

In this class you should learn:

- *Why the problem $f(x) = 0$ is a general problem that occurs.*
- *How we can use bisection to find solutions under some fairly mild conditions.*
- *How long the bisection process takes to solve a problem, and the limits of bisection.*

November 28, 2016

Nonlinear equations

Next class

Newton's method & secant method
Review

Next next class

3rd Midterm / Final

Nonlinear equations

Today Section 4.1

Statement of nonlinear equation problem, bisection for solutions. Limits of bisection

Wednesday Newton's method & the secant method

Friday Midterm!

Learning goals

Understand the general form of a nonlinear equation problem.

Be familiar with three popular solution methods:

- Bisection
- Newton's method
- The secant method

The nonlinear equation problem

Find x where $f(x) = 0$