Assignment # 7

Consider the following two equations:
Equation-1: $f(x) = x^2 + 3x - 7$
Equation-2: $f(x) = x^3 + 3x^2 + 5x + 7$

Question # 1: [8 Marks] Solve the 1^{st} equation $f(x) = 0$ using Newton's Method. Show your calculation for at least 4 iterations, and also express the numerical values up to five decimal places.

Question # 2: [8 Marks] Solve the 2^{nd} equation $f(x) = 0$ using Secant Method. Show your calculation up to at least 4 iterations, and also express the numerical values up to five decimal places.

Question # 3: [4 Marks] Explain which technique used in the previous two questions to find the root is better to find x_*. Give at least two reasons.

Submission of the Assignment # 7:

- Solve all problems above.

- Prepare a title page including

  # Your Name, Your ID#, Theory Section #.

- Prepare a single .pdf or .jpg file containing the title page and the solution pages.
- To submit your assignment solution, visit the Submission Link (**Click here**). This will take you to a Google Form link.
- Fill up the Google Form link with correct information and upload the file there. You are done.

Previous

Next