

Table 1

PTOFBMPPN (Periodic Table Of Fractal-Based Mersenne Primes - Perfect Numbers): Eliminate +y

Line #	+y	x	1	3	7	15	31	63	127	255	511	1023	2047	4095	8191
1		1	1	3	7	15	31	63	127	255	511	1023	2047	4095	8191
2	1	2	2	6	14	30	62	126	254	510	1022	2046	4094	8190	16382
3	3	4	4	12	28	60	124	252	508	1020	2044	4092	8188	16380	32764
4	7	8	8	24	56	120	248	504	1016	2040	4088	8184	16376	32760	65528
5	15	16	16	48	112	240	496	1008	2032	4080	8176	o	32752	65520	131056
6	31	32	32	96	224	480	992	2016	4064	8160	16352	32736	65504	131040	262112
7	63	64	64	192	448	960	1984	4032	8128	16320	32704	65472	131008	262080	524224
8	127	128	128	384	896	1920	3968	8064	16256	32640	65408	130944	262016	524160	1048448
9	255	256	256	768	1792	3840	7936	16128	32512	65280	130816	261888	524032	1048320	2096896
10	511	512	512	1536	3584	7680	15872	32256	65024	130560	261632	523776	1048064	2096640	4193792
11	1023	1024	1024	3072	7168	15360	31744	64512	130048	261120	523264	1047552	2096128	4193280	8387584
12	2047	2048	2048	6144	14336	30720	63488	129024	260096	522240	1046528	2095104	4192256	8386560	16775168
13	4095	4096	4096	12288	28672	61440	126976	258048	520192	1044480	2093056	4190208	8384512	16773120	33550336
14	8191	8192	8192	24576	57344	122880	253952	516096	1040384	2088960	4186112	8380416	16769024	33546240	67100672
15	16383	16384	16384	49152	114688	245760	507904	1032192	2080768	4177920	8372224	16760832	33538048	67092480	134201344
16	32767	32768	32768	98304	229376	491520	1015808	2064384	4161536	8355840	16744448	33521664	67076096	134184960	268402688
17	65535	65536	65536	196608	458752	983040	2031616	4128768	8323072	16711680	33488896	67043328	134152192	268369920	536805376
18	131071	131072	131072	393216	917504	1966080	4063232	8257536	16646144	33423360	66977792	134086656	268304384	536739840	1073610752
19	262143	262144	262144	786432	1835008	3932160	8126464	16515072	33292288	66846720	133955584	268173312	536608768	1073479680	2147221504
20	524287	524288	524288	1572864	3670016	7864320	16252928	33030144	66584576	133693440	267911168	536346624	1073217536	2146959360	429443008
21	1048575	1048576	1048576	3145728	7340032	15728640	32505856	66060288	133169152	267386880	535822336	1072693248	2146435072	4293918720	858886016
22	2097151	2097152	2097152	6291456	14680064	31457280	65011712	132120576	266338304	534773760	1071644672	2145386496	4292870144	8587837440	1717772032
23	4194303	4194304	4194304	12582912	29360128	62914560	130023424	264241152	532676608	1069547520	2143289344	4290772992	8585740288	17175674880	34355544064
24	8388607	8388608	8388608	25165824	58720256	125829120	260046848	528482304	1065353216	2139095040	4286578688	8581545984	17171480576	34351349760	68711088128
25	16777215	16777216	16777216	50331648	117440512	251658240	520093696	1056964608	2130706432	4278190080	8573157376	17163091968	34342961152	68702699520	137422176256
26	33554431	33554432	33554432	100663296	234881024	503316480	1040187392	2113929216	4261412864	8556380160	17146314752	34326183936	68685922304	137405399040	274844352512
27	67108863	67108864	67108864	201326592	469762048	1006632960	2080374784	4227858432	852285728	17112760320	3429269504	68652367872	137371844608	274810798080	549688705024
28	134217727	134217728	134217728	402653184	939524096	2013265920	4160749568	8455716864	17045651456	34225520640	68585259008	137304735744	274743689216	549621596160	1099377410048

