

# THE LARGEST KNOWN PRIMES

(Primes with 600,000 or more digits)

(selected smaller primes which have comments are included)

Originally Compiled by Samuel Yates – Continued by Chris Caldwell

(Last Updated Thu Jul 3 09:50:22 CDT 2014)

So that I can maintain this database of the 5,000 largest known primes (plus selected smaller primes with 1,000 or more digits), please send any new primes (that are large enough) to:

<http://primes.utm.edu/bios/submission.php>

This list in a searchable form (plus information such as how to find large primes and how to prove primality) is available at the interactive web site:

<http://primes.utm.edu/primes/>

See the last pages for information about the provers.

Professor Chris K. Caldwell  
Mathematics and Statistics  
University of Tennessee at Martin  
Martin, TN 38238, USA

caldwell@utm.edu  
<http://www.utm.edu/~caldwell/>

## 1 The List of Primes

The letters after the rank refer to when the prime was submitted. ‘a’ is this month, ‘b’ last month...

rank	description	digits	who	year	comment
1	$2^{57885161} - 1$	17425170	G13	13	Mersenne 48??
2	$2^{43112609} - 1$	12978189	G10	08	Mersenne 47??
3	$2^{42643801} - 1$	12837064	G12	09	Mersenne 46??
4	$2^{37156667} - 1$	11185272	G11	08	Mersenne 45?
5	$2^{32582657} - 1$	9808358	G9	06	Mersenne 44?
6	$2^{30402457} - 1$	9152052	G9	05	Mersenne 43?
7	$2^{25964951} - 1$	7816230	G8	05	Mersenne 42
8	$2^{24036583} - 1$	7235733	G7	04	Mersenne 41
9	$2^{20996011} - 1$	6320430	G6	03	Mersenne 40
10	$2^{13466917} - 1$	4053946	G5	01	Mersenne 39
11	$19249 \cdot 2^{13018586} + 1$	3918990	SB10	07	
12	$3 \cdot 2^{10829346} + 1$	3259959	L3770	14	Divides $GF(10829343, 3)$ , $GF(10829345, 5)$
13	$475856^{524288} + 1$	2976633	L3230	12	Generalized Fermat
14	$356926^{524288} + 1$	2911151	L3209	12	Generalized Fermat
15	$341112^{524288} + 1$	2900832	L3184	12	Generalized Fermat
16	$27653 \cdot 2^{9167433} + 1$	2759677	SB8	05	
17	$90527 \cdot 2^{9162167} + 1$	2758093	L1460	10	
18	$75898^{524288} + 1$	2558647	p334	11	Generalized Fermat
19	$28433 \cdot 2^{7830457} + 1$	2357207	SB7	04	
20	$3 \cdot 2^{7033641} + 1$	2117338	L2233	11	Divides $GF(7033639, 3)$
21	$33661 \cdot 2^{7031232} + 1$	2116617	SB11	07	
22	$2^{6972593} - 1$	2098960	G4	99	Mersenne 38
23	$40597 \cdot 2^{6808509} - 1$	2049571	L3749	13	

rank	description	digits	who	year	comment
24	$6679881 \cdot 2^{6679881} + 1$	2010852	L917	09	Cullen
25	$304207 \cdot 2^{6643565} - 1$	1999918	L3547	13	
26	$398023 \cdot 2^{6418059} - 1$	1932034	L3659	13	
27	$1582137 \cdot 2^{6328550} + 1$	1905090	L801	09	Cullen
28	$3 \cdot 2^{6090515} - 1$	1833429	L1353	10	
29	$7 \cdot 2^{5775996} + 1$	1738749	L3325	12	
30	$9 \cdot 2^{5642513} + 1$	1698567	L3432	13	
31	$252191 \cdot 2^{5497878} - 1$	1655032	L3183	12	
32	$258317 \cdot 2^{5450519} + 1$	1640776	g414	08	
33	$773620^{262144} + 1$	1543643	L3118	12	Generalized Fermat
34	$3 \cdot 2^{5082306} + 1$	1529928	L780	09	Divides $GF(5082303, 3)$ , $GF(5082305, 5)$
35	$676754^{262144} + 1$	1528413	L2975	12	Generalized Fermat
36	$5359 \cdot 2^{5054502} + 1$	1521561	SB6	03	
37	$525094^{262144} + 1$	1499526	p338	12	Generalized Fermat
38	$265711 \cdot 2^{4858008} + 1$	1462412	g414	08	
39	$1271 \cdot 2^{4850526} - 1$	1460157	L1828	12	
40	$361658^{262144} + 1$	1457075	p332	11	Generalized Fermat
41	$2^{4792057} - 2^{2396029} + 1$	1442553	L3839	14	Gaussian Mersenne norm 39??
42	$9 \cdot 2^{4683555} - 1$	1409892	L1828	12	
43	$11 \cdot 2^{4643238} - 1$	1397755	L2484	14	
44	$121 \cdot 2^{4553899} - 1$	1370863	L3023	12	
45	$145310^{262144} + 1$	1353265	p314	11	Generalized Fermat
46	$353159 \cdot 2^{4331116} - 1$	1303802	L2408	11	
47	$141941 \cdot 2^{4299438} - 1$	1294265	L689	11	
48	$15 \cdot 2^{4246384} + 1$	1278291	L3432	13	Divides $GF(4246381, 6)$
49	$3 \cdot 2^{4235414} - 1$	1274988	L606	08	
50	$191 \cdot 2^{4203426} - 1$	1265360	L2484	12	
51	$40734^{262144} + 1$	1208473	p309	11	Generalized Fermat
52	$9 \cdot 2^{4005979} - 1$	1205921	L1828	12	
53	$27 \cdot 2^{3855094} - 1$	1160501	L3033	12	
54	$24518^{262144} + 1$	1150678	g413	08	Generalized Fermat
55	$123547 \cdot 2^{3804809} - 1$	1145367	L2371	11	
56	$326834 \cdot 5^{1634978} - 1$	1142807	L3523	14	
57	$415267 \cdot 2^{3771929} - 1$	1135470	L2373	11	
58	$11 \cdot 2^{3771821} + 1$	1135433	p286	13	
59	$938237 \cdot 2^{3752950} - 1$	1129757	L521	07	Woodall
60	$207394 \cdot 5^{1612573} - 1$	1127146	L3869	14	
61	$104944 \cdot 5^{1610735} - 1$	1125861	L3849	14	
62	$330286 \cdot 5^{1584399} - 1$	1107453	L3523	14	
63	$15 \cdot 2^{3668194} - 1$	1104238	L3665	13	
64	$65531 \cdot 2^{3629342} - 1$	1092546	L2269	11	
65	$485767 \cdot 2^{3609357} - 1$	1086531	L622	08	
66	$5 \cdot 2^{3569154} - 1$	1074424	L503	09	
67	$22934 \cdot 5^{1536762} - 1$	1074155	L3789	14	
68	$\text{Phi}(3, 3^{1118781} + 1)/3$	1067588	L3839	14	Generalized Unique
69	$93 \cdot 2^{3544744} + 1$	1067077	L1728	14	
70	$178658 \cdot 5^{1525224} - 1$	1066092	L3789	14	
71	$1019 \cdot 2^{3536312} - 1$	1064539	L1828	12	
72	$2 \cdot 10^{1059002} - 1$	1059003	L3432	13	Near-repdigit

