

AERE 361: Lab 7

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1 Midpoint Rule

The Midpoint Rule has $O(1)$ complexity. This means there is a constant time regardless of the inputs size. The function depends on only one input variable.

2 Simpson's 1/3

The Simpson's 1/3 Rule has $O(1)$ complexity. This means there is a constant time regardless of the inputs size. The function depends on only one input variable.

3 Simpson's 3/8

The Simpson's 3/8 Rule has $O(1)$ complexity. This means there is a constant time regardless of the inputs size. The function depends on only one input variable.

4 Gauss Quad

The Gauss Quad Rule has $O(n)$ complexity. This means there is linear growth in the time as the input size increases. This is created by the for loop iterating through i .

5 Sources

https://en.wikipedia.org/wiki/Big_O_notation