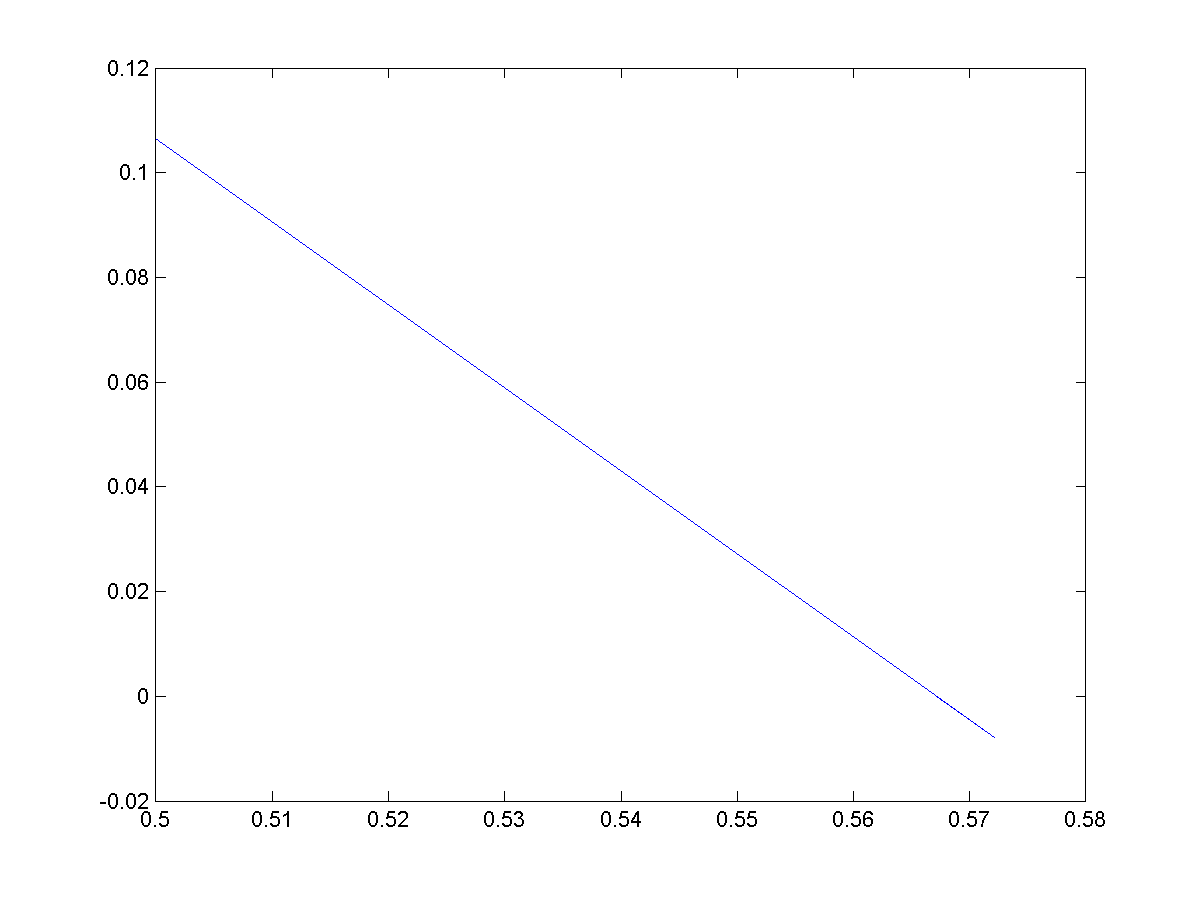
* f(x) = , xl=0.1 ,xu=1.0

Solution x=0.2324



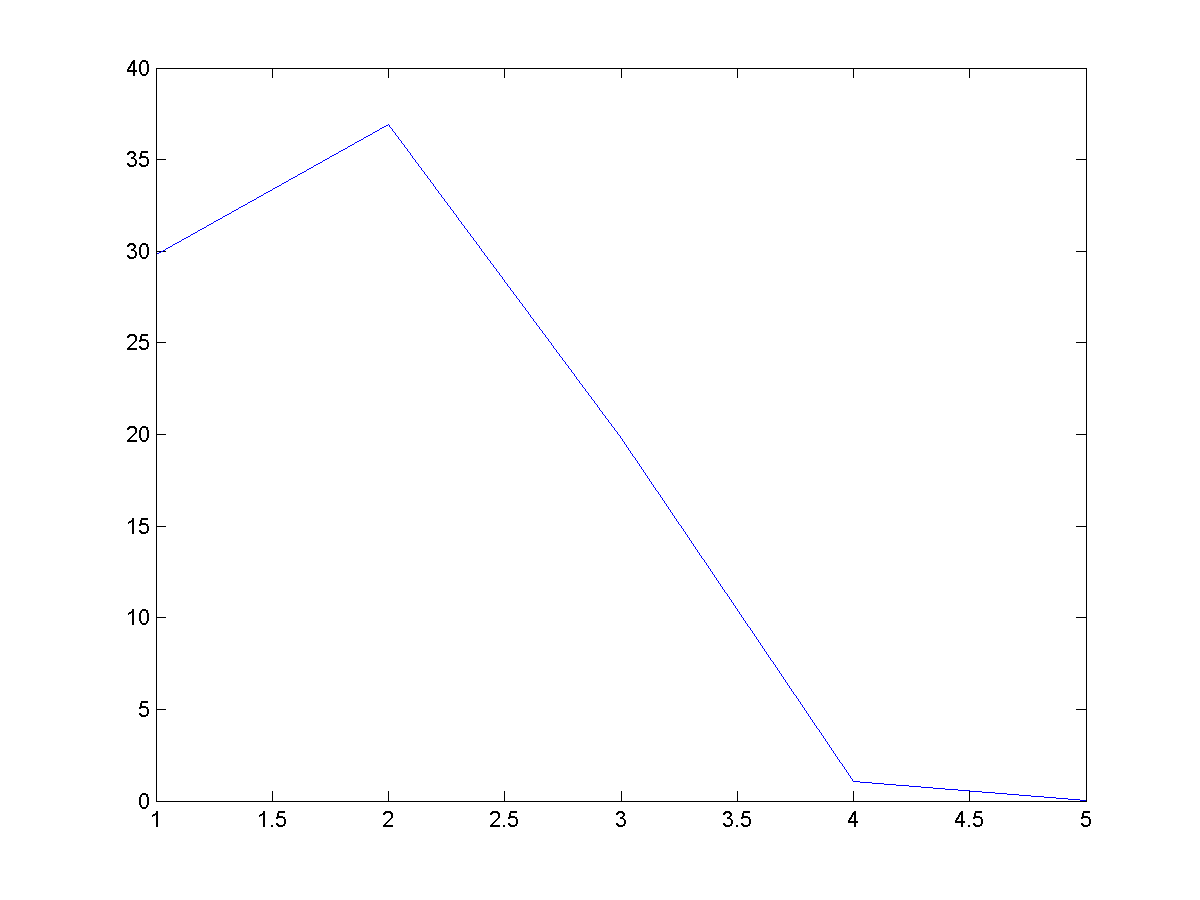