rank	description	digits	who	year	comment
73	$7 \cdot 2^{3511774} + 1$	1057151	p236	08	Divides $GF(3511773, 6)$
74	$428639 \cdot 2^{3506452} - 1$	1055553	L2046	11	
75	$9 \cdot 2^{3497442} + 1$	1052836	L1780	12	Generalized Fermat, divides $GF(3497441, 10)$
76	$87 \cdot 2^{3496188} + 1$	1052460	L1576	14	
77	$51 \cdot 2^{3490971} + 1$	1050889	L1823	14	
78	$59912 \cdot 5^{1500861} + 1$	1049062	L3772	14	
79	$37292 \cdot 5^{1487989} + 1$	1040065	L3553	13	
80	$1273 \cdot 2^{3448551} - 1$	1038121	L1828	12	
81	$191249 \cdot 2^{3417696} - 1$	1028835	L1949	10	
82	$59 \cdot 2^{3408416} - 1$	1026038	L426	10	
83	$67 \cdot 2^{3391385} - 1$	1020911	L1959	14	
84	$173198 \cdot 5^{1457792} - 1$	1018959	L3720	13	
85	$81 \cdot 2^{3352924} + 1$	1009333	L1728	12	Generalized Fermat
86	$1087 \cdot 2^{3336385} - 1$	1004355	L1828	12	
87	$464253 \cdot 2^{3321908} - 1$	1000000	L466	13	
88	$191273 \cdot 2^{3321908} - 1$	1000000	L466	13	
89	$3139 \cdot 2^{3321905} - 1$	999997	L185	08	
90	$4847 \cdot 2^{3321063} + 1$	999744	SB9	05	
91	$49 \cdot 2^{3309087} - 1$	996137	L1959	13	
92	$245114 \cdot 5^{1424104} - 1$	995412	L3686	13	
93	$175124 \cdot 5^{1422646} - 1$	994393	L3686	13	
94	$5 \cdot 2^{3264650} - 1$	982759	L384	13	
95	$223 \cdot 2^{3264459} - 1$	982703	L1884	12	
96	$9 \cdot 2^{3259381} - 1$	981173	L1828	11	
97	$39 \cdot 2^{3240990} + 1$	975637	L3432	14	
98	$211195 \cdot 2^{3224974} + 1$	970820	L2121	13	
99	$94373 \cdot 2^{3206717} + 1$	965323	L2785	13	
100	$113983 \cdot 2^{3201175} - 1$	963655	L613	08	
101	$33 \cdot 2^{3176269} + 1$	956154	L3432	13	
102	$1087 \cdot 2^{3164677} - 1$	952666	L1828	12	
103	$15 \cdot 2^{3162659} + 1$	952057	p286	12	
104	$19 \cdot 2^{3155009} - 1$	949754	L1828	12	
105	$3 \cdot 2^{3136255} - 1$	944108	L256	07	
106	$27777 \cdot 2^{3111027} + 1$	936517	L2777	14	Generalized Cullen
107	$1019 \cdot 2^{3103680} - 1$	934304	L1828	12	
108	$256612 \cdot 5^{1335485} - 1$	933470	L259	13	
109	$69 \cdot 2^{3097340} - 1$	932395	L3764	14	
110	$5 \cdot 2^{3090860} - 1$	930443	L1862	12	
111	$60849 \cdot 2^{3067914} + 1$	923539	L591	14	
112	$21 \cdot 2^{3065701} + 1$	922870	p286	12	
113	$43 \cdot 2^{3063674} + 1$	922260	L3432	13	
114	$5 \cdot 2^{3059698} - 1$	921062	L503	08	
115	$383731 \cdot 2^{3021377} - 1$	909531	L466	11	
116	$46821 \cdot 2^{3021380} - 374567$	909531	p363	13	
117	$2^{3021377} - 1$	909526	G3	98	Mersenne 37
118	$7 \cdot 2^{3015762} + 1$	907836	g279	08	
119	$268514 \cdot 5^{1292240} - 1$	903243	L3562	13	
120	$7 \cdot 10^{902708} + 1$	902709	p342	13	
121	$43 \cdot 2^{2994958} + 1$	901574	L3222	13	

rank	description	digits	who	year	comment
122	$1095 \cdot 2^{2992587} - 1$	900862	L1828	11	
123	$15 \cdot 2^{2988834} + 1$	899730	p286	12	
124	$39 \cdot 2^{2978894} + 1$	896739	L2719	13	
125	$4348099 \cdot 2^{2976221} - 1$	895939	L466	08	
126	$18976 \cdot 2^{2976221} - 18975$	895937	p373	14	
127	$2^{2976221} - 1$	895932	G2	97	Mersenne 36
128	$46425 \cdot 2^{2971203} + 1$	894426	L2777	14	Generalized Cullen
129	$198677 \cdot 2^{2950515} + 1$	888199	L2121	12	
130	$17 \cdot 2^{2946584} - 1$	887012	L3519	13	
131	$33 \cdot 2^{2939063} - 1$	884748	L3345	13	
132	$7019 \cdot 10^{881309} - 1$	881313	L3564	13	
133	$25 \cdot 2^{2927222} + 1$	881184	L1935	13	Generalized Fermat
134	$97366 \cdot 5^{1259955} - 1$	880676	L3567	13	
135	$243944 \cdot 5^{1258576} - 1$	879713	L3566	13	
136	$7 \cdot 2^{2915954} + 1$	877791	g279	08	Divides $GF(2915953, 12)$ [g322]
137	$427194 \cdot 113^{427194} + 1$	877069	p310	12	Generalized Cullen
138	$63 \cdot 2^{2898957} + 1$	872675	L3262	13	
139	$11 \cdot 2^{2897409} + 1$	872209	L2973	13	Divides $GF(2897408, 3)$
140	$51 \cdot 2^{2881227} + 1$	867338	L3512	13	
141	$41 \cdot 2^{2872058} - 1$	864578	L2484	13	
142	$1207 \cdot 2^{2861901} - 1$	861522	L1828	11	
143	$222361 \cdot 2^{2854840} + 1$	859398	g403	06	
144	$95 \cdot 2^{2837909} + 1$	854298	L3539	13	
145	$84466 \cdot 5^{1215373} - 1$	849515	L3562	13	
146	$97 \cdot 2^{2820650} + 1$	849103	L2163	13	
147	$107 \cdot 2^{2819922} - 1$	848884	L2484	13	
148	$97 \cdot 2^{2818306} + 1$	848397	L3262	13	
149	$177 \cdot 2^{2816050} + 1$	847718	L129	12	
150	$96 \cdot 10^{846519} - 1$	846521	L2425	11	Near-repdigit
151	$63 \cdot 2^{2807130} + 1$	845033	L3262	13	
152	$150344 \cdot 5^{1205508} - 1$	842620	L3547	13	
153	$400254 \cdot 127^{400254} + 1$	842062	g407	13	Generalized Cullen
154	$43 \cdot 2^{2795582} + 1$	841556	L2842	13	
155	$15 \cdot 2^{2785940} + 1$	838653	p286	12	
156	$57 \cdot 2^{2765963} + 1$	832640	L3262	13	
157	$77 \cdot 2^{2762047} + 1$	831461	L3430	13	
158	$7 \cdot 10^{830865} + 1$	830866	p342	14	
159	$57 \cdot 2^{2747499} + 1$	827082	L3514	13	Divides Fermat $F(2747497)$
160	$17 \cdot 2^{2721830} - 1$	819354	p294	10	
161	$165 \cdot 2^{2717378} - 1$	818015	L2055	12	
162	$45 \cdot 2^{2711732} + 1$	816315	L1349	12	
163	$39 \cdot 2^{2705367} + 1$	814399	L1576	13	Divides $GF(2705360, 3)$
164	$11 \cdot 2^{2691961} + 1$	810363	p286	13	Divides $GF(2691960, 12)$
165	$1372930^{131072} + 1$	804474	g236	03	Generalized Fermat
166	$1361244^{131072} + 1$	803988	g236	04	Generalized Fermat
167	$1396 \cdot 5^{1146713} - 1$	801522	L3547	13	
168	$69 \cdot 2^{2649939} - 1$	797713	L3764	14	
169	$1176694^{131072} + 1$	795695	g236	03	Generalized Fermat
170	$13 \cdot 2^{2642943} - 1$	795607	L1862	12	
171	$342673 \cdot 2^{2639439} - 1$	794556	L53	07	

