

MATH 3310 SPRING 2022 HOMEWORK 2
Due Friday February 24th 11:59pm by email

INSTRUCTIONS

#1 You are given the following data

| c | y |
|---|------|
| 1 | 36 |
| 2 | 70 |
| 3 | 100 |
| 4 | 150 |
| 5 | 250 |
| 6 | 502 |
| 7 | 800 |
| 8 | 1224 |

Find the Lagrange polynomial that fits this data, plot the scatter plot of this data with this curve fit, and check if this curve is a good fit or not.

#2 Same data as above, fit a third degree polynomial to this data instead, do you think this is a good fit? Do you think this is a better fit than the graph found in #1?

#3 Same data as above but now first a 2nd degree polynomial to the data, determine which of these 3 fits you think is best and why.