Regions	(a,b)=(0,1) (c,d)=(0,1)	(a,b)=(0,1) (c,d)=(0,1)	(a,b)=(1,2) (c,d)=(3,4)	(a,b)=(0,2.5) (c,d)=(0,2.5)	(a,b)=(0,2.5) (c,d)=(2.5,3.5)
(`MAXTERMS`, `MAXDEGREE`)	(20,15)	(9,8)	(15,15)	(20,15)	(20,20)
Number of Subregions	1	7	4	7	4
Approximation Generation Time (s)	14.968	71.540	189.127	464.509	279.341
$\|f\|_\infty$	0.84	0.84	0.33	1.00	0.40
Max Error ($\|f - approx\|_\infty / \max(\|f\|_\infty, 1)$)	6.50e-16	2.82e-15	1.24e-15	5.67e-15	3.83e-15
Original Maple Time (s)	20.642	23.397	46.695	42.822	54.199
`evalf` Time (s)	11.624	7.241	18.785	25.566	32.106
`evalhf` Time (s)	1.397	0.784	1.965	2.956	4.061
Compiled Time (s)	0.128	0.100	0.160	0.224	0.312
Speedup Factor (origMaple/`evalf`)	1.776	3.232	2.487	1.675	1.688
Speedup Factor (`evalf`/`evalhf`)	8.318	9.236	9.557	8.650	7.907
Speedup Factor (`evalhf`/compiled)	10.91	7.840	12.28	13.20	13.02
Overall Speedup (origMaple/compiled)	161.2	234.0	291.9	191.2	173.7
Original Maple Plot Time (s)	2.572	3.108	4.416	3.776	4.920
Approximation Plot Time (s)	0.028	0.024	0.028	0.036	0.048
Plot Speedup Factor	91.86	129.5	157.7	104.9	102.5

Table 7.7: Timings and Errors for Approximating `JacobiSN`(x, y) Using Rational Approximation

Regions	(a,b)=(0,1) (c,d)=(0,1)	(a,b)=(1,2) (c,d)=(3,4)	(a,b)=(1,2) (c,d)=(3,4)	(a,b)=(0,2.5) (c,d)=(0,2.5)	(a,b)=(0,2.5) (c,d)=(2.5,3.5)
(MAXTERMS, MAXDEGREE)	(20,30)	(20,35)	(10,20)	(20,35)	(20,35)
Number of Subregions	1	4	27	8	6
Approximation Generation Time (s)	13.656	163.050	711.220	496.903	315.723
$\|f\|_\infty$	0.84	0.33	0.33	1.00	0.40
Max Error ($\|f - approx\|_\infty / \max(\|f\|_\infty, 1)$)	5.80e-16	1.23e-15	4.08e-15	4.86e-15	3.94e-15
Original Maple Time (s)	22.466	44.166	47.367	48.119	61.828
evalf Time (s)	13.537	20.102	12.721	28.697	28.342
evalhf Time (s)	1.468	2.264	1.256	2.941	3.156
Compiled Time (s)	0.144	0.348	0.132	0.224	0.416
Speedup Factor (origMaple/evalf)	1.660	2.198	3.724	1.677	2.182
Speedup Factor (evalf/evalhf)	9.223	8.878	10.13	9.759	8.980
Speedup Factor (evalhf/compiled)	10.19	6.506	9.515	13.13	7.587
Overall Speedup (origMaple/compiled)	156.0	126.9	358.9	214.8	148.6
Original Maple Plot Time (s)	2.756	4.176	4.880	4.064	4.484
Approximation Plot Time (s)	0.032	0.032	0.024	0.032	0.040
Plot Speedup Factor	86.12	130.5	203.3	127.0	112.1

Table 7.8: Timings and Errors for Approximating JacobiSN(x, y) Using Polynomial Approximation