Various Series Convergences for the Value of Pi

Plouffe's Formula

Term Nbr.	Converging Partial Sum 0	Terms						
0	3.13333333333333	1	4	0.5	0.2	0.1666667	3.1333333	3.1333333
1	3.14142246642247	0.0625	0.4444444	0.1666667	0.0769231	0.0714286	0.1294261	0.0080891
2	3.14158739034658	0.0039063	0.2352941	0.1	0.047619	0.0454545	0.0422205	0.0001649
3	3.14159245756744	0.0002441	0.16	0.0714286	0.0344828	0.0333333	0.0207553	5.07E-06
4	3.14159264546034	1.53E-05	0.1212121	0.0555556	0.027027	0.0263158	0.0123137	1.88E-07
5	3.14159265322809	9.54E-07	0.097561	0.0454545	0.0222222	0.0217391	0.0081451	7.77E-09
6	3.14159265357288	5.96E-08	0.0816327	0.0384615	0.0188679	0.0185185	0.0057847	3.45E-10
7	3.14159265358897	3.73E-09	0.0701754	0.0333333	0.0163934	0.016129	0.0043196	1.61E-11
8	3.14159265358975	2.33E-10	0.0615385	0.0294118	0.0144928	0.0142857	0.0033482	7.8E-13
9	3.14159265358979	1.46E-11	0.0547945	0.0263158	0.012987	0.0128205	0.0026712	3.89E-14
10	3.14159265358979	9.09E-13	0.0493827	0.0238095	0.0117647	0.0116279	0.0021806	1.98E-15
11	3.14159265358979	5.68E-14	0.0449438	0.0217391	0.0107527	0.0106383	0.0018137	1.03E-16
12	3.14159265358979	3.55E-15	0.0412371	0.02	0.009901	0.0098039	0.0015322	5.44E-18
13	3.14159265358979	2.22E-16	0.0380952	0.0185185	0.0091743	0.0090909	0.0013115	2.91E-19
14	3.14159265358979	1.39E-17	0.0353982	0.0172414	0.008547	0.0084746	0.0011353	1.58E-20
15	3.14159265358979	8.67E-19	0.0330579	0.016129	0.008	0.0079365	0.0009923	8.61E-22
16	3.14159265358979	5.42E-20	0.0310078	0.0151515	0.0075188	0.0074627	0.0008748	4.74E-23
17	3.14159265358979	3.39E-21	0.0291971	0.0142857	0.0070922	0.0070423	0.0007769	2.63E-24
18	3.14159265358979	2.12E-22	0.0275862	0.0135135	0.0067114	0.0066667	0.0006946	1.47E-25
19	3.14159265358979	1.32E-23	0.0261438	0.0128205	0.0063694	0.0063291	0.0006247	8.27E-27
20	3.14159265358979	8.27E-25	0.0248447	0.0121951	0.0060606	0.0060241	0.0005649	4.67E-28

Bellard's Formula...

Term Nbr.	Converging Partial Sum 0	Terms									
0	3.14176587301587	1	256	0.1111111	21.333333	32	0.8	0.5714286	0.3333333	201.07302	3.1417659
1	3.14159257186839	-0.000977	23.272727	0.0526316	4.9230769	6.4	0.2666667	0.2352941	0.1428571	11.357464	-0.000173
2	3.14159265364205	9.54E-07	12.190476	0.0344828	2.7826087	3.5555556	0.16	0.1481481	0.0909091	5.4877375	8.18E-08
3	3.14159265358975	-9.31E-10	8.2580645	0.025641	1.9393939	2.4615385	0.1142857	0.1081081	0.0666667	3.5937127	-5.23E-11
4	3.14159265358979	9.09E-13	6.2439024	0.0204082	1.4883721	1.8823529	0.0888889	0.0851064	0.0526316	2.6669587	3.79E-14
5	3.14159265358979	-8.88E-16	5.0196078	0.0169492	1.2075472	1.5238095	0.0727273	0.0701754	0.0434783	2.1188193	-2.94E-17
6	3.14159265358979	8.67E-19	4.1967213	0.0144928	1.015873	1.28	0.0615385	0.0597015	0.037037	1.7570641	2.38E-20
7	3.14159265358979	-8.47E-22	3.6056338	0.0126582	0.8767123	1.1034483	0.0533333	0.0519481	0.0322581	1.500592	-1.99E-23
8	3.14159265358979	8.27E-25	3.1604938	0.011236	0.7710843	0.969697	0.0470588	0.045977	0.0285714	1.3093412	1.69E-26
9	3.14159265358979	-8.08E-28	2.8131868	0.010101	0.688172	0.8648649	0.0421053	0.0412371	0.025641	1.1612675	-1.47E-29
10	3.14159265358979	7.89E-31	2.5346535	0.0091743	0.6213592	0.7804878	0.0380952	0.0373832	0.0232558	1.0432465	1.29E-32
11	3.14159265358979	-7.7E-34	2.3063063	0.0084034	0.5663717	0.7111111	0.0347826	0.034188	0.0212766	0.9469796	-1.14E-35
12	3.14159265358979	7.52E-37	2.1157025	0.0077519	0.5203252	0.6530612	0.032	0.0314961	0.0196078	0.8669641	1.02E-38
13	3.14159265358979	-7.35E-40	1.9541985	0.0071942	0.481203	0.6037736	0.0296296	0.0291971	0.0181818	0.7994076	-9.18E-42
14	3.14159265358979	7.17E-43	1.8156028	0.0067114	0.4475524	0.5614035	0.0275862	0.0272109	0.0169492	0.741612	8.31E-45
15	3.14159265358979	-7.01E-46	1.6953642	0.0062893	0.4183007	0.5245902	0.0258065	0.0254777	0.015873	0.6916056	-7.57E-48