* f(x) = , , xl=0 ,xu=1.0

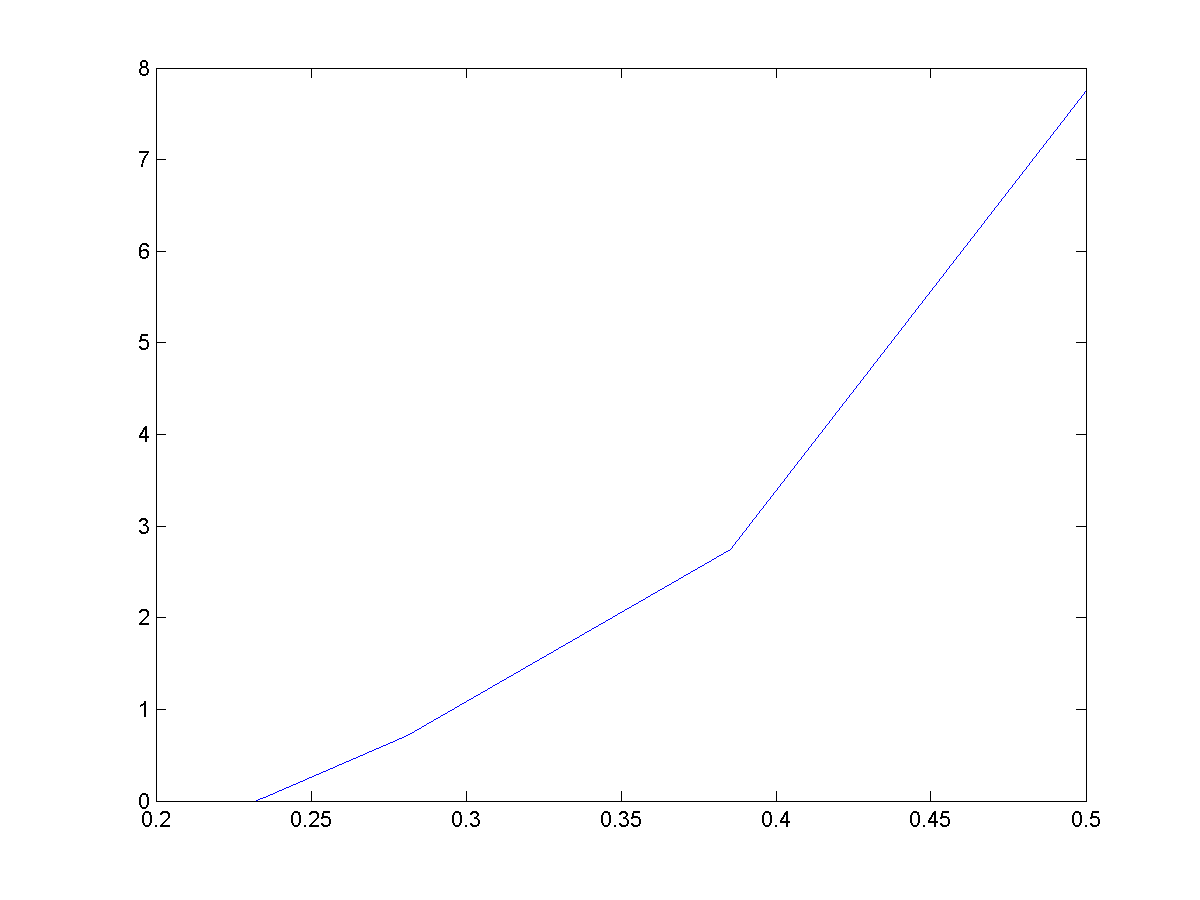
Solution x=0.5671



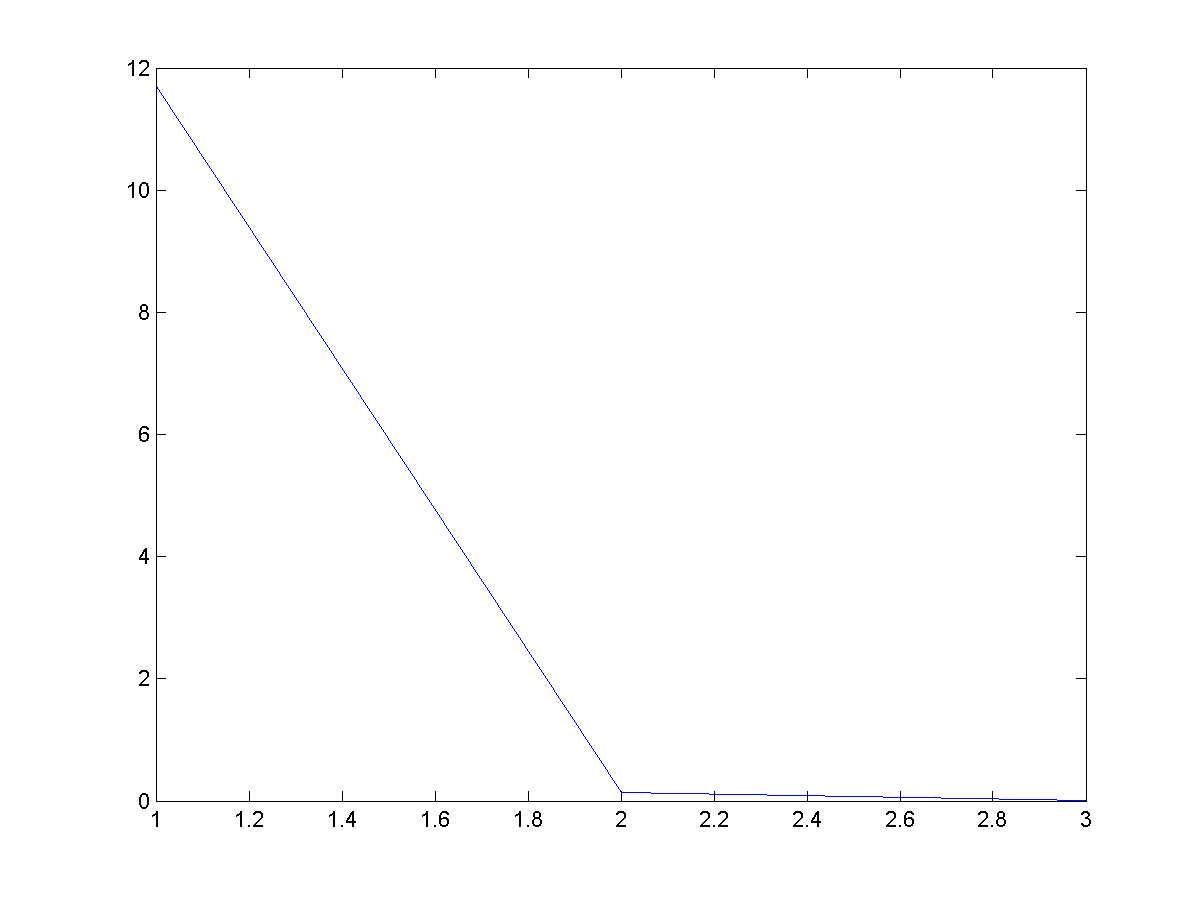
1. Newton-Raphson Method:

