

Combined calculus operations:

General form .MS. .M{one or more operations(-,+,\div,*,^,root),2 or more(3,4,5,6,...) combined}
.S={numbers}
M..S={solution}

Example .MS. .M{+,2,3} S.={1,6,14}

.M{+,2} 1+1=2 ,1+6=7 ,1+14=15 ,6+6=12 ,6+14=20 ,14+14=28

.M{+,3} 1+1+1=3 ,1+1+6=8 ,1+1+14=16 ,1+6+6=13 ,1+6+14=21 ,1+14+14=29 ,6+6+6=18
6+6+14=26 ,6+14+14=34 ,14+14+14=42

M..S={2,3,7,8,12,13,15,16,18,20,21,26,28,29,34,42}

Process of set:

General form .PS.{one or more process}.In the process set of taking one by one element(one set or more sets)
checks the accuracy of operation, moves to set (one or more)

Example A={0,1,2,3,4,5,6,...} .PS.{process:from the set (A) is the one by one the number of divisions and the
number (3),if the result of natural number , the number of move to set (B)} process:

0\div3=0(yes)B={0},1\div3=0,33...(no),2\div3=0,66...(no),3\div3=1(yes),B={0,3},4\div3=1,33...(no),5\div3=1,66..(no),
6\div3=2(yes)B={0,3,6} B={0,3,6,9,12,15,...}

Regulation of prime numbers: .MS. .M{* ,2,3,4,5,6,...} S.={2} A={3,4,5,...} .PS.{process 1:from the set(A) is
the first number and delete from the set (A), check that the number exists in the set(M..S), if any action is
repeated, if there are move to set (S.).process 2:set (S.) has been expanded and performed operations(.MS.)
for the expanded}

.M{* ,2,3,4,...} S.={2} 2*2=4 ,2*2*2=8 ,... M..S={4,8,...} process1 A={4,5,6,...} {3}\cap{4,8,...}={ }yes S.{2,3}

process 2 .M{* ,2,3,4,...} S.={2,3} 3*2=6 ,3*3=9 ,...M..S={4,6,8,9,...} process1 A={5,6,7,...} {4}\cap{4,6,8,9,...}={4}no,
A={6,7,8,...} {5}\cap{6,8,9,...}={ }yes S.{2,3,5}

process 2 .M{* ,2,3,4,...} S.={2,3,5} 5*2=10 ,5*3=15 ,... M..S={6,8,9,10,12,15,...} process 1 A={7,8,9,...}
{6}\cap{6,8,9,10,12,15,...}={6}no, A={8,9,10,...} {7}\cap{8,9,10,12,15,...}={ } yes S.{2,3,5,7}

process 2 .M{* ,2,3,4,...} S.={2,3,5,7} 7*2=14 ,7*3=21 ,... M..S={8,9,10,12,14,15,16,18,20,21...} ,process 1
A={9,10,11,...} {8}\cap{8,9,10,12,14,15,16,18,20,21,...}={8} no, A={10,11,12,..}
{9}\cap{9,10,12,14,15,16,18,20,21,...}={9} no, A={11,12,13,...} {10}\cap{10,12,14,15,16,18,20,21,...}={10} no,

$A=\{12,13,14,\dots\}$ $\{11\} \cap \{12,14,15,16,18,20,21,\dots\}=\{\}$ yes $S.=\{2,3,5,7,11\}$

process 2 . $M\{*,2,3,4,\dots\}$ $S.\{2,3,5,7,11\}$ and on ad infinitum

set $S.=\{2,3,5,7,11,13,17,\dots\}$ prime numbers