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| --- | --- | --- | --- | --- |
| function | Mathematica value | Trapezoid code value(n=no.of divisions) | Rectangle code value(n=no.of divisions) | x ranges from Value1:Value2 |
| x | 12 | 12(n=4) | 12(n=4) | 1:5 |
| x^2 | 41.333........ | 42(n=4) | 41(n=4) | 1:5 |
| Exp(x) | 143.48 | 157.63(n=4) | 139.766(n=4) | 1:5 |
| Sin(x) | 2 | 1.89(n=4) | 2.05(n=4) | 0:Pi |
| |x| | 12 | 12(n=4) | 12(n=4) | 1:5 |
| Sin(x^2) | 0.7726 | 0.7726(n=100) | 0.7728(n=100) | 0:Pi |
| 1/x^2 | 0.9 | 0.9013(n=100) | 0.899(n=100) | 1:10 |
| x^3 | 2500 | 2500.25(n=100) | 2499.87(n=100) | 0:10 |
| 1/x^3 | 0.495 | 0.497(n=100) | 0.493(n=100) | 1:10 |
| x^2-x | 283.3333....... | 283.35(n=100) | 283.325(n=100) | 0:10 |
| x^4 | 625 | 625.104(n=100) | 624.94(n=100) | 0:5 |
| Sqrt(x-1) | 17.3333.... | 17.33315(n=100) | 17.3334(n=100) | 2:10 |
| Sqrt(x^2-1) | 47.179 | 47.179(n=100) | 47.179(n=100) | 2:10 |
| (x-1)^2 | 21.3333..... | 21.3344(n=100) | 21.3328(n=100) | 1:5 |
| Sin(2\*x) | 1 | 0.9999....(n=100) | 1.00004(n=100) | 0:Pi/2 |
| x^2 + 1 | 46.666.... | 46.668(n=100) | 46.665(n=100) | 0:5 |
| Sin(x/2) | 4 | 3.9996(n=100) | 4.00016(n=100) | 0:2\*Pi |
| Arcsin(x) | 0.5707 | 0.57108(n=100) | 0.5707(n=100) | 0:1 |
| Arccos(x) | 1 | 0.99971(n=100) | 1.00008(n=100) | 0:1 |
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