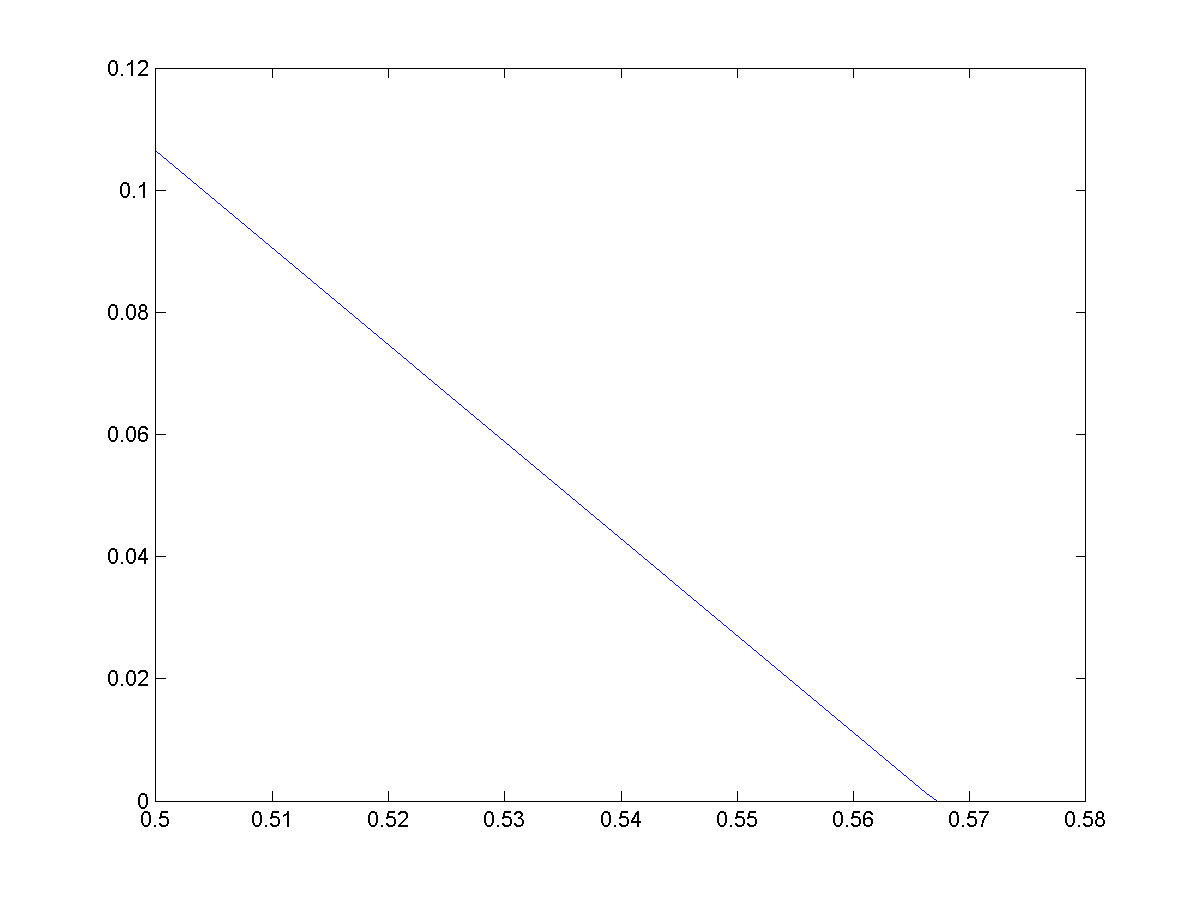
* f(x) = , x0=0.5

Solution x=0.2325



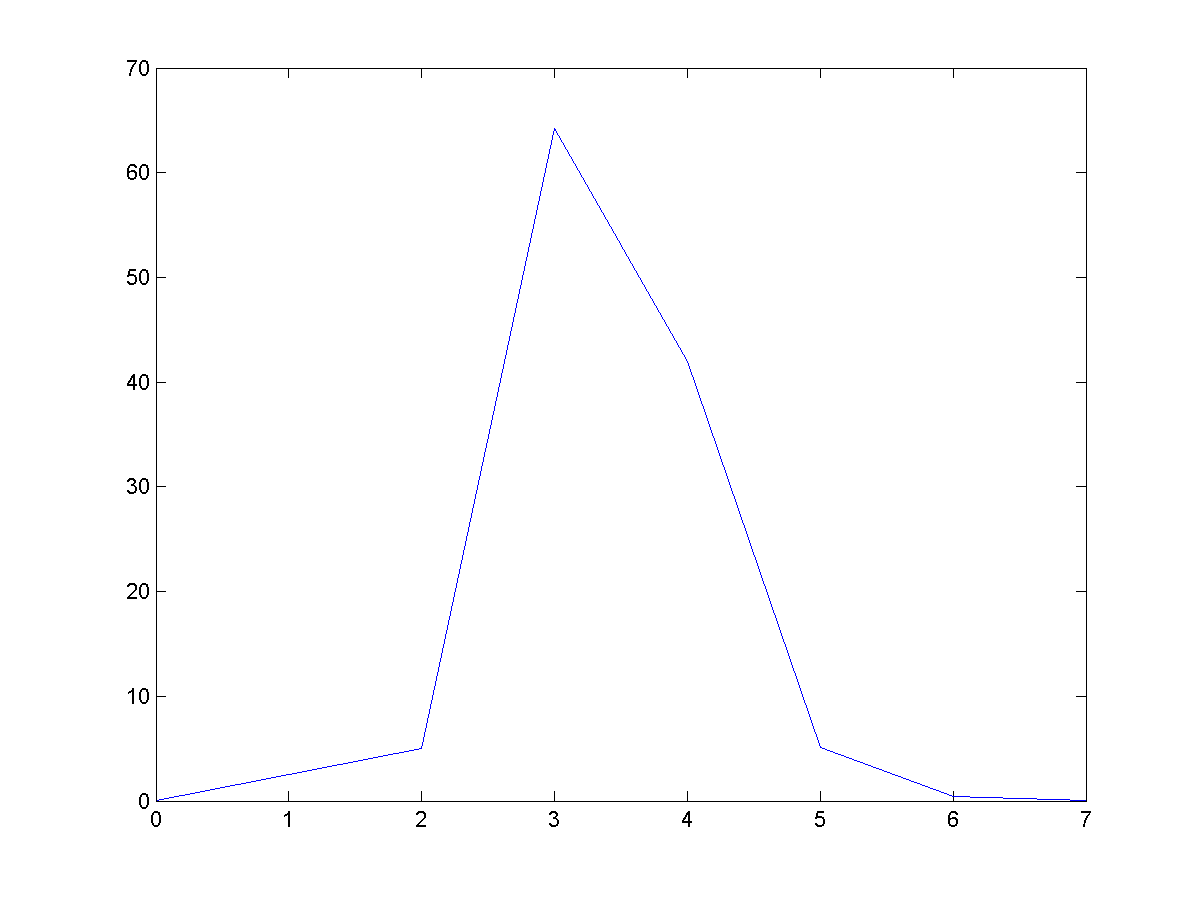