rank	description	digits	who	year	comment
172	$92182 \cdot 5^{1135262} + 1$	793520	L3547	13	
173	$87 \cdot 2^{2630468} + 1$	791852	L3262	13	
174	$17152 \cdot 5^{1131205} - 1$	790683	L3552	13	
175	$1063730^{131072} + 1$	789949	g260	13	Generalized Fermat
176	$1243 \cdot 2^{2623707} - 1$	789818	L1828	11	
177	$87 \cdot 2^{2609046} + 1$	785404	L2520	13	
178	$329584 \cdot 5^{1122935} - 1$	784904	L3553	13	
179	$13 \cdot 2^{2606075} - 1$	784508	L1862	11	
180	$25 \cdot 2^{2583690} + 1$	777770	L3249	13	Generalized Fermat
181	$334310 \cdot 2^{11334310} - 1$	777037	p350	12	Generalized Woodall
182	$51 \cdot 2^{2578652} + 1$	776254	L3262	13	
183	$75 \cdot 2^{2562382} - 1$	771356	L2055	11	
184	$147559 \cdot 2^{2562218} + 1$	771310	L764	12	
185	$404 \cdot 12^{714558} + 1$	771141	L1471	11	
186	$9 \cdot 2^{2543551} + 1$	765687	L1204	11	Divides Fermat $F(2543548)$ , $GF(2543549, 3)$ , $GF(2543549, 6)$ , $GF(2543549, 12)$
187	$689186^{131072} + 1$	765243	g429	13	Generalized Fermat
188	$123287 \cdot 2^{2538167} + 1$	764070	L3054	12	
189	$305716 \cdot 5^{1093095} - 1$	764047	L3547	13	
190	$83 \cdot 2^{2537641} + 1$	763908	L1300	13	
191	$33 \cdot 2^{2513872} - 1$	756753	L3345	13	
192	$45 \cdot 2^{2507894} + 1$	754953	L1349	12	
193	$130484 \cdot 5^{1080012} - 1$	754902	L3547	13	
194	$572186^{131072} + 1$	754652	g0	04	Generalized Fermat
195	$165 \cdot 2^{2500130} - 1$	752617	L2055	11	
196	$33 \cdot 2^{2499883} - 1$	752542	L3345	13	
197	$57 \cdot 2^{2492031} + 1$	750178	L1230	13	
198	$3 \cdot 2^{2478785} + 1$	746190	g245	03	Divides Fermat $F(2478782)$ , $GF(2478782, 3)$ , $GF(2478776, 6)$ , $GF(2478782, 12)$
199	$22 \cdot 30^{504814} - 1$	745673	p355	14	
200	$11 \cdot 2^{2476839} + 1$	745604	L2691	11	
201	$1061 \cdot 2^{2474282} - 1$	744837	L1828	12	
202	$81 \cdot 2^{2468789} + 1$	743182	g418	09	
203	$55154 \cdot 5^{1063213} + 1$	743159	L3543	13	
204	$26773 \cdot 2^{2465343} - 1$	742147	L197	06	
205	$5 \cdot 2^{2460482} - 1$	740680	L503	08	
206	$41676 \cdot 7^{875197} - 1$	739632	L2777	12	Generalized Woodall
207	$65 \cdot 2^{2450614} - 1$	737711	L2074	14	
208	$75 \cdot 2^{2446050} + 1$	736337	L3035	13	
209	$114986 \cdot 5^{1052966} - 1$	735997	L3528	13	
210	$386892^{131072} + 1$	732377	p259	09	Generalized Fermat
211	$69 \cdot 2^{2428251} - 1$	730979	L384	14	
212	$23 \cdot 2^{2425641} + 1$	730193	L2675	11	
213	$69 \cdot 2^{2410035} - 1$	725495	L2074	13	
214	$243686 \cdot 5^{1036954} - 1$	724806	L3549	13	
215	$15 \cdot 2^{2393365} + 1$	720476	L1349	10	

rank	description	digits	who	year	comment
216	$99 \cdot 2^{2383846} + 1$	717612	L1780	13	
217	$737 \cdot 2^{2382804} - 1$	717299	L191	07	
218	$61 \cdot 2^{2381887} - 1$	717022	L2432	12	
219	$1117 \cdot 2^{2373977} - 1$	714642	L1828	12	
220	$99 \cdot 2^{2370390} + 1$	713561	L1204	13	
221	$1183953 \cdot 2^{2367907} - 1$	712818	L447	07	Woodall
222	[ Long prime 222 ]	712748	p360	13	
223	$119878 \cdot 5^{1019645} - 1$	712707	L3528	13	
224	$150209! + 1$	712355	p3	11	Factorial
225	$2683 \cdot 2^{2360743} - 1$	710658	L1959	12	
226	$33706 \cdot 6^{910462} + 1$	708482	L587	14	
227	$45 \cdot 2^{2347187} + 1$	706576	L1349	12	
228	$127 \cdot 2^{2346377} - 1$	706332	L282	09	
229	$33 \cdot 2^{2345001} + 1$	705918	L2322	13	
230	$83 \cdot 2^{2342345} + 1$	705119	L2626	13	
231	$275293 \cdot 2^{2335007} - 1$	702913	L193	06	
232	$228188^{131072} + 1$	702323	g124	10	Generalized Fermat
233	$147855! - 1$	700177	p362	13	Factorial
234	$15 \cdot 2^{2323205} - 1$	699356	L2484	11	
235	$125098 \cdot 6^{896696} + 1$	697771	L587	14	
236	$65536 \cdot 5^{997872} + 1$	697488	L3802	14	Generalized Fermat
237	$1983 \cdot 366^{271591} - 1$	696222	L2054	12	
238	$3 \cdot 2^{2312734} - 1$	696203	L158	05	
239	$450457 \cdot 2^{2307905} - 1$	694755	L172	06	
240	$1087 \cdot 2^{2293345} - 1$	690369	L1828	11	
241	$97768 \cdot 5^{987383} - 1$	690157	L1016	13	
242	$3 \cdot 2^{2291610} + 1$	689844	L753	08	Divides $GF(2291607, 3)$ , $GF(2291609, 5)$
243	$93 \cdot 2^{2263894} + 1$	681502	L2826	13	
244	$217499 \cdot 28^{470508} - 1$	680905	p366	13	
245	$65 \cdot 2^{2250637} + 1$	677512	L3487	13	
246	$374565 \cdot 2^{2247391} + 1$	676538	L3532	13	Generalized Cullen
247	$35 \cdot 2^{2241049} + 1$	674625	L2742	13	
248	$831 \cdot 2^{2235253} + 1$	672882	L3432	13	
249	$103 \cdot 2^{2232551} - 1$	672067	L2484	13	
250	$11 \cdot 2^{2230369} + 1$	671410	L2561	11	Divides $GF(2230368, 3)$
251	$130816^{131072} + 1$	670651	g308	03	Generalized Fermat
252	$27 \cdot 2^{2218064} + 1$	667706	L690	09	
253	$67 \cdot 2^{2215581} - 1$	666959	L268	10	
254	$33 \cdot 2^{2215291} - 1$	666871	L3345	13	
255	$157533 \cdot 2^{2214598} - 1$	666666	L3494	13	
256	$33 \cdot 2^{2212971} - 1$	666173	L3345	13	
257	$3 \cdot 10^{665829} + 1$	665830	p300	12	
258	$165 \cdot 2^{2207550} - 1$	664541	L2055	11	
259	$19 \cdot 2^{2206266} + 1$	664154	p189	06	
260	$2 \cdot 179^{294739} + 1$	664004	g424	11	Divides $Phi(179^{294739}, 2)$
261	$173 \cdot 2^{2199301} + 1$	662058	L1204	14	
262	$5077 \cdot 2^{2198565} - 1$	661838	L251	08	
263	$114487 \cdot 2^{2198389} - 1$	661787	L179	06	
264	$404882 \cdot 43^{404882} - 1$	661368	p310	11	Generalized Woodall

