

Numerical Methods: Homework #2

Based on Regula-Falsi Method

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Problem 1

Find a real root of the equation $x^3 - 2x - 5 = 0$ by the method of false position to three decimal places.

Problem 2

Find the root of the equation $\cos x = xe^x$ using the regula-falsi method correct to four decimal places.

Problem 3

Use the method of false position, to find the fourth root of 32 correct to three decimal places.

Problem 4

Using the regula falsi method, compute a real root of the equation $3x \sin x = e^x$.

Problem 5

Approximate a real root of the equation $2x - \log x = 7$ by using method of false position correct to 3 decimal places.