* f(x) = , x0=0.5

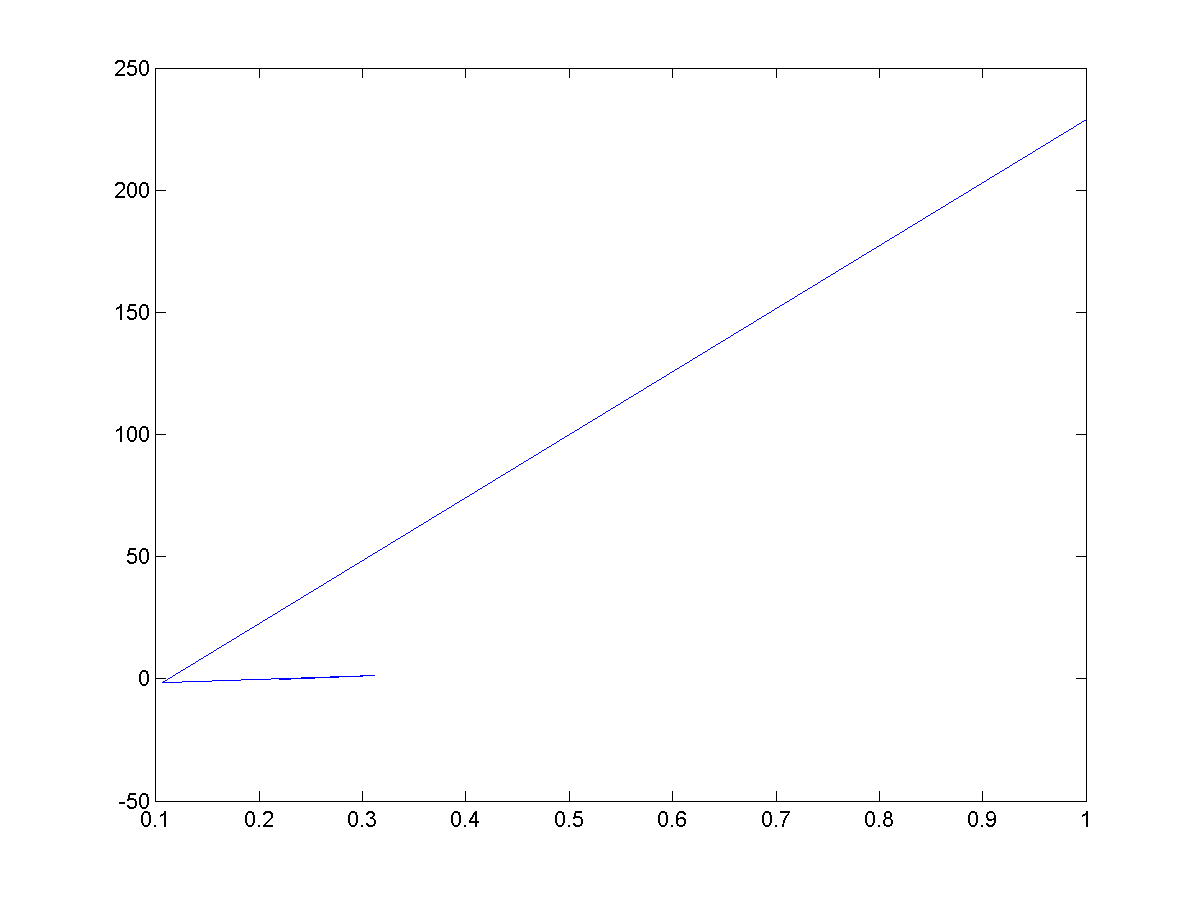
Solution x=0.5673



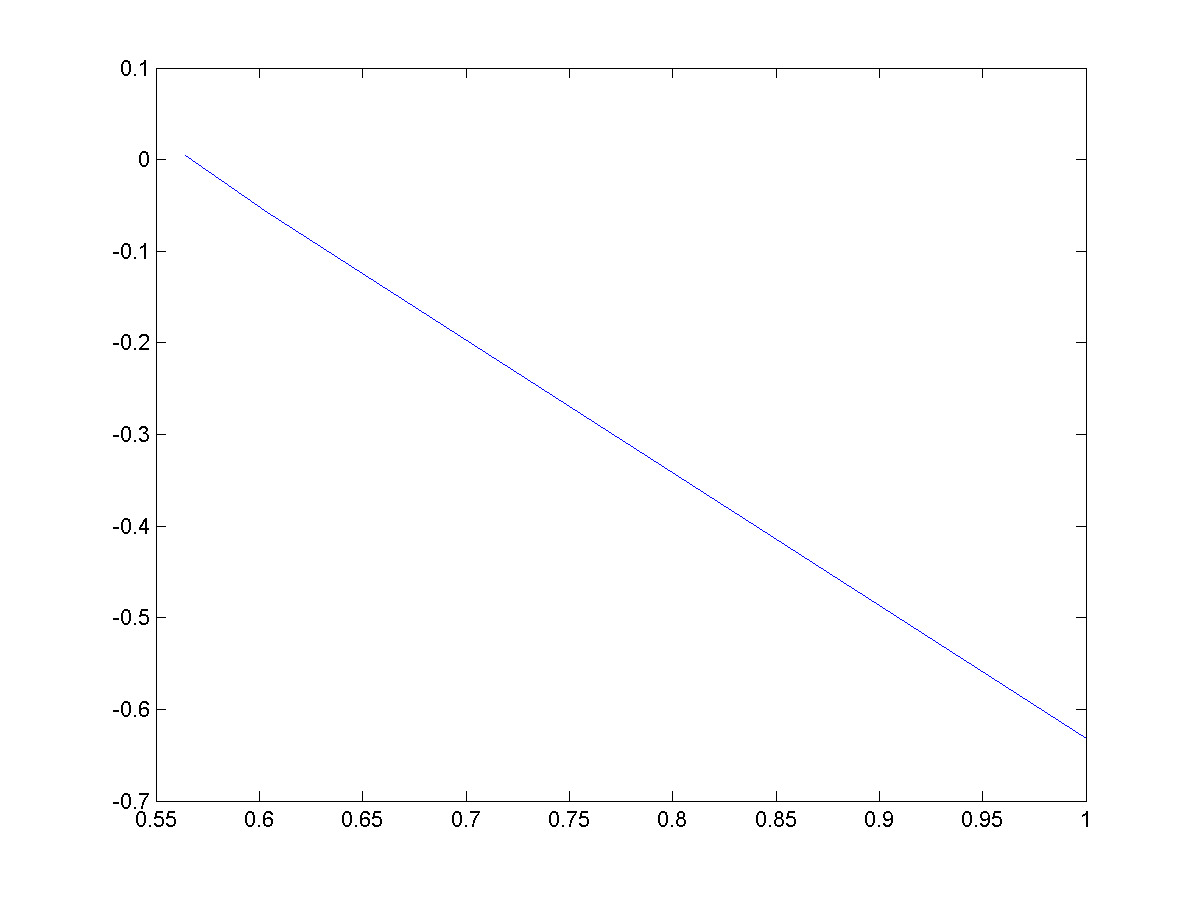
1. Secant Method:

