Zheng Yin

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V00915261

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The matlab function did not work which I did not know the reason why, even everything looks fine.

Question 1

(a)

function Newton(x0, e, i\_max,f,fp)

i = 1;

xn = x0;

root\_found = false;

fprintf(' iteration approximation \n')

while i<= i\_max

Xn = xn- (f(xn)/fp(xn));

fprintf('%6.0f %18.8f \n',i,Xn);

if abs(1-(Xn/xn))<e

root =Xn;

root\_found = true;

break;

end

xn= Xn;

i = i+1;

end

if root\_found ==false

fprintf(['failed to converge in %g iteration\n',i\_max)

root = [];

end

(b)

图表, 折线图

描述已自动生成

©

(d)

Question 2

(a)

图表, 直方图

描述已自动生成