
# Computer assignment in Math-254

Sem2-1446H

Write a computer program to approximate the root $\alpha = 7$ of the function

$f(x) = x^3 - 13x^2 + 35x + 49 = 0$ , setting $x_0 = 4$ with accuracy $10^{-6}$ using

***1st Modified Newton method and 2nd Modified Newton method.***

The decimal places to the right of the decimal point must be at least 10 places.

The output must be in the following form:

| ***i*** | ***1st Modified Newton*** | ***2nd Modified Newton*** |
|---|---|---|
| **1** | | |
| **2** | | |
| **….** | | |
| **…..** | | |

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Notes:

a- The program is submitted with output by e-mail.

b- The program is done by any programming language you know.

c- The assignment is due on **Saturday 1 /March /2025** (before 1.00 p.m.)

With my best wishes,
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