Homework 4 # Adding `NewtonRaphson` to your Library Due Oct 20, 2021

## 1: Newton-Raphson method (90 pts)

Add your Newton-Raphson function to your library. Things to keep in mind:

- Name Your function **NewtonRaphson**
- Use this order for your parameter list:
  1. initial guess, **x**
  2. tolerance, **tol**
  3. maximum iterations, **Maxit**
  4. function, **f**
  5. function derivative, **df**
- The Newton-Raphson declaration belongs in the RootFinding class with Bisect.
- The Newton-Raphson code belongs in the same .cpp file as the Bisect code.
- Call NewtonRaphson the same way you called Bisect in the `main()`
- You will need to pass in pointers to the functions f and df. Define df in the same manner as f in the .cpp file containing the `main()`.

## 2: Test your library (10)

Test your Newton-Raphson code on the function covered in slide 4 of lecture 12. Report the value of the root.

## Submission Details:

Submit a **.zip** file of your visual studio project to Canvas.