

Aaron Templeton

U0734119

CS 3200

Assignment 4

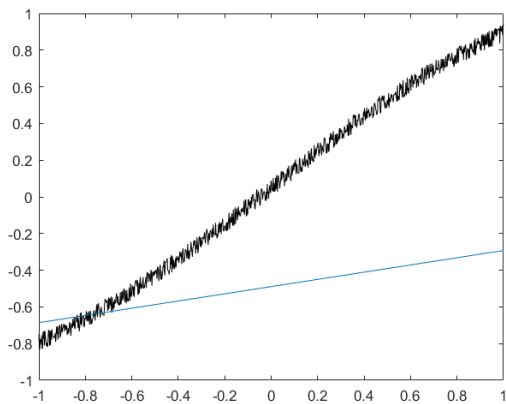
1a) see code file

1b) see code file

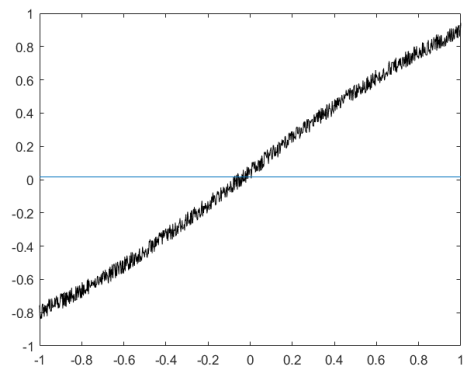
1c)

Graphs below are as follows:

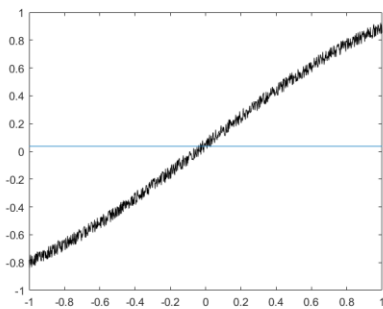
$N=3, l=2$



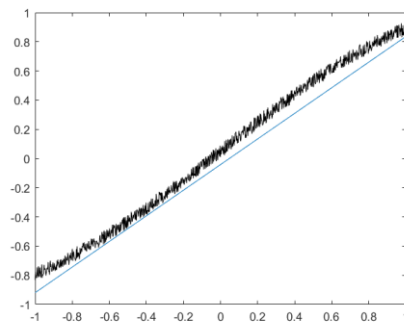
$N=3, l=1$



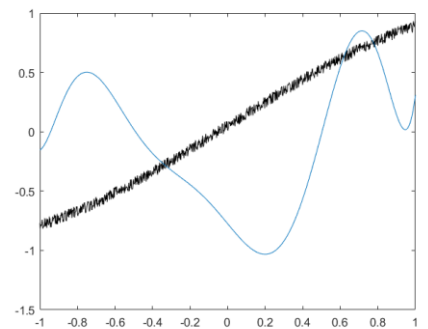
$N=10, l=1$



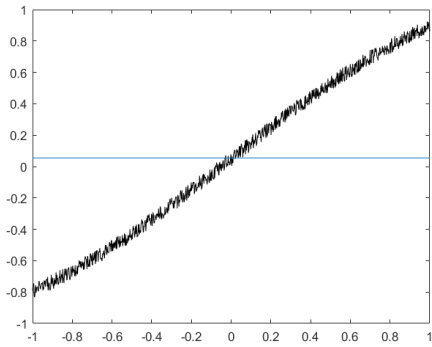
$N=10, l=2$



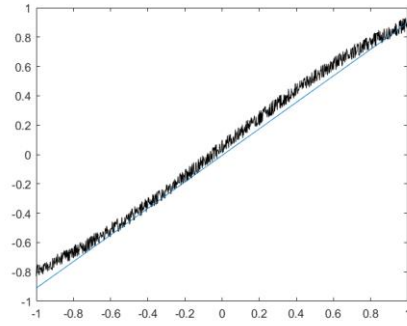
$N=10, l=9$



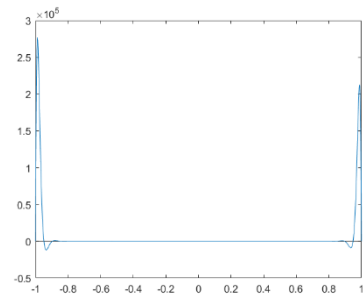
$N=40, l=1$



$N=40, l=2$



$N=40, l=39$



The closer L is to N , the better fit the graph is. If L is very far from N , the fit will not be accurate

1d) relative error should be measured against $f(x)$. you should account for noise in data