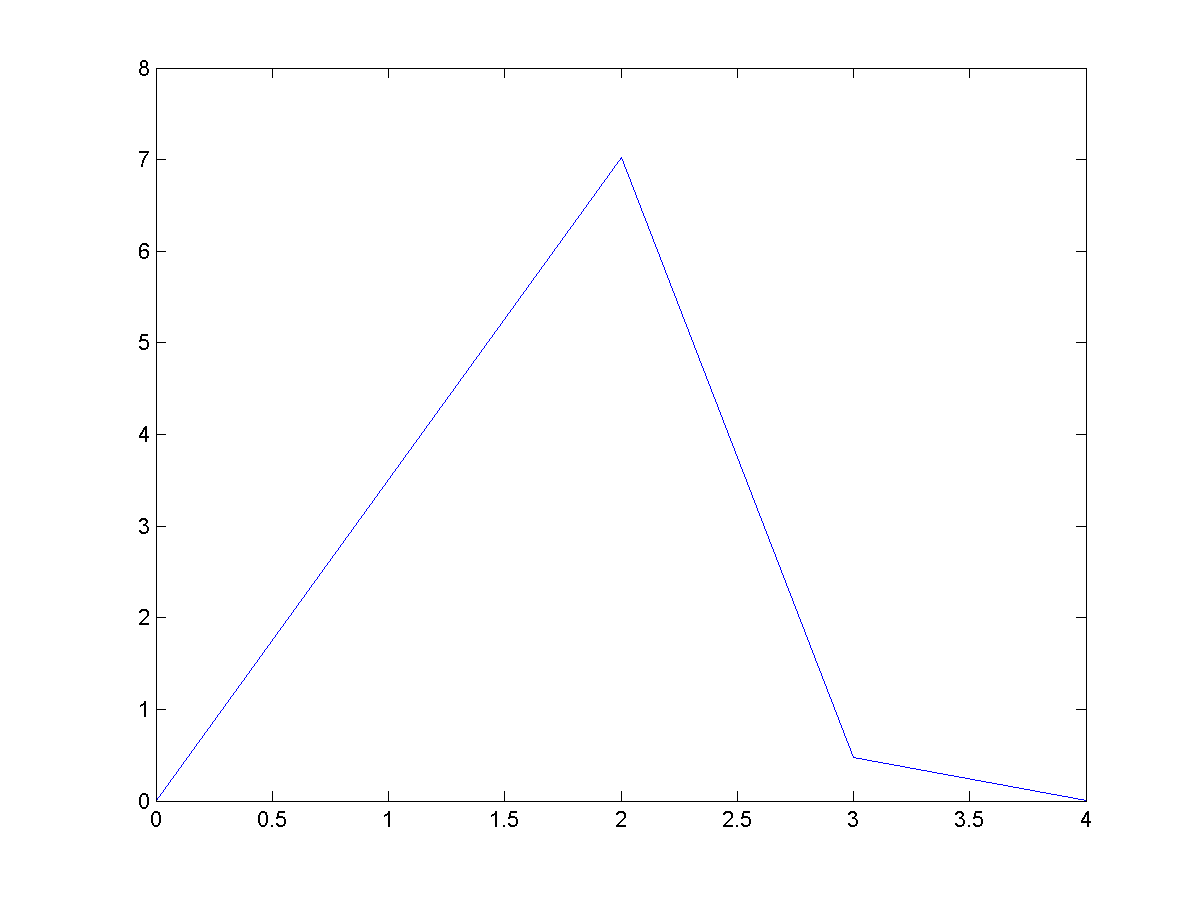
* f(x) = x-1=0.1, x0=1

Solution x=0.2324



f(x) = , x0=0.1 x1=1

