

**VERIFICATION OF COMPLICATED INTEGRATION  
SOLUTION USING FEYNMAN'S AND NUMERICAL METHOD**

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## ABSTRACT

Solving integration problems is crucial since they exist in a wide range of subjects and professions such as physics, mathematics, and engineering. There are many complicated integration problems that are usually solved by common theoretical methods such as integration by substitution, integration by parts, and integration by trigonometric substitution. However, these methods need a laborious calculation. As a result, researchers prefer to use numerical methods that are straightforward and easy to apply. In this project, theoretical method namely Feynman' method and numerical method are used to solve complicated integration problems. The percentage of relative error is used to analyse the error. This project tries to verify the solution for the complicated integration problem using Feynman's method by the numerical method particularly the Trapezoidal Rule when direct solver failed to give the solution.

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