

Assignment 9 – Robin Nehls & Yves Müller

If we put our seeds too close to any maximum or minimum, we have to do more iterations. Due to that $H'(x)$ is nearby zero, the result of $f(\text{guess})/f'(\text{guess})$ becomes quite large and we need more iterations to correct this behavior. A simple and obvious fix, would be to choose different seeds. Other possibilities to prevent this, could be based on the knowledge we have about the quality of our guesses. We could catch these large quotients and differ them in order to end up with less iterations.

The function $h(x)$ isn't symmetric, so depending on the side we observe, we could need more or less operations.