rank	description	digits	who	year	comment
265	$256 \cdot 3^{1384608} + 1$	660629	L3802	14	Generalized Fermat
266	$269 \cdot 2^{2189235} + 1$	659028	L1204	14	
267	$39 \cdot 2^{2188855} + 1$	658913	p286	13	
268	$433 \cdot 2^{2188076} + 1$	658680	L3855	14	
269	$249 \cdot 2^{2185003} + 1$	657754	L1300	14	
270	$585 \cdot 2^{2184510} + 1$	657606	L3838	14	
271	$525 \cdot 2^{2180848} + 1$	656504	L3797	14	
272	$447 \cdot 2^{2180102} + 1$	656279	L3760	14	
273	$196597 \cdot 2^{2178109} - 1$	655682	L175	06	
274	$70082 \cdot 5^{936972} - 1$	654921	L3523	13	
275	$699 \cdot 2^{2175031} + 1$	654753	L3865	14	
276	$69 \cdot 2^{2174213} - 1$	654506	L2055	12	
277	$793 \cdot 2^{2173720} + 1$	654358	L2322	14	
278	$651 \cdot 2^{2173159} + 1$	654189	L3864	14	
279	$739 \cdot 2^{2170786} + 1$	653475	L2121	14	
280	$701 \cdot 2^{2169041} + 1$	652950	L3863	14	
281	$295 \cdot 2^{2168448} + 1$	652771	L1935	14	
282	$7 \cdot 2^{2167800} + 1$	652574	g279	07	Divides Fermat $F(2167797)$ , $GF(2167799, 5)$ , $GF(2167799, 10)$
283	$359 \cdot 2^{2165551} + 1$	651899	L3838	14	
284	$329 \cdot 2^{2163717} + 1$	651347	L2117	14	
285	$559 \cdot 2^{2163382} + 1$	651246	L1741	14	
286	$775 \cdot 2^{2162344} + 1$	650934	L3588	14	
287	$21 \cdot 2^{2160479} - 1$	650371	L2074	12	
288	$102976 \cdot 5^{929801} - 1$	649909	L3313	13	
289	$617 \cdot 2^{2156699} + 1$	649234	L1675	14	
290	$483 \cdot 2^{2155456} + 1$	648860	L3760	14	
291	$105 \cdot 2^{2155392} + 1$	648840	L3580	14	
292	$31340 \cdot 6^{833096} + 1$	648280	p271	13	
293	$427 \cdot 2^{2153306} + 1$	648213	L3838	14	
294	$261 \cdot 2^{2152805} + 1$	648062	L1125	14	
295	$371 \cdot 2^{2150871} + 1$	647480	L2545	14	
296	$111 \cdot 2^{2150802} - 1$	647458	L2484	13	
297	$357 \cdot 2^{2148518} + 1$	646771	L1741	14	
298	$67 \cdot 2^{2148060} + 1$	646633	L3276	13	
299	$243 \cdot 2^{2147387} - 1$	646431	L2444	14	
300	$693 \cdot 2^{2147024} + 1$	646322	L3862	14	
301	$3 \cdot 2^{2145353} + 1$	645817	g245	03	Divides Fermat $F(2145351)$ , $GF(2145351, 3)$ , $GF(2145352, 5)$ , $GF(2145348, 6)$ , $GF(2145352, 10)$ , $GF(2145351, 12)$
302	$509 \cdot 2^{2144181} + 1$	645466	L3035	14	
303	$753 \cdot 2^{2143388} + 1$	645227	L2583	14	Divides $GF(2143383, 3)$
304	$161 \cdot 2^{2142431} + 1$	644939	L3105	14	
305	$25 \cdot 2^{2141884} + 1$	644773	L1741	11	Divides Fermat $F(2141872)$ , $GF(2141871, 5)$ , $GF(2141872, 10)$ ; generalized Fermat

rank	description	digits	who	year	comment
306	$23 \cdot 2^{2141626} - 1$	644696	L545	08	
307	$519 \cdot 2^{2140311} + 1$	644301	L2659	14	
308	$7 \cdot 2^{2139912} + 1$	644179	g279	07	Divides $GF(2139911, 12)$
309	$315 \cdot 2^{2139665} + 1$	644106	L3838	14	
310	$193 \cdot 2^{2139400} + 1$	644026	L3538	14	
311	$292402 \cdot 159^{292402} + 1$	643699	g407	12	Generalized Cullen
312	$513 \cdot 2^{2135642} + 1$	642896	L3843	14	
313	$61 \cdot 2^{2134577} - 1$	642574	L2055	11	
314	$711 \cdot 2^{2132477} + 1$	641943	L2125	14	
315	$75 \cdot 2^{2130432} - 1$	641326	L2055	11	
316	$110488 \cdot 5^{917100} + 1$	641031	L3354	13	
317	$37 \cdot 2^{2128328} + 1$	640693	L3422	13	
318	$103 \cdot 2^{2128242} + 1$	640667	L3787	14	
319	$253 \cdot 2^{2126968} + 1$	640284	L1935	14	
320	$583 \cdot 2^{2126166} + 1$	640043	L1741	14	
321	$587 \cdot 2^{2124947} + 1$	639676	L3838	14	
322	$451 \cdot 2^{2124636} + 1$	639582	L1741	14	
323	$693 \cdot 2^{2121393} + 1$	638606	L3278	14	
324	$8331405 \cdot 2^{2120345} - 1$	638295	L2055	13	
325	$33 \cdot 2^{2118570} - 1$	637755	L3345	13	
326	$254 \cdot 5^{911506} - 1$	637118	p292	10	
327	$771 \cdot 2^{2115741} + 1$	636905	L1675	14	
328	$411 \cdot 2^{2115559} + 1$	636850	L2840	14	
329	$189 \cdot 2^{2115473} + 1$	636824	L3784	14	Divides $GF(2115468, 6)$
330	$591 \cdot 2^{2111001} + 1$	635478	L1360	14	
331	$433 \cdot 2^{2109146} + 1$	634919	L1935	14	
332	$519 \cdot 2^{2108910} + 1$	634848	L1356	14	
333	$765 \cdot 2^{2106027} + 1$	633981	L3838	14	
334	$503 \cdot 2^{2106013} + 1$	633976	L1741	14	
335	$113 \cdot 2^{2104825} + 1$	633618	L3785	14	
336	$381 \cdot 2^{2103999} + 1$	633370	L2322	14	
337	$57 \cdot 2^{2103370} - 1$	633180	L2055	11	
338	$539 \cdot 2^{2102167} + 1$	632819	L3125	14	
339	$687 \cdot 2^{2100243} + 1$	632239	L3867	14	
340	$329 \cdot 2^{2099771} + 1$	632097	L2507	14	
341	$35 \cdot 2^{2099769} + 1$	632095	L3432	13	
342	$405 \cdot 2^{2099716} + 1$	632081	L3154	14	
343	$575 \cdot 2^{2098483} + 1$	631710	L3168	14	
344	$103 \cdot 2^{2093350} + 1$	630164	L3432	13	
345	$369 \cdot 2^{2093022} + 1$	630065	L3514	14	
346	$165 \cdot 2^{2090645} + 1$	629350	L1209	14	
347	$1119 \cdot 2^{2090509} + 1$	629309	L2520	14	
348	$941 \cdot 2^{2090243} + 1$	629229	L1356	14	
349	$62722^{131072} + 1$	628808	g308	03	Generalized Fermat
350	$401 \cdot 2^{2088713} + 1$	628768	L3035	14	
351	$819 \cdot 2^{2088423} + 1$	628681	L3890	14	
352	$1009 \cdot 2^{2087690} + 1$	628461	L3728	14	
353	$85 \cdot 2^{2087651} - 1$	628448	L2338	13	
354	$467 \cdot 2^{2085835} + 1$	627902	L3625	14	
355	$563528 \cdot 13^{563528} - 1$	627745	p262	09	Generalized Woodall



