```
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    0.00695 seconds.
result =
      1.06082967612829418193965438558005799790103356667175782093367M-2

         Error for case  1 =   3.1923M-64




Return from fm_integrate.     Function n =           2.     a, b =
      0.00000000000000000000000000000000000000000000000000000000000M 0
      1.00000000000000000000000000000000000000000000000000000000000M+0
tol = 1.00000000M-40
      319 function calls were made in    0.00738 seconds.
result =
      9.18938533204672741780329736405617639861397473637783412817152M-1

         Error for case  2 =   1.3656M-64




Return from fm_integrate.     Function n =           3.     a, b =
      0.00000000000000000000000000000000000000000000000000000000000000000000
      00000000000000000000000000000000000000000000000000M 0
      1.00000000000000000000000000000000000000000000000000000000000000000000
      00000000000000000000000000000000000000000000000000M+0
tol = 1.00000000M-100
      1577 function calls were made in    0.10403 seconds.
result =
      2.22144146907918312350794049503034684930731084468784511154269780347821730
      96549736955287663467382382618681705106342614395680M+0

         Error for case  3 =   1.0000M-126




Return from fm_integrate.     Function n =           4.     a, b =
      0.00000000000000000000000000000000000000000000000000000000000000000000
      00000000000000000000000000000000000000000000000000M 0
      1.00000000000000000000000000000000000000000000000000000000000000000000
      00000000000000000000000000000000000000000000000000M+0
tol = 1.00000000M-100
      5569 function calls were made in    0.11439 seconds.
result =
      1.25331413731550025120788264240552262650349337030496915831496178817114680
      27303920987473297919189028633058004986332601939820M+0

         Error for case  4 =   0.0000M 0
```

```
Return from fm_integrate.     Function n =           5.     a, b =
       1.04719755119659774615421446109316762806572313312503527365831486410260 54
      68762069666209344941780705689327382695504427435549031281536516860743908 45
      3136042827039150094700 90 06M+0
       1.57079632679489661923132169163975144209858469968755291048747229615390 82
      03143104499314017412671058533991074043256641153323546922304775291115862 67
      97040642405587251420513510M+0
tol = 1.00000000M-150
   10683 function calls were made in    0.47260 seconds.
result =
       8.88914927816353263598904154203550014699461296184213177131057267771907 82
      94718704396042707387348073761676367809214937587363285853459072970709818 78
      7864544792805470165477 28 89M-1

        Error for case  5 =   9.6058M-177




Return from fm_integrate.     Function n =          61.     a, b =
       0.00000000000000000000000000000000000000000000000000000000000000000000 00
      00000000000000000000000000000000000000000000000000000000000000000000000 00
      000000000000000000000000000M 0
       1.00000000000000000000000000000000000000000000000000000000000000000000 00
      00000000000000000000000000000000000000000000000000000000000000000000000 00
      000000000000000000000000000M+0
tol = 1.00000000M-150
    1465 function calls were made in    0.10110 seconds.
result =
       4.03894257264792045711428729846624215057689246473344029794401357454901 16
      06944112048714678998880855926812524504129937808073432134779187429554257 56
      24911559985812283596650941M-1

Return from fm_integrate.     Function n =          62.     a, b =
       0.00000000000000000000000000000000000000000000000000000000000000000000 00
      00000000000000000000000000000000000000000000000000000000000000000000000 00
      000000000000000000000000000M 0
       1.00000000000000000000000000000000000000000000000000000000000000000000 00
      00000000000000000000000000000000000000000000000000000000000000000000000 00
      000000000000000000000000000M+0
tol = 1.00000000M-150
    1465 function calls were made in    0.09483 seconds.
result =
       4.85020670551561217887475424356925799641772049710869147336655910317006 66
      87774592347328028388467217834863843305084999779289853718679885541155561 22
      53733887942242418058121948M-1

 Adding these last two integrals gives the case 6 result:

       8.88914927816353263598904154203550014699461296184213177131057267771907 82
      94718704396042707387348073761676367809214937587363285853459072970709818 78
      7864544792805470165477 28 89M-1

        Error for case  6 =   4.3972M-178
```

```
Return from fm_integrate.     Function n =            7.     a, b =
        0.0000000000000000000000000000000000000000000000000000000000000000000000
        0000000000000000000000000000000000000000000000000000000000000000000000000
        0000000000000000000000000000M 0
        1.0000000000000000000000000000000000000000000000000000000000000000000000
        0000000000000000000000000000000000000000000000000000000000000000000000000
        0000000000000000000000000000M+0
tol = 1.00000000M-150
     1465 function calls were made in   0.15123 seconds.
result =
        8.8891492781635326359890415420355001469946129618421317713105726777190782
        9471870439604270738734807376167636780921493758736328585345907297070981878
        78645447928054701654772889M-1


        Error for case  7 =   4.3972M-178


 All results were ok -- no errors were found.
```