ENIAC 2037 digits PI calculation

The published values of PI and e are found at "ams.org/journals/mcom/1950-04-029/S0025-5718-1950-0037597-6/S0025-5718-1950-0037597-6.pdf". The 2035 digits PI and 2010 digits for the number "e" all the published digits were correct to the last digit. Of the following three formulas under consideration the first one was finally selected. Note that this document published in 1950 list 2035 digits PI and not the 2037 mentioned in most of history of PI, and no where does it tell how many digits were calculated. In the following list of possible calculated values I will show the most probable number. The number e was published to 2010 digits not the suggested 2037 as stated in some references also this number was calculated first as a dry run for the harder number PI. ENIAC used BCD base 10 math and needed to use punch cards to hold intermediate values as there was very little memory, not enough to hold all the sub answers. The program was originally hard wired boards by 1948 it was given extra memory for the program just in time for the "e" and "PI" calculation. Magnetic-core memory did not come around till 1955. The transistor was created at the end of 1947 and in a 1955 magazine I saw an add for a transistors for sale to the public.

The three formulas under consideration were as followed. The one ended up being used was the first one the Machin formula because it was easier to use. In my own calculations of PI in 1972 I use the same formula that I found in a book as there was no internet back in 1972, which I used on a IBM 1620, a 1959 vintage computer, it was also a BCD decimal computer which I was able to use for doing 100 digits of PI for the fun of it. Thomas Watson, president of IBM in 1943 said "I think there is a world market for maybe five computers" "computer," he meant "vacuum-tube-powered adding machine that's as big as a house." It is known that they used the standard method with ATAN(1/5) and ATAN(1/239) first, then they had to do a multiplication by four twice.

X/4 = 4 * ATAN(1/5) – ATAN(1/239) "Machin formula"
x/4 = 8 * ATAN(1/10) - 4 * ATAN(1/515) – ATAN(1/239) "Machin like formula"
x/4 = 3 * ATAN(1/4) + ATAN(1/20) + ATAN(1/1985) "Machin like formula"

Some Comments on a NORC 1954 computation of PI can be found at in the 1955 publication "ams.org/journals/mcom/1955-09-052/S0025-5718-1955-0075672-5/S0025-5718-1955-0075672-5.pdf", along with its 3089 published digits of PI. With the article they did publish a table of the number of times each digit was and they did use 3090 digits and not the expected value of 3089 digits the table does have an extra 9 as the numbers do show the 3090th digit is a 9. In this article it is stated that there were 3093 digits calculated, which may have had 105 units error in the last digit effecting the last three digits, they did a little spin on how they did the actual calculation they combined both ATAN before doing the term division The last 9 digits are 21825 6259 while the final 13 digits were most likely 21825 62599 768. Just like ENIAC, NORC used the same Machin formula as ENIAC. I can not find if NORC was a BCD decimal computer they state they truncated the calculation at 3093 digits which could only be done in

decimal calculation not total binary even if you would convert each term to decimal first. In this document they did not state that ENIAC calculated 2035 or 2037 digits although they would have known 2037 digits were correct. The IBM 1620 which I did use was a 1959 vintage computer and it did also use BCD base 10 math, something I though may be normal for computers of the time. To settle the problem see "en.wikipedia.org/wiki/Decimal_computer" where they list the following computers were all BCD decimal computers "Early computers with year introduced that were exclusively decimal include the ENIAC 1946, IBM NORC 1954, IBM 650 1953, IBM 1620 1959, IBM 7070 1958." I was pleased note the IBM 1620 is in the list as should be.

The first 100,000 digits of the 100,265 calculation value of PI that was done in 1961 by using the formula PI = 48 * ATAN(1/8) + 32 * ATAN(1/57) – 20 * ATAN(1/239). The first 100,000 digits listing can be found at "ams.org/journals/mcom/1962-16-077/S0025-5718-1962-0136051-9/S0025-5718-1962-0136051-9.pdf", yes a lot of pages, 20 pages with 5,000 digits per page. In this paper they stated that a 1,000,000 digits were in the reach of computer it was not until 1973 it was finally accomplished with two other smaller calculations between. It was stated that ENIAC did calculate 2037 digits, this may have been the first place where this number was stated, after all they did know the 2037 were correct.

