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## Assignment -10

### Q1. Part a

$I_{\text{trapezoidal}} = 0.79284000$

error = 0.20221425

### Q1. part b

$I_{\text{combination}} = 0.79128167$

Percentage error = 0.005208

### Q2.

Value of Integral for 2 gauss points is:

1.9192422260274025

Value of percentage error for 2 gauss points is:

1.0766183588796125

Value of Integral for 3 gauss points is:

1.9379955450493007

Value of percentage error for 3 gauss points is:

0.1100172131342729

Value of Integral for 4 gauss points is:

1.9406071606910136

Value of percentage error for 4 gauss points is:

0.0245931280313827