Test report

Osian Shelley

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Abstract

In this report, we show how to plot a function and its derivative. There is nothing particularly difficult about this.

1 Introduction

Here is an introduction into the problem. We are trying to plot the function

$$f(x) = \sin(x) \tag{1}$$

and its derivative.

2 Results

Here are some results. The function is approximated on a grid with $N = 128$ gripoints. See figure 1 for results.
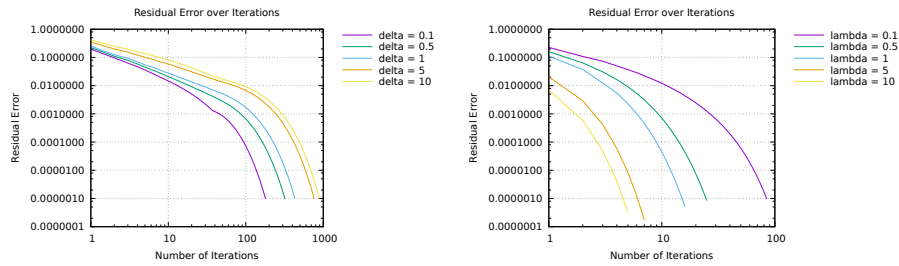

Figure 1: This is the figure. Left: Function $f(x) = \sin(x)$. Right: Derivative $f'(x) = \cos(x)$. Note that the x-axis shows gridpoint-indices and not the proper x value.