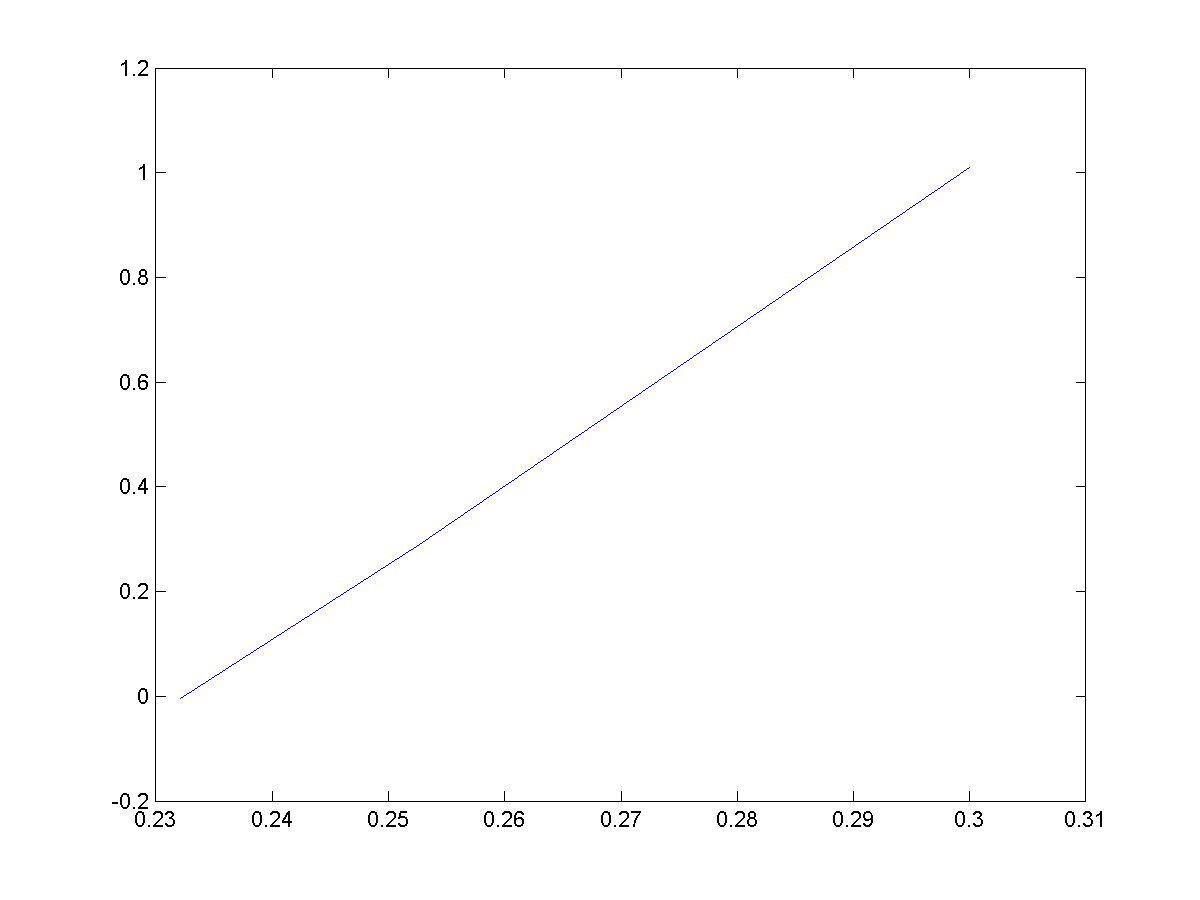
Solution x=0.5671



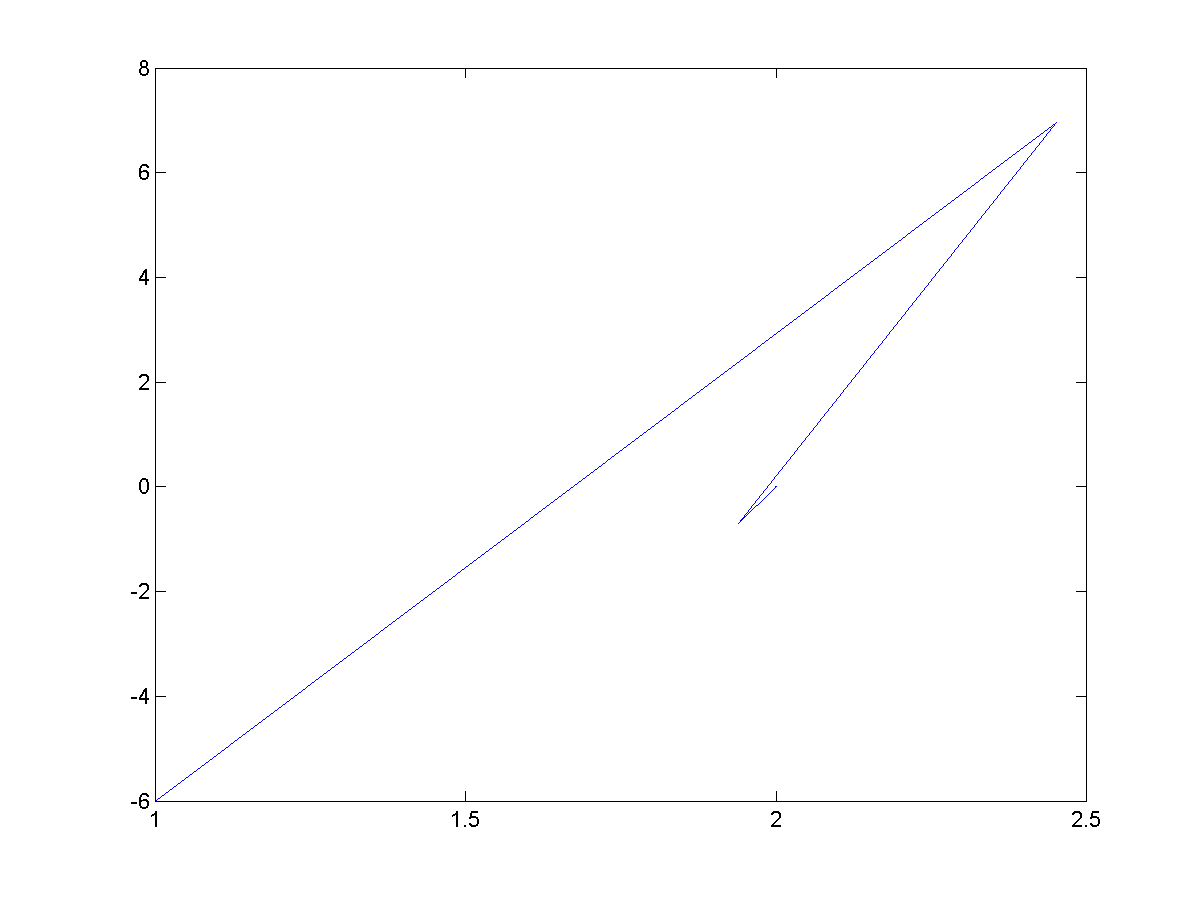
Q.2)