rank	description	digits	who	year	comment
356	$437960 \cdot 3^{1313880} + 1$	626886	L2777	12	Generalized Cullen
357	$247 \cdot 2^{2082202} + 1$	626808	L3294	14	
358	$107 \cdot 2^{2081775} + 1$	626679	L3432	13	Divides $GF(2081774, 6)$
359	$655 \cdot 2^{2080562} + 1$	626315	L3859	14	
360	$201 \cdot 2^{2080464} + 1$	626285	L1741	14	
361	$269328 \cdot 2^{269328} + 1$	626000	p354	12	Generalized Cullen
362	$153 \cdot 2^{2079401} + 1$	625965	L3601	14	
363	$279 \cdot 2^{2079167} + 1$	625895	L2413	14	
364	$643 \cdot 2^{2078306} + 1$	625636	L3035	14	
365	$79 \cdot 2^{2078162} + 1$	625591	L2117	13	
366	$239 \cdot 2^{2076663} + 1$	625141	L2413	14	
367	$1003 \cdot 2^{2076535} - 1$	625103	L51	08	
368	$2186 \cdot 7^{739474} - 1$	624932	p258	11	
369	$73 \cdot 2^{2075936} + 1$	624921	L3464	13	
370	$807 \cdot 2^{2075519} + 1$	624797	L3555	14	
371	$65 \cdot 2^{2073229} + 1$	624106	L1480	13	
372	$693 \cdot 2^{2072564} + 1$	623907	L3290	14	
373	$375 \cdot 2^{2071598} + 1$	623616	L2413	14	
374	$73 \cdot 2^{2071592} + 1$	623614	L1480	13	
375	$125 \cdot 2^{2071555} + 1$	623603	L3432	13	
376	$1107 \cdot 2^{2071480} + 1$	623581	L2520	14	
377	$299 \cdot 2^{2070979} + 1$	623430	L1741	14	
378	$891 \cdot 2^{2069024} + 1$	622842	L2520	14	
379	$943 \cdot 2^{2068944} + 1$	622818	L1741	14	
380	$579 \cdot 2^{2068647} + 1$	622728	L2967	14	
381	$911 \cdot 2^{2068497} + 1$	622683	L1741	14	
382	$1005 \cdot 2^{2067272} + 1$	622314	L3895	14	
383	$393 \cdot 2^{2066540} + 1$	622094	L3700	14	
384	$951 \cdot 2^{2065180} + 1$	621685	L1403	14	
385	$915 \cdot 2^{2064663} + 1$	621529	L3035	14	
386	$9 \cdot 2^{2060941} - 1$	620407	L503	08	
387	$659 \cdot 2^{2058623} + 1$	619711	L3860	14	
388	$575 \cdot 2^{2056081} + 1$	618945	L1935	14	
389	$1095 \cdot 2^{2055975} + 1$	618914	L3518	14	
390	$3 \cdot 10^{618853} + 1$	618854	p300	12	
391	$819 \cdot 2^{2054470} + 1$	618461	L2826	14	
392	$969 \cdot 2^{2054054} + 1$	618335	L3668	14	
393	$675 \cdot 2^{2053578} + 1$	618192	L1792	14	
394	$739 \cdot 2^{2051658} + 1$	617614	L3838	14	
395	$71 \cdot 2^{2051313} + 1$	617509	L1480	13	
396	$779 \cdot 2^{2050881} + 1$	617380	L3453	14	
397	$75 \cdot 2^{2050637} - 1$	617306	L2055	11	
398	$935 \cdot 2^{2050113} + 1$	617149	L3696	14	
399	$847 \cdot 2^{2049400} + 1$	616934	L2322	14	
400	$73 \cdot 2^{2048754} + 1$	616739	L3432	13	
401	$527 \cdot 2^{2045751} + 1$	615836	L346	14	
402	$785 \cdot 2^{2045419} + 1$	615736	L3861	14	
403	$195 \cdot 2^{2044789} + 1$	615546	L3744	14	
404	$537 \cdot 2^{2044162} + 1$	615357	L1741	14	
405	$413 \cdot 2^{2043829} + 1$	615257	L1300	14	

rank	description	digits	who	year	comment
406	$345 \cdot 2^{2042295} + 1$	614795	L2562	14	
407	$1069 \cdot 2^{2039562} + 1$	613973	L1741	14	
408	$625 \cdot 2^{2039416} + 1$	613929	L1741	14	Generalized Fermat
409	$1085 \cdot 2^{2038005} + 1$	613504	L2520	14	
410	$1069 \cdot 2^{2036902} + 1$	613172	L3876	14	
411	$417 \cdot 2^{2036482} + 1$	613045	L1847	14	
412	$701 \cdot 2^{2035955} + 1$	612887	L2823	14	
413	$1025 \cdot 2^{2034405} + 1$	612420	L1741	14	
414	$651 \cdot 2^{2034352} + 1$	612404	L3459	14	
415	$121 \cdot 2^{2033941} - 1$	612280	L162	06	
416	$57 \cdot 2^{2033643} + 1$	612190	L3432	13	
417	$249 \cdot 2^{2031803} + 1$	611637	L2327	14	
418	$783 \cdot 2^{2031629} + 1$	611585	L2126	14	
419	$285 \cdot 2^{2028495} + 1$	610641	L2594	14	
420	$775 \cdot 2^{2027562} + 1$	610360	L1204	14	
421	$621 \cdot 2^{2026864} + 1$	610150	L3446	14	
422	$357 \cdot 2^{2026846} + 1$	610144	L2163	14	
423	$879 \cdot 2^{2026501} + 1$	610041	L1139	14	
424	$787 \cdot 2^{2026242} + 1$	609963	L2122	14	
425	$919 \cdot 2^{2024094} + 1$	609316	L1741	14	
426	$235 \cdot 2^{2023486} + 1$	609133	L2594	14	
427	$195 \cdot 2^{2023030} + 1$	608996	L376	14	
428	$8 \cdot 10^{608989} - 1$	608990	p297	11	Near-repdigit
429	$233 \cdot 2^{2022801} + 1$	608927	L3767	14	
430	$521 \cdot 2^{2022059} + 1$	608704	L3760	14	
431	$431 \cdot 2^{2019693} + 1$	607991	L2100	14	
432	$1155 \cdot 2^{2019244} + 1$	607857	L3873	14	
433	$195 \cdot 2^{2018866} + 1$	607742	L2413	14	
434	$59506 \cdot 6^{780877} + 1$	607646	p254	13	
435	$45 \cdot 2^{2014557} + 1$	606444	L1349	12	Divides $GF(2014552, 10)$
436	$251749 \cdot 2^{2013995} - 1$	606279	L436	07	Woodall
437	$1023 \cdot 2^{2012570} + 1$	605847	L1741	14	
438	$403 \cdot 2^{2012412} + 1$	605799	L3538	14	
439	$1173 \cdot 2^{2012185} + 1$	605732	L1413	14	
440	$751 \cdot 2^{2010924} + 1$	605352	L3859	14	
441	$101 \cdot 2^{2009735} + 1$	604993	L3432	13	
442	$1069 \cdot 2^{2008558} + 1$	604640	L1595	14	
443	$881 \cdot 2^{2008309} + 1$	604565	L3260	14	
444	$959 \cdot 2^{2008035} + 1$	604482	L1422	14	
445	$633 \cdot 2^{2007897} + 1$	604441	L3857	14	
446	$223 \cdot 2^{2007748} + 1$	604395	L1741	14	
447	$461 \cdot 2^{2007631} + 1$	604360	L1300	14	
448	$477 \cdot 2^{2006719} + 1$	604086	L3803	14	
449	$428551 \cdot 2^{2006520} + 1$	604029	g411	11	
450	$1097 \cdot 2^{2005203} + 1$	603630	L3868	14	
451	$493 \cdot 2^{2002964} + 1$	602955	L3800	14	
452	$315 \cdot 2^{2002904} + 1$	602937	L3790	14	
453	$77 \cdot 2^{2002742} - 1$	602888	L2074	13	
454	$585 \cdot 2^{2002589} + 1$	602843	L3035	14	
455	$1059 \cdot 2^{2001821} + 1$	602612	L2103	14	