At the time I can not find any article about ENIAC which states how many digits were used to calculated PI. The reason I would pick the number 2040 as it is a logical value for it does produce 2037 correct digits which is the value referenced in most published articles, including the 1961 100,000 digits PI calculation. I have included the following table to support my conclusion see below. No other number has 2037 digits correct and the higher up you go more digits will be correct and 2037 will never repeat. Well finally I have found the answer in the paper "files.eric.ed.gov/fulltext/ED175694.pdf" on the bottom of page 29 they stated "in September 1949 to evaluate PI to about 2037 places (2040 working decimals)". There you go my work must have been correct after all.

The following number is from the 1950 paper, see the bottom of this page where they listed the 2035 digits which they must have felt were all correct. I have checked all 2035 digits and they were published with the correct numbers no typo errors. They had better luck than William Shanks did in 1873 with his 707 digits, there was a three digits with typo error.

ENIAC 1950 published 2035 digits pi value=

3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510
58209 74944 59230 78164 06286 20899 86280 34825 34211 70679
82148 08651 32823 06647 09384 46095 50582 23172 53594 08128
48111 74502 84102 70193 85211 05559 64462 29489 54930 38196
44288 10975 66593 34461 28475 64823 37867 83165 27120 19091
45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436
78925 90360 01133 05305 48820 46652 13841 46951 94151 16094
33057 27036 57595 91953 09218 61173 81932 61179 31051 18548

07446 23799 62749 56735 18857 52724 89122 79381 83011 94912
98336 73362 44065 66430 86021 39494 63952 24737 19070 21798
60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872
14684 40901 22495 34301 46549 58537 10507 92279 68925 89235
42019 95611 21290 21960 86403 44181 59813 62977 47713 09960
51870 72113 49999 99837 29780 49951 05973 17328 16096 31859
50244 59455 34690 83026 42522 30825 33446 85035 26193 11881
71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778
18577 80532 17122 68066 13001 92787 66111 95909 21642 01989
38095 25720 10654 85863 27886 59361 53381 82796 82303 01952
03530 18529 68995 77362 25994 13891 24972 17752 83479 13151
55748 57242 45415 06959 50829 53311 68617 27855 88907 50983
81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744
94482 55379 77472 68471 04047 53464 62080 46684 25906 94912
93313 67702 89891 52104 75216 20569 66024 05803 81501 93511
25338 24300 35587 64024 74964 73263 91419 92726 04269 92279
67823 54781 63600 93417 21641 21992 45863 15030 28618 29745
55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356
63698 07426 54252 78625 51818 41757 46728 90977 77279 38000
81647 06001 61452 49192 17321 72147 72350 14144 19735 68548
16136 11573 52552 13347 57418 49468 43852 33239 07394 14333
45477 62416 86251 89835 69485 56209 92192 22184 27255 02542
56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511
73929 84896 08412 84886 26945 60424 19652 85022 21066 11863
06744 27862 20391 94945 04712 37137 86960 95636 43719 17287
46776 46575 73962 41389 08658 32645 99581 33904 78027 59009
94657 64078 95126 94683 98352 59570 98258

The following is a small sample of the possible max number of digits that PI was calculated to and the dropped the last digits down to the final answer of 2035 digits which they knew needed to be done to ensure a correct answer. Some of the numbers I would guess 2040 which produces 2037 digits correct with 52 units in error in the last digit, 2045 which produces 2043 digits correct with 12 units error in the last digit and 2048 = 2^11 which produces 2045 digits correct with 88 units error in the last digit. As you can see any of the values above would have given the correct 2037 digits as mentioned in most references about ENIAC as the number of digits to be correct. At the time there was very little knowledge as how many digits needed to be dropped and as you van see the number of digits do change by just adding one digit to each line.

For the number 2036 there are = 350 units error with 2033 digits correct.

