FINDING THE ROOT OF NONLINEAR FUNCTION USING FIVE BRACKETING METHOD

NUR AFIQAH BINTI MOHAMED AZHAR

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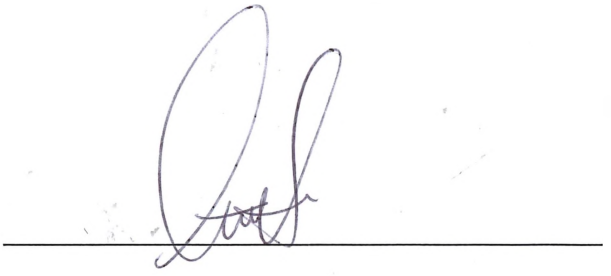
DECLARATION BY CANDIDATE

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



NUR AFIQAH BINTI MOHAMED AZHAR

2016299222

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ABSTRACT

In the field of science, engineering and natural science, practitioners often faced with the question of finding the exact root of the function. The exact root for simple function is easy to acquire rather than complicated functions. Therefore, numerical method in the form of bracketing method is often used to find only the approximate root of the function. This research tries to approximate the root for ten difference function of trigonometric, polynomial, exponential and logarithmic function using five difference bracketing method which are bisection, n-section, improved n-section, newton and bisection newton like algorithm. The result is based on number of iteration, CPU time and error analysis from three difference tolerance. Numerical result show that the newton's method is the best bracketing method for finding the root of function.

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