rank	description	digits	who	year	comment
456	$1115 \cdot 2^{2000291} + 1$	602151	L3588	14	
457	$891 \cdot 2^{2000268} + 1$	602144	L3440	14	
458	$657 \cdot 2^{1998854} + 1$	601718	L2520	13	Divides $GF(1998852, 10)$
459	$573 \cdot 2^{1998232} + 1$	601531	L1300	13	
460	$669 \cdot 2^{1995918} + 1$	600835	L2659	13	
461	$19861029 \cdot 2^{1995311} - 1$	600656	L895	13	
462	$261 \cdot 2^{1995105} + 1$	600589	L3378	13	
463	$1031 \cdot 2^{1994741} + 1$	600480	L2626	14	
464	$577 \cdot 2^{1994634} + 1$	600448	L3035	13	
465	$497 \cdot 2^{1994051} + 1$	600272	L2413	13	
466	$8331405 \cdot 2^{1993674} - 1$	600163	L260	11	
467	$467917 \cdot 2^{1993429} - 1$	600088	L160	05	
468	$137137 \cdot 2^{1993201} - 1$	600019	L321	07	
472	$17 \cdot 2^{1990299} + 1$	599141	g267	06	Divides $GF(1990298, 3)$
476	$101 \cdot 2^{1988279} + 1$	598534	L3141	13	Divides $GF(1988278, 12)$
504	$175 \cdot 2^{1962288} + 1$	590710	L2137	13	Divides $GF(1962284, 10)$
507	$225 \cdot 2^{1960083} + 1$	590047	L3548	13	Divides $GF(1960078, 6)$
548	$2 \cdot 47^{346759} + 1$	579816	g424	11	Divides $Phi(47^{346759}, 2)$
596	$1183414 \cdot 3^{1183414} + 1$	564639	L2841	14	Generalized Cullen
600	$71 \cdot 2^{1873569} + 1$	564003	L1223	11	Divides $GF(1873568, 5)$
612	$13 \cdot 2^{1861732} + 1$	560439	g267	05	Divides $GF(1861731, 6)$
644	$3 \cdot 2^{1832496} + 1$	551637	p189	07	Divides $GF(1832490, 3)$ , $GF(1832494, 5)$
653	$39 \cdot 2^{1824871} + 1$	549343	L2664	11	Divides $GF(1824867, 6)$
729	$45 \cdot 2^{1779971} + 1$	535827	L1223	11	Divides $GF(1779969, 5)$
736	$5 \cdot 2^{1777515} + 1$	535087	p148	05	Divides $GF(1777511, 5)$ , $GF(1777514, 6)$
741	$129 \cdot 2^{1774709} + 1$	534243	L2526	13	Divides $GF(1774705, 12)$
751	$190088 \cdot 5^{760352} - 1$	531469	L2841	12	Generalized Woodall
762	$2 \cdot 191^{232149} + 1$	529540	g424	11	Divides $Phi(191^{232149}, 2)$
782	$183 \cdot 2^{1747660} + 1$	526101	L2163	13	Divides Fermat $F(1747656)$
877	$5 \cdot 10^{511056} - 1$	511057	p297	11	Near-repdigit
894	$63 \cdot 2^{1686050} + 1$	507554	L2085	11	Divides $GF(1686047, 12)$
900	$110059! + 1$	507082	p312	11	Factorial
932	$55 \cdot 2^{1669798} + 1$	502662	L2518	11	Divides $GF(1669797, 12)$
937	$2^{1667321} - 2^{833661} + 1$	501914	L137	11	Gaussian Mersenne norm 38?
985	$1035092 \cdot 3^{1035092} - 1$	493871	L3544	13	Generalized Woodall
1064	$216290 \cdot 167^{216290} - 1$	480757	L2777	12	Generalized Woodall
1111	$1098133\# - 1$	476311	p346	12	Primorial
1114	$87 \cdot 2^{1580858} + 1$	475888	L2487	11	Divides $GF(1580856, 6)$
1150	$103040! - 1$	471794	p301	10	Factorial
1180	$95 \cdot 10^{466002} - 1$	466004	L3735	14	Near-repdigit
1189	$5 \cdot 10^{464843} - 1$	464844	p297	11	Near-repdigit
1244	$135 \cdot 2^{1515894} + 1$	456332	L1129	13	Divides $GF(1515890, 10)$
1271	$13 \cdot 2^{1499876} + 1$	451509	g267	04	Divides $GF(1499875, 3)$
1285	$131 \cdot 2^{1494099} + 1$	449771	L2959	12	Divides Fermat $F(1494096)$
1297	$7 \cdot 2^{1491852} + 1$	449094	p166	05	Divides $GF(1491851, 6)$
1314	$1286 \cdot 3^{937499} + 1$	447304	L2777	12	Generalized Cullen
1323	$5 \cdot 10^{445773} - 1$	445774	p297	11	Near-repdigit
1341	$176660 \cdot 18^{353320} - 1$	443519	p325	11	Generalized Woodall