For the number 2037 there are = 338 units error. with 2034 digits correct
For the number 2038 there are = 230 units error with 2034 digits correct.
For the number 2039 there are = 42 units error with 2036 digits correct.
For the number 2040 there are = 52 units error with 2037 digits correct bing, bing, bing.
For the number 2041 there are = 41 units error with 2038 digits correct.
For the number 2042 there are = 264 units error with 2039 digits correct.
For the number 2043 there are = 454 units error with 2040 digits correct.
For the number 2044 there are = 224 units error with 2041 digits correct.
For the number 2045 there are = 12 units error with 2043 digits correct.

On the following pages is the sample from 2030 through 2060 digits calculations.

THE NUMBER PI TO 2030 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
 72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
 01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
 09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
 89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
 19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
 00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
 22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
 86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
 05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
 26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
 59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
 17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
 27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
 24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
 88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
 85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
 77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
 75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
 91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
 28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
 32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
 54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
 17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
 43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
 27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
 82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
 08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
 04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
 99581 33904 78027 59009 94657 64078 95126 94683 98352 59656
This calculation has 86 units error, the correct last digits are 59570 .

THE NUMBER PI TO 2031 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59552 4
This calculation has 185 units error, the correct last digits are 95709 .

THE NUMBER PI TO 2032 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035

26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59568 96
This calculation has 202 units error, the correct last digits are 57098 .

THE NUMBER PI TO 2033 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184

27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59571 128
This calculation has 146 units error, the correct last digits are 70982 .

THE NUMBER PI TO 2034 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 9836
This calculation has 11 units error, the correct last digits are 9825 .

THE NUMBER PI TO 2035 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953

09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 97984
This calculation has 274 units error, the correct last digits are 98258 .

THE NUMBER PI TO 2036 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104

75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98223 2
This calculation has 350 units error, the correct last digits are 82582 .

THE NUMBER PI TO 2037 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98254 84
This calculation has 338 units error, the correct last digits are 25822 .

THE NUMBER PI TO 2038 POSITION AFTER THE DECIMAL POINT=

3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98257 996
This calculation has 230 units error, the correct last digits are 58226 .

THE NUMBER PI TO 2039 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303

59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 2304
This calculation has 42 units error, the correct last digits are 82262 .

THE NUMBER PI TO 2040 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383

82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22568
This calculation has 52 units error, the correct last five digits should be 22620 and not the 22568.

THE NUMBER PI TO 2041 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22616
4
This calculation has 41 units error, the correct last digits are 26205 .

THE NUMBER PI TO 2042 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953

09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22623
16

This calculation has 264 units error, the correct last digits are 62052 .

THE NUMBER PI TO 2043 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379

77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
068

This calculation has 454 units error, the correct last digits are 20522 .

THE NUMBER PI TO 2044 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
5000

This calculation has 224 units error, the correct last digits are 5224 .

THE NUMBER PI TO 2045 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
 72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
 01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
 09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
 89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
 19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
 00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
 22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
 86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
 05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
 26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
 59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
 17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
 27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
 24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
 88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
 85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
 77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
 75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
 91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
 28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
 32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
 54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
 17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
 43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
 27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
 82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
 08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
 04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
 99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
 52236
This calculation has 12 units error, the correct last digits are 52248 .

THE NUMBER PI TO 2046 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
 72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
 01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
 09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
 89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
 19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
 00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901

22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52242 4

This calculation has 65 units error, the correct last digits are 22489 .

THE NUMBER PI TO 2047 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955

32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52246 80
This calculation has 214 units error, the correct last digits are 24894 .

THE NUMBER PI TO 2048 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 852
This calculation has 88 units error, the correct last digits are 48940 .

THE NUMBER PI TO 2049 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944

59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 9460

This calculation has 53 units error, the correct last digits are 89407 .

THE NUMBER PI TO 2050 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303

59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94228

This calculation has 151 units error, the correct last digits are 94077 .

THE NUMBER PI TO 2051 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184

27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94058 4

This calculation has 188 units error, the correct last digits are 40772 .

THE NUMBER PI TO 2052 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
 72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
 01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
 09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
 89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
 19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
 00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
 22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
 86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
 05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
 26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
 59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
 17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
 27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
 24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
 88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
 85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
 77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
 75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
 91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
 28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
 32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
 54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
 17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
 43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
 27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
 82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
 08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
 04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
 99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
 52248 94078 12

This calculation has 86 units error, the correct last digits are 7726 .

