

Table 105_Master Sheet : Mersenne Prime Squares

			PN/Mp		OC/Mp	2PN/2 ^p	PN + OC	Mp + OC
	p	Δp	x	Δx exponent	y	z	z ²	xz
#	p	Δ	2p-1 = 2p/2	Δ	OC/Mp	Mp = 2 ^p -1	Mp ² = MPS	PN = (2 ^{p-1})(2 ^p -1)
1	2		2		1	3	9	6
2	3	1	4	2 ¹	3	7	49	28
3	5	2	16	2 ²	15	31	961	496
4	7	2	64	2 ²	63	127	16129	8128
5	13	6	4096	2 ⁶	4095	8191	67092481	33550336
6	17	4	65536	2 ⁴	65535	131071	17179607041	8589869056
7	19	2	262144	2 ²	262143	524287	274876858369	137438691328
8	31	12	1073741824	2 ¹²	1073741823	2147483647	4611686014132420609	2305843008139952128
9	61	30	1152921504606846976	2 ³⁰	1152921504606846975	2305843009213693951	5316911983139663487003542222693990401	2658455991569831744654692615953842176
10	89	28	309485009821345068724781056	2 ²⁸	309485009821345068724781055	618970019642690137449562111	383123885216472214589586755549637256619304505646776321	191561942608236107294793378084303638130997321548169216
11	107	18	81129638414606681695789005144064	2 ¹⁸	81129638414606681695789005144063	162259276829213363391578010288127	26328072917139296674479506920917283561170115423410494657557168129	13164036458569648337239753460458722910223472318386943117783728128
12	127	20	85070591730234615865843651857942052864	2 ²⁰	85070591730234615865843651857942052863	170141183460469231731687303715884105727	28948022309329048855892746252171976962977213799489202546401021394546514198529	14474011154664524427946373126085988481573677491474835889066354349131199152128
	p		EVEN		ODD	ODD	ODD	EVEN

KEY: p=PRIME Mp=Mersenne Prime= 2^p -1 Mp² = Mersenne Prime Square PN=Perfect Number = (2^{p-1})(2^p -1)
 OC=ODD Complement (to PN) PNS=Perfect Number Square

Table 105_MS 2: Mersenne Prime Squares: 8 parameters of the First 12 Mersenne Primes. Copyright©2022, Reginald Brooks, Brooks Design. All rights reserved.