

Return from FM_INTEGRATE. Function N = 1. A, B =
7.85398163397448309615660845819875721049292349843776455243736M-1
1.57079632679489661923132169163975144209858469968755291048747M+0
TOL = 1.00000000M-40
318 function calls were made in 0.01054 seconds.
RESULT =
1.06082967612829418193965438558005799790103356667175782093367M-2

Error for case 1 = 3.1923M-64

Return from FM_INTEGRATE. Function N = 2. A, B =
0.00M 0
1.000M+0
TOL = 1.00000000M-40
319 function calls were made in 0.00885 seconds.
RESULT =
9.18938533204672741780329736405617639861397473637783412817152M-1

Error for case 2 = 1.3656M-64

Return from FM_INTEGRATE. Function N = 3. A, B =
0.00
000M 0
1.000
000M+0
TOL = 1.00000000M-100
1577 function calls were made in 0.14092 seconds.
RESULT =
2.2214414690791831235079404950303468493073108446878451115426978034782173
9654973695528766346738238261868170510634261439568M+0

Error for case 3 = 1.0000M-126

Return from FM_INTEGRATE. Function N = 4. A, B =
0.00
000M 0
1.000
000M+0
TOL = 1.00000000M-100
5569 function calls were made in 0.18368 seconds.
RESULT =
1.2533141373155002512078826424055226265034933703049691583149617881711468
2730392098747329791918902863305800498633260193982M+0

Error for case 4 = 0.0000M 0

Return from FM_INTEGRATE. Function N = 5. A, B =
1.0471975511965977461542144610931676280657231331250352736583148641026054
6876206966620934494178070568932738269550442743554903128153651686074390845
31360428270391500947009006M+0
1.5707963267948966192313216916397514420985846996875529104874722961539082
0314310449931401741267105853399107404325664115332354692230477529111586267
97040642405587251420513510M+0

TOL = 1.0000000M-150
10683 function calls were made in 0.76296 seconds.

RESULT =
8.8891492781635326359890415420355001469946129618421317713105726777190782
9471870439604270738734807376167636780921493758736328585345907297070981878
78645447928054701654772889M-1

Error for case 5 = 9.6058M-177

Return from FM_INTEGRATE. Function N = 61. A, B =
0.00
00
00
1.00
00
00
00000000000000000000000000000M+0

TOL = 1.0000000M-150
1465 function calls were made in 0.16632 seconds.

RESULT =
4.0389425726479204571142872984662421505768924647334402979440135745490116
0694411204871467899888085592681252450412993780807343213477918742955425756
24911559985812283596650941M-1

Return from FM_INTEGRATE. Function N = 62. A, B =
0.00
00
00
1.00
00
00
00000000000000000000000000000M+0

TOL = 1.0000000M-150
1465 function calls were made in 0.13283 seconds.

RESULT =
4.8502067055156121788747542435692579964177204971086914733665591031700666
8777459234732802838846721783486384330508499977928985371867988554115556122
53733887942242418058121948M-1

Adding these last two integrals gives the case 6 result:

8.8891492781635326359890415420355001469946129618421317713105726777190782