16	3.14159265358979	6.84E-49	1.5900621	0.0059172	0.392638	0.4923077	0.0242424	0.0239521	0.0149254	0.6479136	6.93E-51
17	3.14159265358979	-6.68E-52	1.497076	0.0055866	0.3699422	0.4637681	0.0228571	0.0225989	0.0140845	0.6094118	-6.36E-54
18	3.14159265358979	6.53E-55	1.4143646	0.005291	0.3497268	0.4383562	0.0216216	0.0213904	0.0133333	0.5752274	5.86E-57
19	3.14159265358979	-6.37E-58	1.3403141	0.0050251	0.3316062	0.4155844	0.0205128	0.0203046	0.0126582	0.544673	-5.42E-60
20	3.14159265358979	6.22E-61	1.2736318	0.0047847	0.3152709	0.3950617	0.0195122	0.0193237	0.0120482	0.5171998	5.03E-63

Old Simple Standard

Converging
Partial Sum

Term Nbr.	0	Terms		
0	4	1	1	1
1	2.66666666666667	-1	3	-0.333333
2	3.46666666666667	1	5	0.2
3	2.8952380952381	-1	7	-0.142857
4	3.33968253968254	1	9	0.1111111
5	2.97604617604618	-1	11	-0.090909
6	3.28373848373848	1	13	0.0769231
7	3.01707181707182	-1	15	-0.066667
8	3.25236593471888	1	17	0.0588235
9	3.0418396189294	-1	19	-0.052632
10	3.23231580940559	1	21	0.047619
11	3.05840276592733	-1	23	-0.043478
12	3.21840276592733	1	25	0.04
13	3.07025461777919	-1	27	-0.037037
14	3.20818565226194	1	29	0.0344828
15	3.07915339419743	-1	31	-0.032258
16	3.20036551540955	1	33	0.030303
17	3.08607980112384	-1	35	-0.028571
18	3.19418790923194	1	37	0.027027
19	3.09162380666784	-1	39	-0.025641
20	3.1891847822776	1	41	0.0243902

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Standard Series convergence for the value of "e"

Converging
Partial Sum

Term Nbr.	0	Terms	
0	1	1	1
1	2	1	1
2	2.5	2	0.5
3	2.66666666666667	6	0.1666667
4	2.70833333333333	24	0.0416667
5	2.71666666666667	120	0.0083333
6	2.71805555555556	720	0.0013889
7	2.71825396825397	5040	0.0001984
8	2.71827876984127	40320	2.48E-05

9	2.71828152557319	362880	2.76E-06
10	2.71828180114638	3628800	2.76E-07
11	2.71828182619849	39916800	2.51E-08
12	2.71828182828617	4.79E+08	2.09E-09
13	2.71828182844676	6.23E+09	1.61E-10
14	2.71828182845823	8.72E+10	1.15E-11
15	2.718281828459	1.31E+12	7.65E-13
16	2.71828182845904	2.09E+13	4.78E-14
17	2.71828182845905	3.56E+14	2.81E-15
18	2.71828182845905	6.4E+15	1.56E-16
19	2.71828182845905	1.22E+17	8.22E-18
20	2.71828182845905	2.43E+18	4.11E-19