

Factoring of the Smarandache Square Product Sequence,
by Micha Fleuren

$$(\text{SmSquProd}(n-1)) * n^2 + 1$$

SmSquProd(1): 2
PRIME!

SmSquProd(2): 5
PRIME!

SmSquProd(3): 37
PRIME!

SmSquProd(4): 577
PRIME!

SmSquProd(5): 14401
PRIME!

SmSquProd(6): 518401
13.39877

SmSquProd(7): 25401601
101.251501

SmSquProd(8): 1625702401
17.95629553

SmSquProd(9): 131681894401
PRIME!

SmSquProd(10): 13168189440001
PRIME!

SmSquProd(11): 1593350922240001
PRIME!

SmSquProd(12): 229442532802560001
101.2271708245569901

SmSquProd(13): 38775788043632640001
PRIME!

SmSquProd(14): 7600054456551997440001
29.109.2404319663572286441

SmSquProd(15): 1710012252724199424000001
1344169.1272170577304043929

SmSquProd(16): 437763136697395052544000001
149.2938007628841577533852349

SmSquProd(17): 126513546505547170185216000001
9049.13980942259426143240713449

SmSquProd(18): 40990389067797283140009984000001
37.1107848353183710355135404972973

SmSquProd(19): 14797530453474819213543604224000001
710341.20831587158104092560535861261

SmSquProd(20): 5919012181389927685417441689600000001
41.10657.86816017.348046955609.448324749841

SmSquProd(21): 2610284371992958109269091785113600000001
61.157.272557624725170524096177486176631513

SmSquProd(22): 1263377636044591724886240423994982400000001
337.8017.514049836440277481.909674823323537849

SmSquProd(23): 668326769467589022464821184293345689600000001
509.15448374629.84994002604532747687401741723441

SmSquProd(24): 384956219213331276939737002152967117209600000001
PRIME!

SmSquProd(25): 240597637008332048087335626345604448256000000000001
941.815769831908479758733.313425331349331290243399417
SmSquProd(26): 162644002617632464507038883409628607021056000000000001
53^2.418633.6017159668589.22985889712876096222556462301797
SmSquProd(27): 118567477908254066625631346005619254518349824000000000001

113.42461.745837.2460281.7566641.15238649.116793504008451126962009
SmSquProd(28):
92956902680071188234494975268405495542386262016000000000001

2122590346576634509.43794085292997939303952241474982753464389
SmSquProd(29):
78176755153939869305210274200729021751146846355456000000000001

171707860473207588349837.455289320701414063716469396531758248773
SmSquProd(30):
70359079638545882374689246780656119576032161719910400000000000001

61.1733.15661.359525849.100636381126568690110069.117459224951820775953789
7
SmSquProd(31):
67615075532642592962076366156210530912566907412833894400000000000001

353.422041.13400767181.33867608180948409085305820793832191570324667821677
SmSquProd(32):
69237837345426015193166198943959583654468513190741907865600000000000001

10591621681.6415450838021.522303293914660001204969.1950882388585355532025
429
SmSquProd(33):
7540000486916893054535799064997198659971621086471793766563840000000000000
1

37.3121.4421.4073332882845936253.3625813512324448042738745076210857822314
8052301
SmSquProd(34):
8716240562875928371043383719136761650927193975961393594147799040000000000
0001

193.13217.866100731693.39452143443145645231476894644096901291197410624286
816576197
SmSquProd(35):
1067739468952301225452814505594253302238581262055270715283105382400000000
00000001

317.373.90301965388680848897828545563235536086347482011761632198907771618
9815715361
SmSquProd(36):
1383790351762182388186847599250152279701201315623630847006904575590400000
0000000001

73.57986941373.3269017431698277804505207628624951781788248063136614675401
1637734149869

SmSquProd(37):
1894408991562427689427794363373458470910944601088750629552452363983257600
00000000000001

127406364297881.49105571194338128021910109.302797201145240384282924307698
14272052327643069

SmSquProd(38):
2735526583816145583533735060711274031995404003972155909073741213591823974
4000000000000001

233.757.1015811783865185127181068858481.152677799704967312494288705146365
6961044927593459554341

SmSquProd(39):
4160735933984357432554811027341847802665009490041649137701160385873164265
062400000000000001

61.1004545757741.60184501852213615261967963540406638689.11281995560262274
8619326572520725988346409

SmSquProd(40):
6657177494374971892087697643746956484264015184066638620321856617397062824
09984000000000000001

89.701.187100101949.57030619287986915195631567314222236213934965395443794
926477281748349020255113441

SmSquProd(41)*
1119071536804432775059941973913863385004780952441601952076104097384446260
731183104000000000000001

c100:

1119071536804432775059941973913863385004780952441601952076104097384446260
731183104000000000000001

SmSquProd(42):
4700100454578617655251756290438226217020080000254728198719637209014674295
070969036800000000000001

43.1093046617343864570988780532660052608609320930291797255516194699770854
487225806752744186046511627907

SmSquProd(43):
8690485740515864044560497381020280275270127920470992439432609199468132771
5862217490432000000000000001

61.790199.5612407.13030153033.2465352740903685179277948594288998051450925
9257485082735624377460816963479128989

SmSquProd(44):
1682478039363871279026912292965526261292296765403184136274153141017030504
57909253061476352000000000000001

29921.5623067542407911764402634580948251265974722654333692511193319544858
228349918426959709780822833461448481

SmSquProd(45)*
3407018029711839340029497393255190679116900949941447875955160110559486771
7726623744948961280000000000000001

367.

c108:

9283427873874221634957758564728039997593735558423563694700708748118492566
13804461715230552588555858310626703

SmSquProd(46):

7209250150870252043502416484127983477011362410076103705521118793943874009
0709535844312002068480000000000000000000000000001

5246203.13741843674120601211013787465197178753874683099521889842084110725
3071869484862739479032744383852473874914867

SmSquProd(47)*

1592523358327238676409683801343871550071809956385811308549615141582201768
6037736468008521256927232000000000000000000000000001

881.

c115:

1807631507749419609999641091196221963759148645159831224233388355938935038
142762368672930903169946878547105561861521

SmSquProd(48)*

3669173817585957910447911478296280051365450139512909254898313286205392874
863094482229163297596034252800000000000000000000000001

440124347012137.

c106:

8336675402064897993686883700953045308095584697586732559068592297476279743
616694022566507737969207480322073

SmSquProd(49):

8809686336023884942985435459389368403328445784970495121010850200179148292
5462898518322210775280782409728000000000000000000000001

200323.2007011.3188701.8128018822036560591511.254159236622781693345787164
1042589.332640773299394531035389053735466933244258575075223

SmSquProd(50)*

2202421584005971235746358864847342100832111446242623780252712550044787073
13657246295805526938201956024320000000000000000000000000001

c128:

2202421584005971235746358864847342100832111446242623780252712550044787073
13657246295805526938201956024320000000000000000000000000001