The approximate formula for each n:

with approximate Tolerance = 0.002

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | as a fraction | Using approximate Formula |  | using approximate formula |
| 1 | 0.143080750251166 |  | 0.14285 | -3329.190 | -3329.04 |
| 2 | 0.0792985982485324 |  | 0.076923 | -924.489 |  |
| 3 | 0.0548180139054166 |  | 0.05263 | -425.736 | -420.001 |
| 4 | 0.0418743629670565 |  | 0.04 | -243.734 | -239.866 |
| 5 | 0.0338717159010935 |  | 0.03225 | -157.637 | -154.882 |
| 6 | 0.0284352 |  | 0.02703 | -110.236 | -108.23 |
| 7 | 0.0245018 |  | 0.02326 | -81.393 | -79.861 |
| 8 | 0.0215241 |  | 0.02041 | -62.548 | -61.335 |
| 9 | 0.0191915 |  | 0.01818 | -49.563 | -48.576 |
| 10 | 0.0173149 |  | 0.01639 | -40.238 | -39.422 |

Note: for all the calculations L =1, and assuming a=s to get the maximum