

$n$	$2^n - 1$	factorisation
2	3	3
3	7	7
4	15	$3 \times 5$
5	31	31
6	63	$3^2 \times 7$
7	127	127
8	255	$3 \times 5 \times 17$
9	511	$7 \times 73$
10	1023	$3 \times 11 \times 31$
11	2047	$23 \times 89$
12	4095	$3^2 \times 5 \times 7 \times 13$
13	8191	8191
14	16383	$3 \times 43 \times 127$
15	32767	$7 \times 31 \times 151$
16	65535	$3 \times 5 \times 17 \times 257$
17	131071	131071
18	262143	$3^3 \times 7 \times 19 \times 73$
19	524287	524287
20	1048575	$3 \times 5^2 \times 11 \times 31 \times 41$
21	2097151	$7^2 \times 127 \times 337$
22	4194303	$3 \times 23 \times 89 \times 683$
23	8388607	$47 \times 178481$
24	16777215	$3^2 \times 5 \times 7 \times 13 \times 17 \times 241$
25	33554431	$31 \times 601 \times 1801$
26	67108863	$3 \times 2731 \times 8191$
27	134217727	$7 \times 73 \times 262657$
28	268435455	$3 \times 5 \times 29 \times 43 \times 113 \times 127$
29	536870911	$233 \times 1103 \times 2089$
30	1073741823	$3^2 \times 7 \times 11 \times 31 \times 151 \times 331$
31	2147483647	2147483647