Table167_ODDs_EVENs_EVENs-NOT_Matrix++-RSHworksheet 2-2-1

Table167: ODDs_EVENs_EVENs-NOT Matrix, a.k.a. the DMT: Divisor (Factor) Matrix Table #5

ALL Running Sums (∑) across (— —>) the ODDs Rows.

#	ODDs	EVENs-NOT Δ6	Δ14	Δ30	Δ62	Δ126	Δ254	Δ510	Δ1022	Δ2046	Δ4094	Δ8190	Δ16382
						EVENS							
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
2	3	9 6	21 12	45 24	93 48	189 96	381	765	1533	3069	6141	12285	24573
4	7	21 14	49 28	105 56	217 112	441 224	889	1785	3577	7161	14329	28665	57337
8	15	45 30	105 60	225 120	465 240	945 480	1905	3825	7665	15345	30705	61425	122865
16	31	93 62	217 124	465 248	961 496	1953 992	3937	7905	15841	31713	63457	126945	253921
32	63	189	441	945	1953	3969	8001	16065	32193	64449	128961	257985	516033
64	127	381	889	1905	3937	8001	16128	32385	64897	129921	259969	520065	1040257
		0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
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
2	3	9 6	21 12	45 24	93 48	189 96	381	765	1533	3069	6141	12285	24573
4	7	21 14	49 28	105 56	217 112	441 224	889	1785	3577	7161	14329	28665	57337
8	15	45 30	105 60	225 120	465 240	945 480	1905	3825	7665	15345	30705	61425	122865
16	31	93 62	217 124	465 248	961 496	1953 992	3937	7905	15841	31713	63457	126945	253921
32	63	189	441	945	1953	3969	8001	16065	32193	64449	128961	257985	516033
64	127	381	889	1905	3937	8001	16129	32385	64897	129921	259969	520065	1040257

8128

8128

Divisor-Factor Matrix Table (DMT) Every ARROW value is a multiplier times ∑ in the Column of its SQUARE (shown in RED Rectangle), e.i. The ODD @ ARROW 7 when SQUARED equals 49 (RED Rectangle) and that Column has the products of 7 x any other ODD.

Running Sums, ∑, across the ODDs Rows shown in WHITE. Circles are key repeaters. Red Rectangles show ∑ at the MPS & PN location.

The ∑ is simply the product of the ODD x ∑ of the Column Header in Row 1, e.i. 3x3=9, 3x7=21.

The KEY Circle & Oval repeaters are nothing more than the values found when these multipliers are reversed on the table, e.i. 3x7=21, reverses to 7x3=21, the latter found at the ODD Row 7, EVEN Header ∑ of 3.

The ∑ directly after any Red Rectangle MPS & PN spot on a given Row is ALWAYS found directly before the Red Rectangle MPS & PN spot on the Next "container"/TRUE Mp-PN Row, e.i. ∑8001 on ODD 63 Row is found on ODD127 Row. More examples shown with the DARK GRAY ovals just above. The Sum of the ∑ (shown in larger BLACK Rectangle Box = PN (pointed to with ARROWS). # of ∑ entries = √Col. Header, e.i. √Col16=4, so 4 ∑ entries 31+93+144+217=496

Table167_ODDs_EVENs_EVENs-NOT_Matrix++-RSHworksheet 2-2-1

Table167: ODDs_EVENs_EVENs-NOT Matrix, a.k.a. the DMT: Divisor (Factor) Matrix Table #5

ALL Running Sums (∑) across (— —>) the ODDs Rows.