rank	description	digits	who	year	comment
1359	$1467763 \cdot 2^{1467763} - 1$	441847	L381	07	Woodall
1443	$95 \cdot 2^{1433853} + 1$	431635	L2503	11	Divides $GF(1433852, 3)$
1467	$94550! - 1$	429390	p290	10	Factorial
1494	$15 \cdot 2^{1418605} + 1$	427044	g279	06	Divides $GF(1418600, 5)$ , $GF(1418601, 6)$
1554	$2^{1398269} - 1$	420921	G1	96	Mersenne 35
1576	$182402 \cdot 14^{364804} - 1$	418118	p325	11	Generalized Woodall
1578	$17 \cdot 2^{1388355} + 1$	417938	g267	05	Divides $GF(1388354, 10)$
1613	$6 \cdot 10^{414508} - 1$	414509	p297	11	Near-repdigit
1688	$338707 \cdot 2^{1354830} + 1$	407850	L124	05	Cullen
1728	$11 \cdot 2^{1343347} + 1$	404389	p169	05	Divides $GF(1343346, 6)$
1749	$107 \cdot 2^{1337019} + 1$	402485	L2659	12	Divides $GF(1337018, 10)$
1791	$5 \cdot 2^{1320487} + 1$	397507	g55	02	Divides $GF(1320486, 12)$
1798	$94189 \cdot 2^{1318646} + 1$	396957	L2777	13	Generalized Cullen
1819	$15266 \cdot 12^{366385} - 1$	395401	p325	11	Generalized Woodall
1887	$125132 \cdot 6^{500528} - 1$	389492	L2777	12	Generalized Woodall
3081	$5 \cdot 2^{1282755} + 1$	386149	g55	02	Divides $GF(1282754, 3)$ , $GF(1282748, 5)$
3116	$15 \cdot 2^{1276177} + 1$	384169	g279	06	Divides $GF(1276174, 3)$ , $GF(1276174, 10)$
3135	$9 \cdot 10^{383643} - 1$	383644	p297	11	Near-repdigit
3199	$163747 \cdot 6^{491241} - 1$	382266	L2841	12	Generalized Woodall
3211	$1268979 \cdot 2^{1268979} - 1$	382007	L201	07	Woodall
3382	$2^{1257787} - 1$	378632	SG	96	Mersenne 34
3416	$89725 \cdot 2^{1256151} - 1$	378145	p260	12	Generalized Woodall
3535	$329 \cdot 2^{1246017} + 1$	375092	L2085	12	Divides Fermat $F(1246013)$
3577	$178602 \cdot 5^{535806} - 1$	374518	L2777	12	Generalized Woodall
3710	$259738 \cdot 3^{779214} + 1$	371785	L2777	11	Generalized Cullen
3724	$531 \cdot 2^{1233440} + 1$	371306	L2803	11	Divides $GF(1233439, 5)$
3816	$9999998 \cdot 10^{369705} - 1$	369712	L1958	14	Near-repdigit
3874	$3471 \cdot 2^{1224763} + 1$	368694	L3548	13	Divides $GF(1224758, 6)$
3949	$177482 \cdot 117^{177482} + 1$	367072	g407	08	Generalized Cullen
4007	$843301\# - 1$	365851	p302	10	Primorial
4059	$99 \cdot 2^{1211757} + 1$	364778	L1446	11	Divides $GF(1211755, 5)$
4062	$25 \cdot 2^{1211488} + 1$	364696	g279	05	Generalized Fermat, divides $GF(1211487, 12)$
4071	$9 \cdot 10^{364521} - 1$	364522	p297	10	Near-repdigit
4138	$154962 \cdot 221^{154962} - 1$	363297	L3269	12	Generalized Woodall
4153	$120585 \cdot 2^{1205851} - 1$	363003	p260	12	Generalized Woodall
4183	$2^{1203793} - 2^{601897} + 1$	362378	L192	06	Gaussian Mersenne norm 37
4237	$183500 \cdot 93^{183500} + 1$	361222	g157	12	Generalized Cullen
4279	$9999992 \cdot 10^{360403} - 1$	360410	L1958	11	Near-repdigit
4282	$10^{360360} - 10^{183037} - 1$	360360	p374	14	Near-repdigit
4305	$153222 \cdot 223^{153222} - 1$	359818	L2777	12	Generalized Woodall
4306	$1195203 \cdot 2^{1195203} - 1$	359799	L124	05	Woodall
4317	$193558 \cdot 72^{193558} - 1$	359507	p357	13	Generalized Woodall
4329	$93 \cdot 10^{359354} - 1$	359356	L3735	13	Near-repdigit
4879	$174885 \cdot 98^{174885} + 1$	348241	g157	12	Generalized Cullen
4910	$83 \cdot 2^{1154617} + 1$	347577	L446	10	Divides $GF(1154616, 3)$
4924	$5245 \cdot 2^{1153762} + 1$	347321	L1204	13	Divides $GF(1153761, 12)$

rank	description	digits	who	year	comment
4939	$29 \cdot 2^{1152765} + 1$	347019	g300	05	Divides $GF(1152760, 10)$
5095	$101 \cdot 2^{1142981} + 1$	344074	L1446	11	Divides $GF(1142980, 3)$
5235	$113756 \cdot 10^{341268} - 1$	341274	L3532	13	Generalized Woodall
5241	$2 \cdot 263^{140989} + 1$	341188	g424	11	Divides $Phi(263^{140989}, 2)$
5276	$33 \cdot 2^{1130884} + 1$	340432	L165	06	Divides $GF(1130881, 12)$
5293	$163 \cdot 2^{1129934} + 1$	340147	L1751	10	Divides $GF(1129933, 10)$
5295	$178192 \cdot 3^{12768} + 1$	340083	L2777	11	Generalized Cullen
5358	$14521 \cdot 6^{435631} + 1$	338991	L2777	12	Generalized Cullen
5381	$2 \cdot 467^{126775} + 1$	338403	g425	11	Divides $Phi(467^{126775}, 2)$
5529	$9999993 \cdot 10^{335905} - 1$	335912	L1958	13	Near-repdigit
5755	$9999993 \cdot 10^{331938} - 1$	331945	L1958	13	Near-repdigit
5803	$2145 \cdot 2^{1099064} + 1$	330855	L1792	13	Divides Fermat $F(1099061)$
6002	$93 \cdot 2^{1087202} + 1$	327283	L669	10	Divides $GF(1087199, 12)$
6424	[ Long prime 6424 ]	320237	p44	14	Palindrome
6429	[ Long prime 6429 ]	320097	p44	14	Palindrome
6444	$6 \cdot 10^{319889} - 1$	319890	p297	10	Near-repdigit
6654	$1491 \cdot 2^{1050764} + 1$	316315	L2826	13	Divides $GF(1050763, 10)$
6744	$10^{314727} - 8 \cdot 10^{157363} - 1$	314727	p235	13	Near-repdigit, palindrome
6900	$992 \cdot 10^{312136} - 1$	312139	p356	13	Near-repdigit
6946	$9539 \cdot 2^{1034437} + 1$	311401	L1502	13	Divides $GF(1034434, 10)$
6966	$549 \cdot 2^{1033187} + 1$	311024	L1224	11	Divides $GF(1033186, 5)$
7273	$151 \cdot 2^{1016600} + 1$	306030	L669	10	Divides $GF(1016599, 5)$
7313	$166585 \cdot 68^{166585} - 1$	305274	p357	13	Generalized Woodall
7336	$139948 \cdot 151^{139948} + 1$	304949	g407	10	Generalized Cullen
7790	$2^{991961} - 2^{495981} + 1$	298611	x28	05	Gaussian Mersenne norm 36
7838	$225 \cdot 2^{988695} + 1$	297630	L1446	10	Divides $GF(988693, 6)$
8176	$6 \cdot 10^{293134} - 1$	293135	p297	10	Near-repdigit
8327	$236418 \cdot 17^{236418} + 1$	290906	g157	12	Generalized Cullen
8367	$10^{290253} - 2 \cdot 10^{145126} - 1$	290253	p235	12	Near-repdigit, Palindrome
8441	$11 \cdot 2^{960901} + 1$	289262	g277	05	Divides Fermat $F(960897)$
8589	$2 \cdot 827^{98511} + 1$	287407	g404	09	Divides $Phi(827^{98511}, 2)$
8755	$143717 \cdot 96^{143717} + 1$	284892	g157	09	Generalized Cullen
9145	$2 \cdot 131^{131925} + 1$	279322	g424	10	Divides $Phi(131^{131925}, 2)$
9279	$873 \cdot 2^{922545} + 1$	277717	L153	10	Divides $GF(922543, 3)$
9382	[ Long prime 9382 ]	276340	x38	14	Generalized unique
9383	[ Long prime 9383 ]	276340	x38	14	Generalized unique
9384	[ Long prime 9384 ]	276337	x38	14	Generalized unique
9385	[ Long prime 9385 ]	276333	x38	14	Generalized unique
9386	[ Long prime 9386 ]	276332	x38	14	Generalized unique
9387	[ Long prime 9387 ]	276331	x38	14	Generalized unique
9388	[ Long prime 9388 ]	276330	x38	14	Generalized unique
9390	[ Long prime 9390 ]	276329	x38	14	Generalized unique
9391	[ Long prime 9391 ]	276328	x38	14	Generalized unique
9392	[ Long prime 9392 ]	276323	x38	14	Generalized unique
9393	[ Long prime 9393 ]	276320	x38	13	Generalized unique
9394	[ Long prime 9394 ]	276320	x38	13	Generalized unique
9395	[ Long prime 9395 ]	276318	x38	13	Generalized unique
9396	[ Long prime 9396 ]	276317	x38	13	Generalized unique
9397	[ Long prime 9397 ]	276316	x38	13	Generalized unique
9399	[ Long prime 9399 ]	276309	x38	13	Generalized unique