1. Muller Method:

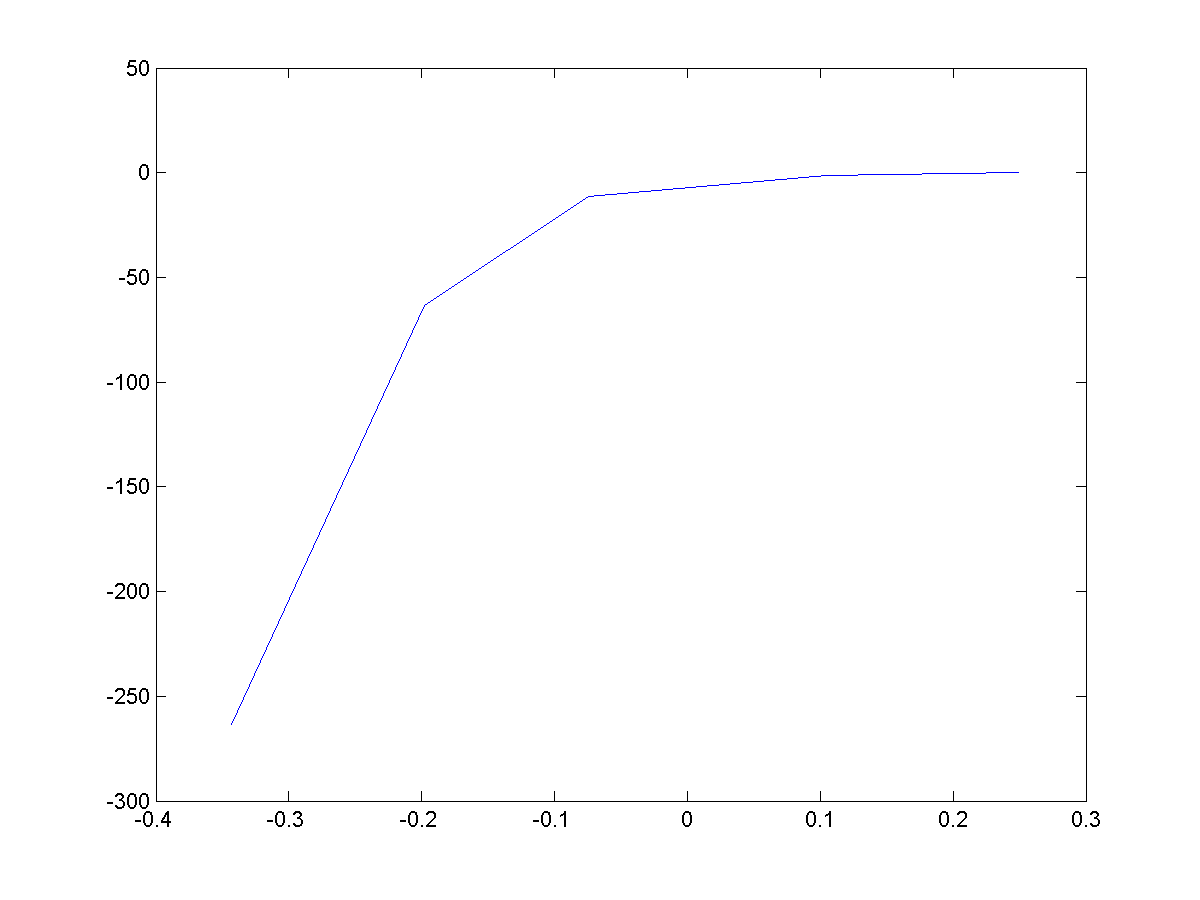
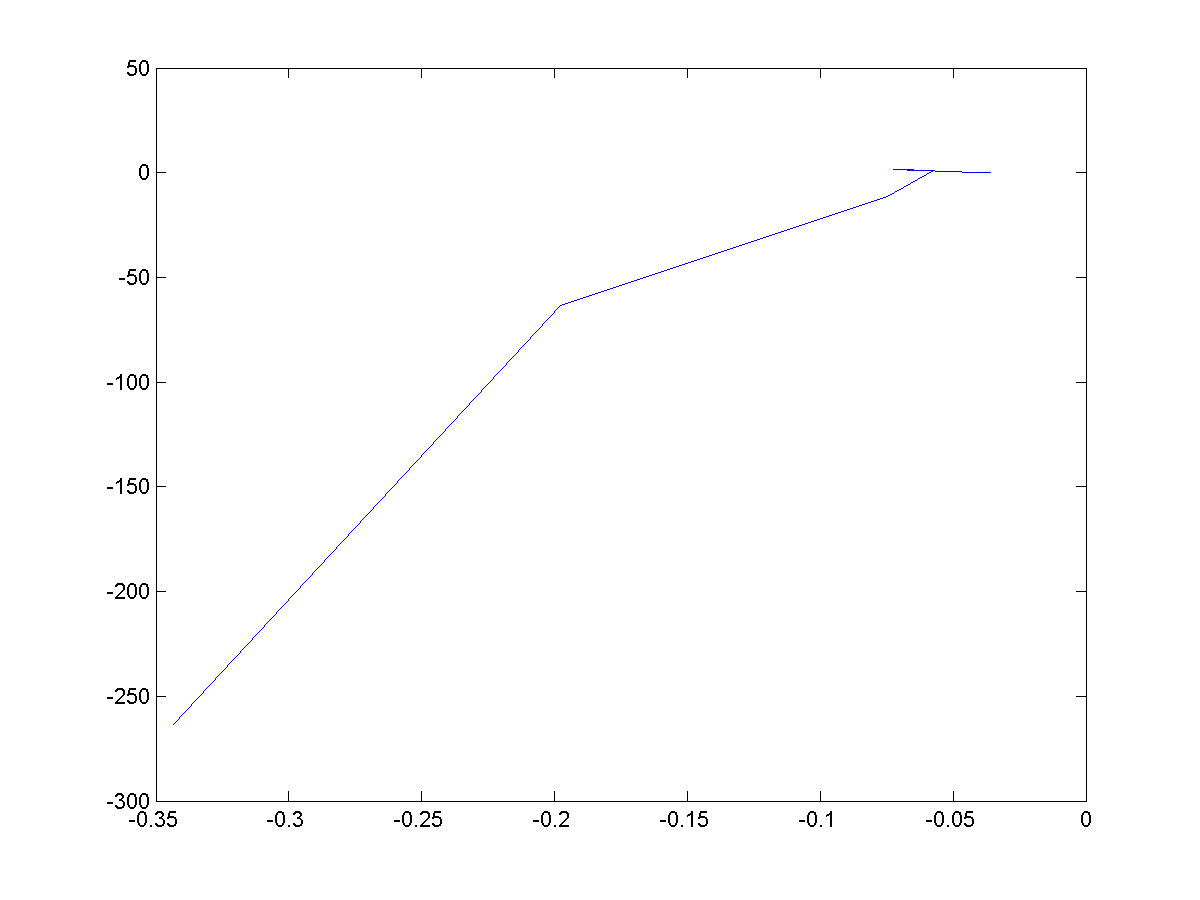
* f(x) = , x0=0.0 ,x1=0.1, x2=0.3

