

Newton's Method

The goal of the presentation is to discuss Newton's Method for finding a zero of a function. Your presentation should include at least

- A discussion of the history of the method.
- A discussion what a tangent line is.
- A discussion of what the slope of a line is.
- Mentioning that if $f(x)$ is a function $f'(x)$ is the slope of the tangent line to f at the point x .
- A geometric explanation of the method. How is it similar to our method of spider diagrams?

In addition you should include at least one thing not on the above list

At the end of your presentation the class will be asked one of the following questions.

- Does Newton's method always work?
- What is goal of Newton's method?
- If x_n is the $n + 1$ st iteration of Newton's method for a function f , what is x_{n+1} in terms of x_n and f ?

A good starting point for your research is

http://en.wikipedia.org/wiki/Newton%27s_method

If you have any questions regarding the presentation feel free to e-mail your TA or Dr. Ackerman