

Table161_PN=2^n-x

Perfect Numbers (PN): PNFactors (Divisors) -1 and Divisors -1							
The PNF is calculated from 2p-1. The actual # of Factors(Divisors) =PNF# ONLY with TRUE Active Mp-PN. PN = 2^n - x							
line#	p	x	z=Mp, value	xz=PN, value	n=PNF# =2p-1	# of Factors-1	PN = 2^n - x
1	2	2	3	6	3	3	6
2	3	4	7	28	5	5	28
3	4	8	15	120	7	15	120
4	5	16	31	496	9	9	496
5	6	32	63	2016	11	36	2016
6	7	64	127	8128	13	13	8128
7	8	128	255	32640	15	64	32640
8	9	256	511	130816	17	36	130816
9	10	512	1023	523776	19	80	523776
10	11	1024	2047	2096128	21	44	2096128
11	12	2048	4095	8386560	23	288	8386560
12	13	4096	8191	33550336	25	25	33550336
13	14	8192	16383	134209536	27	112	134209536
14	15	16384	32767	536854528	29	120	536854528
15	16	32768	65535	2147450880	31	256	2147450880
16	17	65536	131071	8589869056	33	33	8589869056
17	18	131072	262143	34359607296	35	576	34359607296
18	19	262144	524287	137438691328	37	37	137438691328
19	31	1073741824	2147483647	2305843008139952128	61	61	2305843008139952128
20	61	115292150 460684697 6	230584300 921369395 1	2658455991569831744654 692615953842176	121	121	2658455991569831744654 692615953842176
21	89	309485009 821345068 724781056	618970019 642690137 449562111	1915619426082361072947 9337808430363813099732 1548169216	177	177	1915619426082361072947 9337808430363813099732 1548169216
22	107	811296384 146066816 957890051 44064	162259276 829213363 391578010 288127	1316403645856964833723 9753460458722910223472 318386943117783728128	213	213	1316403645856964833723 9753460458722910223472 318386943117783728128
23	127	850705917 302346158 658436518 579420528 64	170141183 460469231 731687303 715884105 727	1447401115466452442794 6373126085988481573677 4914748358890663543491 31199152128	253	253	1447401115466452442794 6373126085988481573677 4914748358890663543491 31199152128
line#	p	x	z=Mp, value	xz=PN, value	n=PNF# =2p-1	# of Factors-1	PN = 2^n - x

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Both non-Active "container" and TRUE, Active Mersenne Prime (Mp), Perfect Number (PN) and prime (p) values are shown. The TRUE are in BLUE.
 The # of Factors-1=the # of divisors, not counting the number itself. The TRUE, Active PNs are defined, by definition, as composed solely of multiples of Mersenne Primes.
 The PNF is calculated from 2p-1.
 The actual # of Factors(Divisors) = PNF# ONLY with TRUE Active Mp-PN. The RED highlights show that the actual number of factors (divisors) -1 of the non-Active "containers" exceed their PNF.
 PN = 2^n - x, where n=2p-1, x=2^p-1
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