#	ODDs	EVENs-NOT	EVENS Δ6	Δ14	Δ30	Δ62	Δ126	Δ254	Δ510	Δ1022	Δ2046	Δ4094	Δ8190	Δ16382
1	1	2	3	4	8	16	32	64	128	256	512	1024	2048	4096
2	3	6	9	12	24	48	96	381	765	1533	3069	6141	12285	24573
4	7	14	21	28	56	112	224	889	1785	3577	7161	14329	28665	57337
8	15	30	45	60	120	240	480	1905	3825	7665	15345	30705	61425	122865
16	31	62	93	124	248	496	992	3937	7905	15841	31713	63457	126945	253921
32	63	189	441	945	1953	3969	8001	16065	32193	64449	128961	257985	516033	
64	127	381	889	1905	3937	8001	16129	32385	64897	129921	259969	520065	1040257	
		0	0	0	0	0	0	0	0	0	0	0	0	0
	$p= 2^{p-}$		$x= 2^{p-1}$	$y=x-1$	$z=x+y= 2^{p}-1=Mp$		$z^2=MPS$	$xz=PN$	$yz=OC$	$xy=CR$	$x^2=PNS$	$y^2=OCS$		
1	y^1	y^3 x^2	y^7 x^4	y^{15} x^8	y^{31} x^{16}	y^{63} x^{32}	y^{127} x^{64}	255 128	511 256	1023 512	2047 1024	4095 2048	8191 4096	
2	z 3	z^2 x 6	yz 21 xy 12	45 24	93 48	189 96	381	765	1533	3069	6141	12285	24573	
4	z 7	yz 21 z 14	z^2 xz 28	yz 105 xy 56	217 112	441 224	889	1785	3577	7161	14329	28665	57337	
8	z 15	45 30	yz 105 60	z^2 225 xz 120	yz 465 xy 240	945 480	1905	3825	next z=y	15345	30705	61425	122865	
16	z 31	93 62	217 124	yz 465 248	z^2 961 xz 496	yz 1953 xy 992	3937	7905	next $z^2=y^2$	31713	63457	126945	253921	
32	z 63	189	441	945	yz 1953	z^2 3969	yz 8001	16065	32193	64449	128961	257985	516033	
64	z 127	381	889	1905	3937	yz 8001	z^2 16129	32385	64897	129921	259969	520065	1040257	
							xz 8128							

Divisor-Factor Matrix Table (DMT) Every ARROW value is a multiplier times ∑ in the Column of its SQUARE (shown in RED Rectangle), e.i. The ODD @ ARROW 7 when SQUARED equals 49 (RED Rectangle) and that Column has the products of 7 x any other ODD.

Running Sums, ∑, across the ODDs Rows shown in WHITE. Circles are key repeaters. Red Rectangles show ∑ at the MPS & PN location.

The ∑ is simply the product of the ODD x ∑ of the Column Header in Row 1, e.i. 3x3=9, 3x7=21.

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Table167_ODDs_EVENs_EVENs-NOT_Matrix++-RSHworksheet 2-2-1

Table167: ODDs_EVENs_EVENs-NOT Matrix, a.k.a. the DMT: Divisor (Factor) Matrix Table #5

ALL Running Sums (∑) across (— —>) the ODDs Rows.

#	ODDs	EVENs-NOT	Δ6	Δ14	Δ30	Δ62	Δ126	Δ254	Δ510	Δ1022	Δ2046	Δ4094	Δ8190	Δ16382
1	1	3	7	4	15	8	31	16	63	32	127	64	255	128	511	256	1023	512	2047	1024	4095	2048	8191	**4096**
2	3	9	21	12	45	24	93	48	189	96	381		765		1533		3069		6141		12285		24573	
4	7	21	49	28	105	56	217	112	441	224	889		1785		3577		7161		14329		28665		57337	
8	15	45	105	60	225	120	465	240	945	480	1905		3825		7665		15345		30705		61425		122865	
16	31	93	217		465	248	961	496	1953	992	3937		7905		15841		31713		63457		126945		253921	
32	63	189							3969		8001		16065		32193		64449		128961		257985		516033	
64	127	381									16129	8128	32385		64897		129921		259969		520065		1040257	

p= STEPS x= 2^{p-1} y=x-1 z=x+y= 2^{p} -1=Mp z^2=MPS xz=PN yz=OC xy=CR x^2=PNS y^2=OCS

TEMPLATE y x^2 x yz xy z yz z^2 xz

next z=y

next $z^2=y^2$

overlap $x=x^2$

Divisor-Factor Matrix Table (DMT) The truncated DMT — showing the first 7 "containers" that include the first 4 Mersenne Prime -Perfect Number pairings — shown in the TOP part of the table is repeated in the BOTTOM — only now the TEMPLATE symbols have replaced the actual DMT values (BLACK) and Running Sums (WHITE). Every "container" & Mp-PN pairing follow this same pattern, with some exceptions with the first. All 10 defining parameters are present for each.