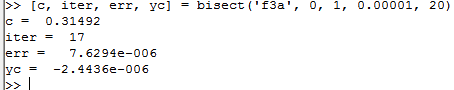
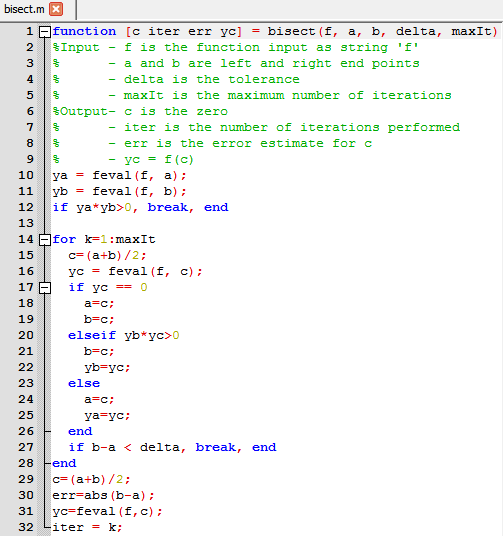
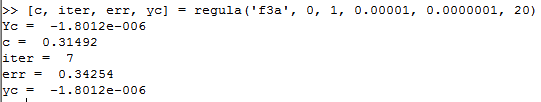
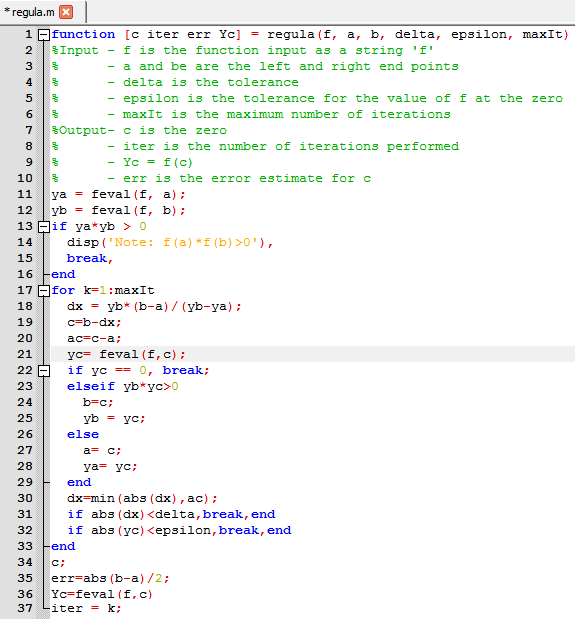
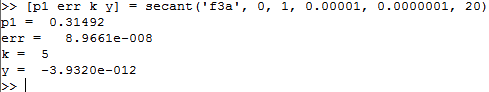
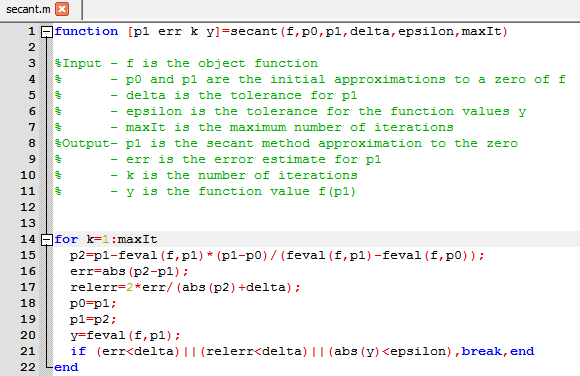
3a) 

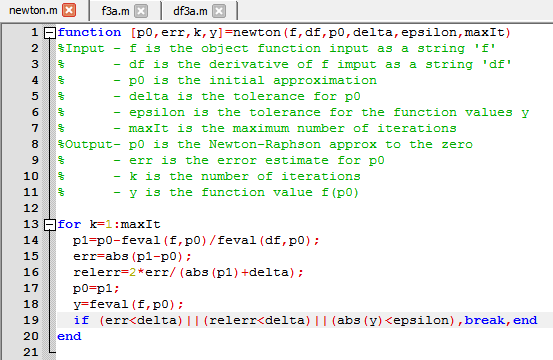
3b)

3c)

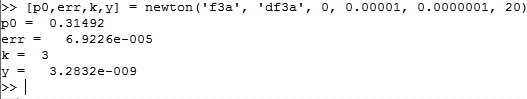


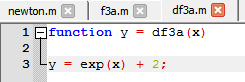
3d)

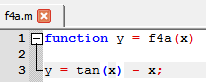




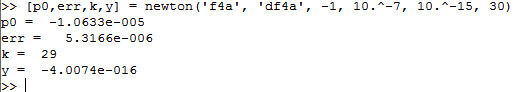
3e)



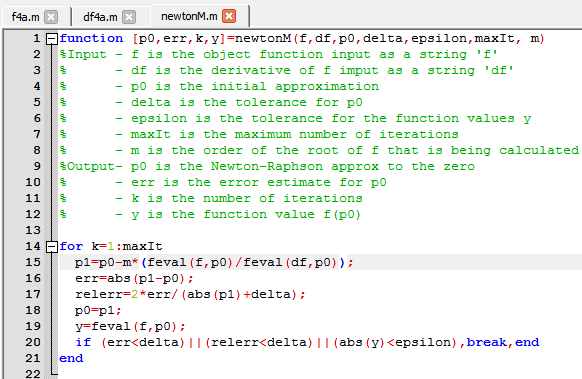


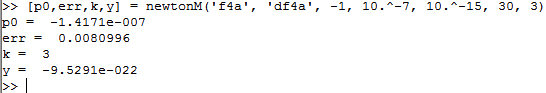
4a) 

Matlab’s fzero built in function does not return the correct solution

4d)

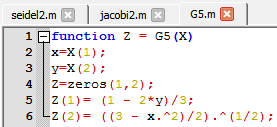
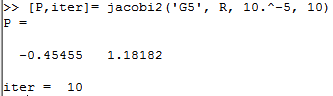
see newton.m from question 3e as I used the same function here

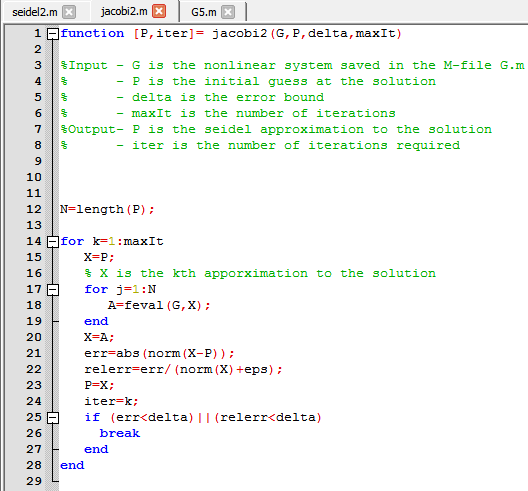
4e)

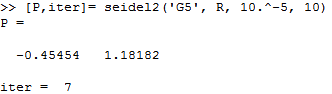


The modified newton method converges significantly faster, converging to a more accurate answer in 3 iterations vs. the unmodified newton method converging in 29 iterations

5c) Converges in 1 iteartions





5d) Converges in 7 iterations

