Table195_BF1-RunningSums-z

Table195_BF1-RunningSums-z on the tDMT: truncated Divisor Matrix Table

#	ODDs	EVENs-NOT	ALL Running Sums (∑) across (— —>) the ODDs Rows. EVENS											
p=1	1	3 2	7 4	15 8	31 16	63 32	127 64	255 128	511 256	1023 512	2047 1024	4095 2048	8191 4096
p=2	3	9 6	21 12	45 24	93 48	189 96	381	765	1533	3069	6141	12285	24573
p=3	7	21 14	49 28	105 56	217 112	441 224	889	1785	3577	7161	14329	28665	57337
p=4	15	45 30	105 60	225 120	465 240	945 480	1905	3825	7665	15345	30705	61425	122865
p=5	31	93 62	217 124	465 248	961 496	1953 992	3937	7905	15841	31713	63457	126945	253921
p=6	63	189 126	441 252	945 504	1953 1008	3969 2016	8001	16065	32193	64449	128961	257985	516033
p=7	127	381 254	889 508	1905 1016	3937 2032	8001 4064	16129 8128	32385	64897	129921	259969	520065	1040257

Table195_BF1-RunningSums-z on the tDMT: truncated Divisor Matrix Table—12 built-in connections

•Butterfly Fractal 1 (BF1) = Row 1. Row 2 = BF1 x 3. Row 3 = BF1 x 7… All in BLACK. Running Sums across the Rows in WHITE.

•ODDs 3-7-31-127 are Mersenne Primes (Mp=z). ODDS 15 & 63 are "containers" that follow the pattern, but are NOT Mp's.

•EVENSs 6-28-496-8128 are Perfect Numbers (PN=xz). EVENS 120 & 4096 are "containers" that are not PN's.

•The Running Sum of those EVENS (SQUARE RECTANGLES) are the square of the ODDs Column and equal the MPS=Mp²=z².

•The ∑ value directly (1 STEP) above the RECTANGLE is the ODD Complement (OC=yz) of that MPS, as MPS=PN+OC=xz+yz.

•The "p" value in the first Column, besides giving the ODDs Column value ($2^p -1$=Mp=z), also gives the PN value:

(2^{p-1} x 2^p-1=PN=xz, where x=2^{p-1}), and does so p=# of STEPS (total # of Columns starting with the ODDs Column) across to its RECTANGLE value.

•The Running Sums of Row 1 BF1 (that is also the √ of its RECTANGLE ∑ value) gives the ODDs Column values.

•As y=x-1=(z-1)/2 and x + y = z, y is always one STEP behind the ODDs value Column or the ∑ in the previous BF1 Row.

•The divisors of ANY PN within the DMT is simply that number and its previous Row number values + the same BF1 Row values.

•The divisors of ANY non-PN is the same + one must also include the composite Row values, e.i. 120 must include Row BF1, Row 3, Row 5 (not shown in the tDMT) and Row 15 values, thus 1-2-3-4-5-6-8-10-12-15-20-24-30-60-120.

•Except for PN6 (in the EVENs NOT ÷4 Column), ALL PN's are found necessarily on every other Column (ORANGE), starting with the "4" Column — yet NOT ALL such Columns hold TRUE PN's (acting solely as containers). Also see Table 183: Make Mp-DMT.

•A bilateral "mirror" symmetry of the ∑'s exists amongst the EVENs, about the central RECTANGLE diagonal values. •Using this information, the ∑'s above the diagonal can be used to inform — predict — those below, e.i. ∑93 — 3 STEPS over from PN6 (under Column 16) is found 3 STEPS down the EVENs NOT÷4 Column, with the ∑961 found 3 STEPS over said Row landing on PN496. SEE Tables 184-186 for even more connections.

Table 184 Annotated

Table184 Mp-DMT Differences — Each line iin the Encircled Group above is a Triplet Color BOLD Ring — Σ in WHITE

p	ODDs $z=Mp$	EVENs-NOT÷4	SET 1				EVENS+4						
value	1	2 / 3	4 / 7	8 / 15	16 / 31	32 / 63	64 / 127	128 / 255	256 / 511	512 / 1023	1024 / 2047	2048 / 4095	4096 / 8191
2	3	6 / 9	12 / 21	24 / 45	48 / 93	96 / 189	192 / 381	384 / 765	768 / 1533	1536 / 3069	3072 / 6141	6144 / 12285	12288 / 24573
3	7	14 / 21	28 / 49	56 / 105	112 / 217	224 / 441	448 / 889	896 / 1785	1792 / 3577	3584 / 7161	7168 / 14329	14336 / 28665	28672 / 57337
5	31	62 / 93	124 / 217	248 / 465	496 / 961	992 / 1953	1984 / 3937	3968 / 7905	7936 / 15841	15872 / 31713	31744 / 63457	63488 / 126945	126976 / 253921
7	127	254 / 381	508 / 889	1016 / 1905	2032 / 3937	4064 / 8001	8128 / 16129	16256 / 32385	32512 / 64897	65024 / 129921	130048 / 259969	260096 / 259969	520192 / 1040257
13	8191	16382 / 24573										16775168 / 33542145	33550336 / 67092481

Table 184: Each of the 4 lines in the Encircled Groups above informs a "Triplet Color Oval Rings on each a Row starting with the PN (BLACK). *Except 2(6)÷9=21 & 6(6) + 9 = 45 series.
The 1st number is an EVEN divisor of 24•(PN). 2nd is the Running Sum Ǭ in WHITE) values in the falling jagged diagonal 1, 2 or 3.
The 3rd is also from these same falling jagged diagonals, displaced 1/2/3/4 STEPS from the initial PN.