Solution x=0.2324

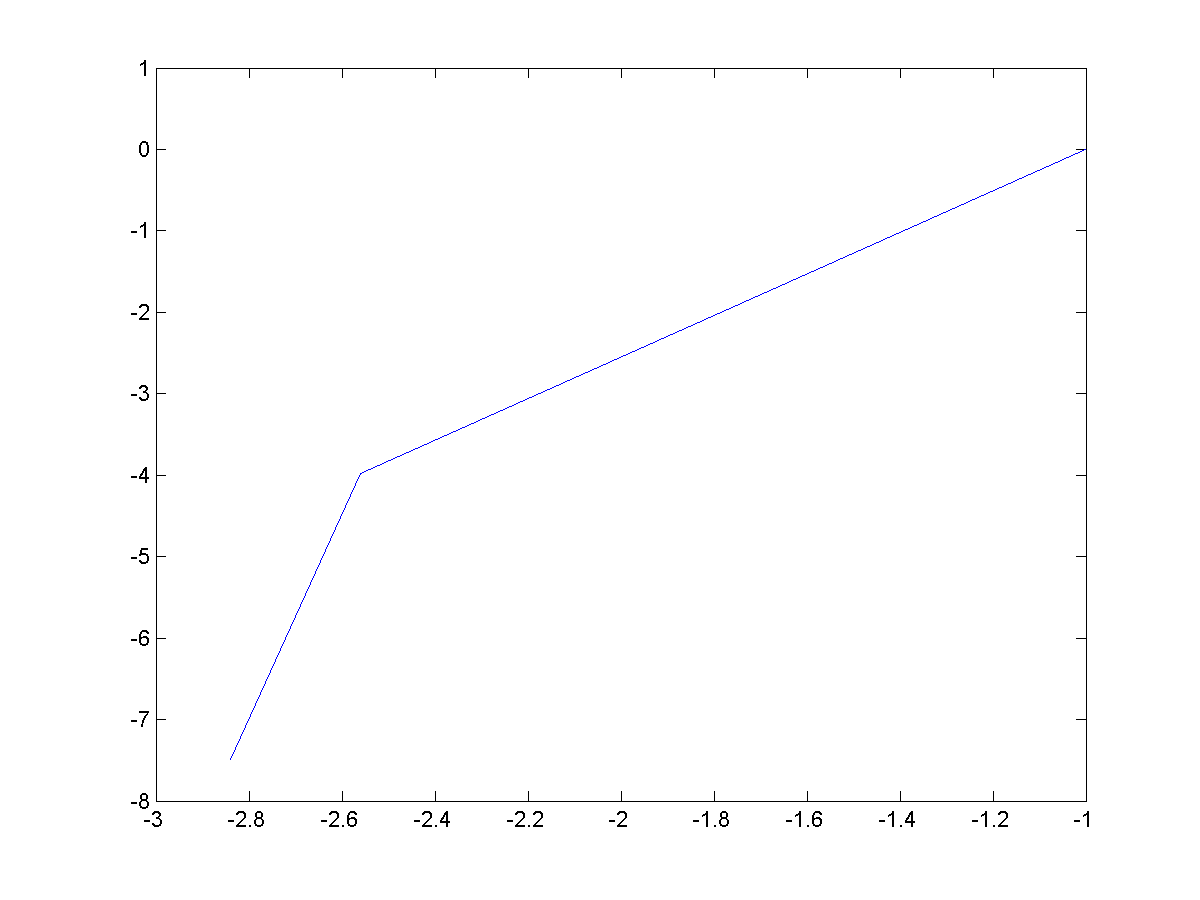
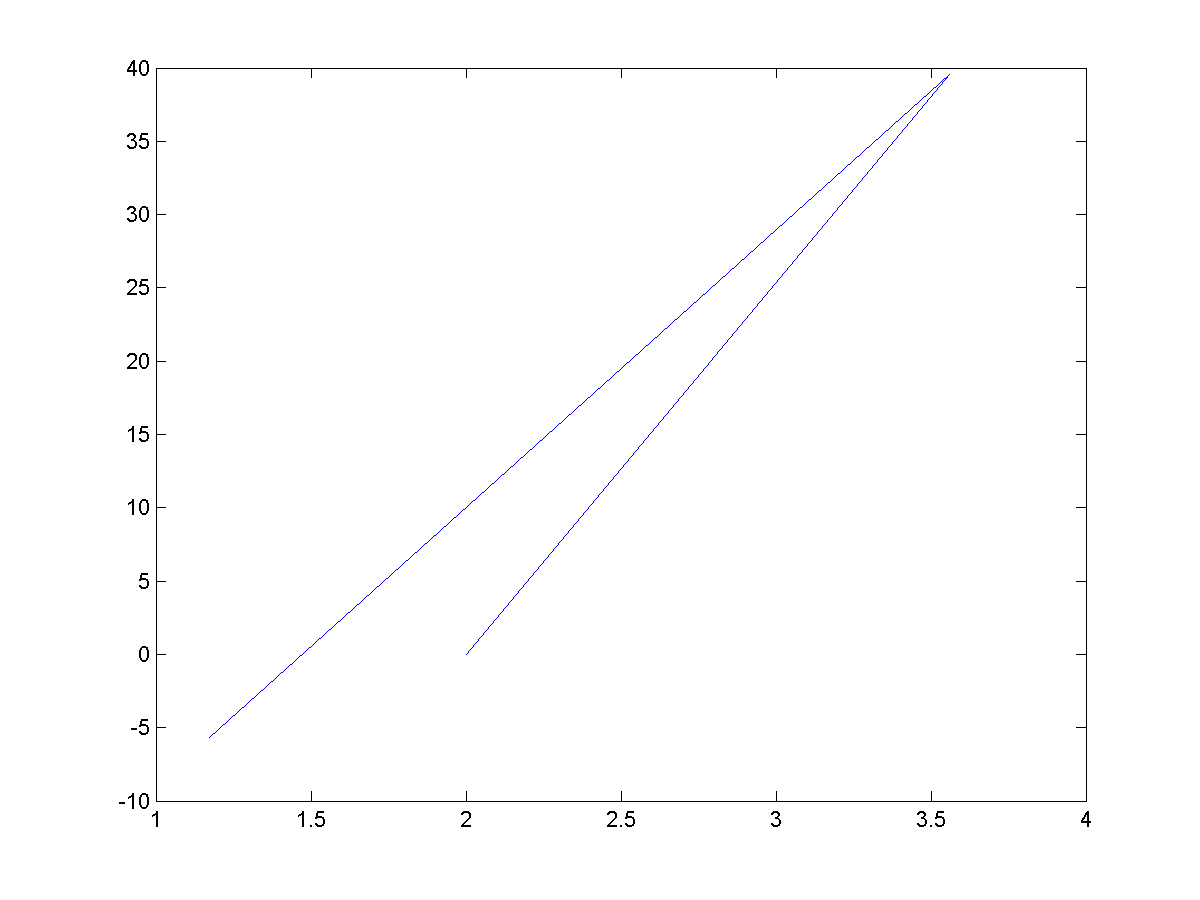
f(x) = , x0=0, x1=0.5, x2=1

Solution x=2

(G)Bairstow Method:

* f(x) = , r=-1 s=-1
* Solution x=0.2324, -0.0358

f(x) = ,

Solution x=2, -1