

**MODIFIED SIMPSON'S METHOD FOR NUMERICAL  
INTEGRATION PROBLEM**

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**Thesis submitted in fulfilment  
of the requirement for the degree of  
Bachelor of Science (Hons.)  
Mathematical Modelling and Analytics**

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**July 2024**

## ABSTRACT

Numerical method can be used to solve complicated integration problem that often occurs in mathematics, data analysis, physics and other fields research. This numerical method is often used when theoretical methods are cumbersome and difficult to implement. Some numerical method for solving integration problems includes Trapezoidal method, Simpson's  $1/3$  method, Trapezium-corrected Simpson's Method (TCSM) and Cubic-corrected Simpson's Method (CCSM). This study aims to investigate the behaviour of these numerical methods in solving different integration problem. The performance of each numerical methods is analyze based on percentage of relative error. It is showed that Simpson's  $1/3$  is the best method for solving integration problems.

## **ACKNOWLEDGEMENT**

In the name of Allah, Most Gracious, Most Merciful. Praise to be to Allah, the Cherisher and Sustainer of the world. First and foremost, I would like to place on record my gratitude and offer sincere thanks to my supervisor Dr. Mohd Rivaie bin Mohd Ali who amply provided guidance and encouragement in this thesis. I also would like to acknowledge with thanks the help rendered by the faculty of Universiti Teknologi Mara for giving me the opportunity to pursue my study. My partners for the idea, the one with me in making our thesis. Not forgetting all my friends who have helped me in many ways. Last but not the least, I reminisce fondly the constant encouragement and continuing support extended to me by my family.

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