3.12-Newton’s Method

Recall: The Linear Approximation of $f$ at $x_0$ is given by

Set this equal to 0 and solve for $x$. What do you obtain?

Example: Given $x_0 = 1$ is an approximate solution of $x^2 = 2$, find the solution to 4 decimal places using Newton’s Method.

On Your Own: 3.12 #1, 3, 7, 9, 13