APPENDIX

x_k	A_k
N = 2	
0.5773502691 8962576451	(1)0.1000000000 0000000000
N = 3	
0.7745966692 4148337704	0.5555555555 5555555556
0.0000000000 0000000000	0.8888888888 8888888889
N = 4	
0.8611363115 9405257523	0.3478548451 3745385737
0.3399810435 8485626480	0.6521451548 6254614263
N = 5	
0.9061798459 3866399280	0.2369268850 5618908751
0.5384693101 0568309104	0.4786286704 9936646804
0.0000000000 0000000000	0.5688888888 8888888889
N = 6	
0.9324695142 0315202781	0.1713244923 7917034504
0.6612093864 6626451366	0.3607615730 4813860757
0.2386191860 8319690863	0.4679139345 7269104739
N = 7	
0.9491079123 4275852453	0.1294849661 6886969327
0.7415311855 9939443986	0.2797053914 8927666790
0.4058451513 7739716691	0.3818300505 0511894495
0.0000000000 0000000000	0.4179591836 7346938776
N = 8	
0.9602898564 9753623168	0.1012285362 9037625915
0.7966664774 1362673959	0.2223810344 5337447054
0.5255324099 1632898582	0.3137066458 7788728734
0.1834346424 9564980494	0.3626837833 7836198297
N = 10	
0.9739065285 1717172008	(-1)0.6667134430 8688137594
0.8650633666 8898451073	0.1494513491 5058059315
0.6794095682 9902440623	0.2190863625 1598204400
0.4333953941 2924719080	0.2692667193 0999635509
0.1488743389 8163121088	0.2955242247 1475287017
N = 12	
0.9815606342 4671925069	(-1)0.4717533638 6511827195
0.9041172563 7047485668	0.1069393259 9531843096
0.7699026741 9430468704	0.1600783285 4334622633
0.5873179542 8661744730	0.2031674267 2306592175
0.3678314989 9818019375	0.2334925365 3835480876
0.1252334085 1146891547	0.2491470458 1340278500

This table is taken from the book, Numerical Quadrature and Solutions of Ordinary Differential Equations.