THE NUMBER PI TO 2053 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273

72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 188

This calculation has 79 units error, the correct last digits are 77267 .

THE NUMBER PI TO 2054 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855

88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 2484

This calculation has 187 units error, the correct last digits are 72671 .

THE NUMBER PI TO 2055 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645

99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 26668
This calculation has 51 units error, the correct last digits are 26719 .

THE NUMBER PI TO 2056 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 26701 2
This calculation has 182 units error, the correct last digits are 67194 .

THE NUMBER PI TO 2057 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737

19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 26716 00

This calculation has 347 units error, the correct last digits are 71947 .

THE NUMBER PI TO 2058 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263

91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 26719 756

This calculation has 278 units error, the correct last digits are 19478 .

THE NUMBER PI TO 2059 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
52248 94077 26719 5252

This calculation has 470 units error, the correct last digits are 94782 .

THE NUMBER PI TO 2060 POSITION AFTER THE DECIMAL POINT=
3.14159 26535 89793 23846 26433 83279 50288 41971 69399 37510 58209 74944
 59230 78164 06286 20899 86280 34825 34211 70679 82148 08651 32823 06647
 09384 46095 50582 23172 53594 08128 48111 74502 84102 70193 85211 05559
 64462 29489 54930 38196 44288 10975 66593 34461 28475 64823 37867 83165
 27120 19091 45648 56692 34603 48610 45432 66482 13393 60726 02491 41273
 72458 70066 06315 58817 48815 20920 96282 92540 91715 36436 78925 90360
 01133 05305 48820 46652 13841 46951 94151 16094 33057 27036 57595 91953
 09218 61173 81932 61179 31051 18548 07446 23799 62749 56735 18857 52724
 89122 79381 83011 94912 98336 73362 44065 66430 86021 39494 63952 24737
 19070 21798 60943 70277 05392 17176 29317 67523 84674 81846 76694 05132
 00056 81271 45263 56082 77857 71342 75778 96091 73637 17872 14684 40901
 22495 34301 46549 58537 10507 92279 68925 89235 42019 95611 21290 21960
 86403 44181 59813 62977 47713 09960 51870 72113 49999 99837 29780 49951
 05973 17328 16096 31859 50244 59455 34690 83026 42522 30825 33446 85035
 26193 11881 71010 00313 78387 52886 58753 32083 81420 61717 76691 47303
 59825 34904 28755 46873 11595 62863 88235 37875 93751 95778 18577 80532
 17122 68066 13001 92787 66111 95909 21642 01989 38095 25720 10654 85863
 27886 59361 53381 82796 82303 01952 03530 18529 68995 77362 25994 13891
 24972 17752 83479 13151 55748 57242 45415 06959 50829 53311 68617 27855
 88907 50983 81754 63746 49393 19255 06040 09277 01671 13900 98488 24012
 85836 16035 63707 66010 47101 81942 95559 61989 46767 83744 94482 55379
 77472 68471 04047 53464 62080 46684 25906 94912 93313 67702 89891 52104
 75216 20569 66024 05803 81501 93511 25338 24300 35587 64024 74964 73263
 91419 92726 04269 92279 67823 54781 63600 93417 21641 21992 45863 15030
 28618 29745 55706 74983 85054 94588 58692 69956 90927 21079 75093 02955
 32116 53449 87202 75596 02364 80665 49911 98818 34797 75356 63698 07426
 54252 78625 51818 41757 46728 90977 77279 38000 81647 06001 61452 49192
 17321 72147 72350 14144 19735 68548 16136 11573 52552 13347 57418 49468
 43852 33239 07394 14333 45477 62416 86251 89835 69485 56209 92192 22184
 27255 02542 56887 67179 04946 01653 46680 49886 27232 79178 60857 84383
 82796 79766 81454 10095 38837 86360 95068 00642 25125 20511 73929 84896
 08412 84886 26945 60424 19652 85022 21066 11863 06744 27862 20391 94945
 04712 37137 86960 95636 43719 17287 46776 46575 73962 41389 08658 32645
 99581 33904 78027 59009 94657 64078 95126 94683 98352 59570 98258 22620
 52248 94077 26719 48012
This calculation has 186 units error, the correct last digits are 47826 .