

Homework Assignment 9

Due on Friday 12/6

Programming Problems:

Bonus Problem. Add 1 point in final grade. Write a Matlab code that evaluates $P'(x)$, where $P(x)$ is the interpolating polynomial given in the Newton form. Your code should take $x, \{x_i, a_i\}$ as input data, where $a_i = f[x_0, x_1, \dots, x_i]$, and output $P'(x)$. Here x should be assigned as an array and output an array $P'(x)$.

Save your code as function M-file and submit it to ccchu@math.nthu.edu.tw

Writing Problems:

Do the following exercise problems in the text book by Bradie,

Sec 6.2: 4, 5*, 6*, 8, 9*, 11, 12, 13*

Sec 6.3: 2, 5*, 8*, 12*

Just turn in problems with *.