Eliminating the "+y" converts Table 120/121 from "z_next" to "PN_next" as:

$$(x+z+y) - y = xz = PN$$

let n=0,2,4,6,...EVENS and p-based on PN#

$$(2^n \cdot PN) + (2^{p-2} \cdot *4PN) = PN_p$$

where *4PN= and 1-6-28-120-496 are PN & *PN is in 2nd PLL Diag.:

$$4 \cdot 0 = 0$$

$$4 \cdot 1 = 4$$

$$4 \cdot 6 = 24$$

$$4 \cdot 28 = 112$$

$$4 \cdot 120 = 480$$

$$4 \cdot 496 = 1984$$

Follow DIAGONALLY
on the Table above.

$$\text{BLUE} = PN$$

$$\text{GREEN} = 2PN = CR$$

$$(2^n \cdot PN) + (2^{p-2} \cdot *4PN) = PN_n \text{ for } p=2, PN=6 \quad \underline{\text{2nd PLL Diag}}$$

$$(2^n \cdot PN) + (2^{p-2} \cdot *4PN) = PN_n \text{ for } p=3, PN=28 \quad \underline{\text{3rd PLL Diag}}$$

$$\begin{aligned}
 (1 \cdot 28) + (2 \cdot 4 \cdot 0) &= (1 \cdot 28) + (2 \cdot 0) &= (28) + (0) &= 28 \\
 (4 \cdot 28) + (2 \cdot 4 \cdot 1) &= (4 \cdot 28) + (2 \cdot 4) &= (112) + (8) &= 120 \\
 (16 \cdot 28) + (2 \cdot 4 \cdot 6) &= (16 \cdot 28) + (2 \cdot 24) &= (448) + (48) &= 496 \\
 (64 \cdot 28) + (2 \cdot 4 \cdot 28) &= (64 \cdot 28) + (2 \cdot 112) &= (1792) + (224) &= 2016 \\
 (256 \cdot 28) + (2 \cdot 4 \cdot 120) &= (256 \cdot 28) + (2 \cdot 480) &= (7168) + (960) &= 8128 \\
 (1024 \cdot 28) + (2 \cdot 4 \cdot 496) &= (1024 \cdot 28) + (2 \cdot 1984) &= (28672) + (3968) &= 32640
 \end{aligned}$$

$$(2^n \cdot PN) + (2^{p-2} \cdot *4PN) = PN_n \text{ for } p=4, PN=120 \quad \underline{\text{4th PLL Diag}}$$

$$\begin{aligned}
 (1 \cdot 120) + (4 \cdot 4 \cdot 0) &= (1 \cdot 120) + (4 \cdot 0) &= (120) + (0) &= 120 \\
 (4 \cdot 120) + (4 \cdot 4 \cdot 1) &= (4 \cdot 120) + (4 \cdot 4) &= (480) + (16) &= 496 \\
 (16 \cdot 120) + (4 \cdot 4 \cdot 6) &= (16 \cdot 120) + (4 \cdot 24) &= (1920) + (96) &= 2016 \\
 (64 \cdot 120) + (4 \cdot 4 \cdot 28) &= (64 \cdot 120) + (4 \cdot 112) &= (7680) + (448) &= 8128 \\
 (256 \cdot 120) + (4 \cdot 4 \cdot 120) &= (256 \cdot 120) + (4 \cdot 480) &= (30720) + (1920) &= 28800 \\
 (1024 \cdot 120) + (4 \cdot 4 \cdot 496) &= (1024 \cdot 120) + (4 \cdot 1984) &= (122880) + (7936) &= 130816
 \end{aligned}$$

$$(2^n \cdot PN) + (2^{p-2} \cdot *4PN) = PN_n \text{ for } p=5, PN=496 \quad \underline{\text{5th PLL Diag}}$$

$$\begin{aligned}
 (1 \cdot 496) + (8 \cdot 4 \cdot 0) &= (1 \cdot 496) + (8 \cdot 0) &= (496) + (0) &= 120 \\
 (4 \cdot 496) + (8 \cdot 4 \cdot 1) &= (4 \cdot 496) + (8$$