|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Function | n | Mid-point Rule | | Trapezium Rule | | Simpson’s Rule | |
| error | OOA | error | OOA | error | OOA |
|  | 25 | -0.0119 |  | 0.0237 |  |  |  |
| 50 | -0.0030 | 2.0045 | 0.0059 | 2.0026 | -1.4086e-05 |  |
| 100 | -7.4041e-04 | 2.0011 | 0.0015 | 2.0006 | -8.7761e-07 | 4.0046 |
| 200 | -1.8507e-04 | 2.0003 | 3.7012e-04 | 2.0002 | -5.4807e-08 | 4.0011 |
|  | 25 | -0.0039 |  | 0.0079 |  |  |  |
| 50 | -9.8707e-04 | 2.0005 | 0.002 | 2.0003 | -5.1976e-07 |  |
| 100 | -2.4675e-04 | 2.0001 | 4.9349e-04 | 2.0003 | -3.2474e-08 | 4.0005 |
| 200 | -6.1685e-05 | 2.0000 | 1.2337e-04 | 2.0003 | -2.0294e-09 | 4.0001 |
|  | 25 | -1.7764e-15 |  | -8.8818e-16 |  |  |  |
| 50 | -1.7764e-15 | 0 | -1.7764e-05 | -1 | -8.8818e-16 |  |
| 100 | -8.8818e-16 | 1 | -1.7763e-15 | 0 | -2.6645e-15 | -1.585 |
| 200 | 0 | Inf | -1.7764e-15 | 0 | -2.6645e-15 | 0 |