rank	description	digits	who	year	comment
9400	[ Long prime 9400 ]	276291	x38	13	Generalized unique
9435	$113 \cdot 2^{916801} + 1$	275987	L153	09	Divides $GF(916800, 5)$ , $GF(916800, 12)$
9436	$3 \cdot 2^{916773} + 1$	275977	g245	01	Divides $GF(916771, 3)$ , $GF(916772, 10)$
9479	[ Long prime 9479 ]	275495	p44	12	Palindrome
9656	$1705 \cdot 2^{906110} + 1$	272770	L3174	12	Divides Fermat $F(906108)$
9920	$10^{269479} - 7 \cdot 10^{134739} - 1$	269479	p235	12	Near-repdigit, Palindrome
9929	$43 \cdot 2^{894766} + 1$	269354	g279	06	Divides $GF(894765, 5)$
10118	$11 \cdot 2^{886071} + 1$	266735	g277	05	Divides $GF(886070, 12)$
10741	$2^{859433} - 1$	258716	SG	94	Mersenne 33
11019	$Phi(3, -3^{267414} + 1)/3$	255178	x28	05	Generalized unique
11384	$249 \cdot 2^{832207} + 1$	250522	L669	10	Divides $GF(832206, 5)$
11495	$2 \cdot 239^{104781} + 1$	249212	g424	11	Divides $Phi(239^{104781}, 2)$
11607	$1815 \cdot 2^{823632} + 1$	247942	L1741	12	Divides $GF(823629, 12)$
11813	$459 \cdot 2^{816031} + 1$	245653	L1498	11	Divides $GF(816030, 5)$
12129	$7 \cdot 2^{804534} + 1$	242190	g196	03	Divides $GF(804533, 12)$
12528	$5215 \cdot 2^{789906} + 1$	237790	L2659	12	Divides $GF(789905, 6)$
13419	$2^{756839} - 1$	227832	SG	92	Mersenne 32
14051	[ Long prime 14051 ]	221071	x34	08	Generalized unique
14257	$59 \cdot 2^{727815} + 1$	219096	p227	08	Divides $GF(727814, 12)$
14328	$2 \cdot 83^{113849} + 1$	218486	g424	10	Divides $Phi(83^{113849}, 2)$
15455	[ Long prime 15455 ]	208559	p44	14	Palindrome
15456	[ Long prime 15456 ]	208553	p44	14	Palindrome
15463	[ Long prime 15463 ]	208515	p44	14	Palindrome
15582	$2 \cdot 683^{73237} + 1$	207585	g404	08	Divides $Phi(683^{73237}, 2)$
15708	[ Long prime 15708 ]	206579	p44	14	Palindrome
15710	[ Long prime 15710 ]	206565	p44	14	Palindrome
15737	[ Long prime 15737 ]	206365	x29	14	Palindrome
15739	[ Long prime 15739 ]	206349	p44	14	Palindrome
15743	[ Long prime 15743 ]	206267	p44	14	Palindrome
15744	[ Long prime 15744 ]	206263	p44	14	Palindrome
15746	[ Long prime 15746 ]	206249	p44	14	Palindrome
15760	[ Long prime 15760 ]	206157	p44	14	Palindrome
15772	[ Long prime 15772 ]	206085	p44	14	Palindrome
15773	[ Long prime 15773 ]	206085	p44	13	Palindrome
15775	$13 \cdot 2^{684560} + 1$	206075	g267	03	Divides $GF(684557, 10)$ , $GF(684559, 6)$
15779	[ Long prime 15779 ]	206057	p44	14	Palindrome
16231	$27 \cdot 2^{672007} + 1$	202296	g279	05	Divides Fermat $F(672005)$
16430	$667071 \cdot 2^{667071} - 1$	200815	g55	00	Woodall
16453	$18543637900515 \cdot 2^{666668} - 1$	200701	L2429	12	Sophie Germain ( $2p + 1$ )
16454	$9094283341425 \cdot 2^{666669} - 1$	200701	p199	11	Arithmetic progression ( $3, d =$ $32289415560495 \cdot 2^{666666}$ )
16500	$40464851170905 \cdot 2^{666666} - 1$	200701	L1008	11	Arithmetic progression ( $2, d =$ $32289415560495 \cdot 2^{666666}$ ) [p199]
16553	$18543637900515 \cdot 2^{666667} - 1$	200701	L2429	12	Sophie Germain (p)
16554	$3756801695685 \cdot 2^{666669} + 1$	200700	L1921	11	Twin ( $p + 2$ )
16555	$3756801695685 \cdot 2^{666669} - 1$	200700	L1921	11	Twin (p)
16676	$26767338410445 \cdot 2^{666666} - 1$	200700	p199	11	Arithmetic progression ( $3, d =$ $12521740750545 \cdot 2^{666666}$ )

rank	description	digits	who	year	comment
16977	$23716957113345 \cdot 2^{666666} - 1$	200700	p199	11	Arithmetic progression ( $3, d = 2697434638065 \cdot 2^{666668}$ )
17027	$11638738675125 \cdot 2^{666667} - 1$	200700	p199	11	Arithmetic progression ( $3, d = 9571322415225 \cdot 2^{666666}$ )
17828	$14646182194005 \cdot 2^{666666} - 1$	200700	p199	11	Arithmetic progression ( $3, d = 3388839720735 \cdot 2^{666666}$ )
17870	$3561399414975 \cdot 2^{666668} - 1$	200700	L1661	11	Arithmetic progression ( $2, d = 12521740750545 \cdot 2^{666666}$ ) [p199]
17930	$13706154935025 \cdot 2^{666666} - 1$	200700	L967	11	Arithmetic progression ( $2, d = 9571322415225 \cdot 2^{666666}$ ) [p199]
18030	$12927218561085 \cdot 2^{666666} - 1$	200700	L2078	11	Arithmetic progression ( $2, d = 2697434638065 \cdot 2^{666668}$ ) [p199]
18197	$5628671236635 \cdot 2^{666667} - 1$	200700	L1945	11	Arithmetic progression ( $2, d = 3388839720735 \cdot 2^{666666}$ ) [p199]
18505	$4087717805205 \cdot 2^{666667} - 1$	200700	L1633	10	Arithmetic progression ( $1, d = 32289415560495 \cdot 2^{666666}$ ) [p199]
18552	$7868502752535 \cdot 2^{666666} - 1$	200700	L1183	10	Arithmetic progression ( $1, d = 3388839720735 \cdot 2^{666666}$ ) [p199]
18922	$516854064975 \cdot 2^{666669} - 1$	200700	L1286	10	Arithmetic progression ( $1, d = 9571322415225 \cdot 2^{666666}$ ) [p199]
19112	$2137480008825 \cdot 2^{666666} - 1$	200699	L1706	10	Arithmetic progression ( $1, d = 2697434638065 \cdot 2^{666668}$ ) [p199]
19157	$1723856909355 \cdot 2^{666666} - 1$	200699	L934	10	Arithmetic progression ( $1, d = 12521740750545 \cdot 2^{666666}$ ) [p199]
19403	$2 \cdot 419^{76419} + 1$	200388	g404	07	Divides $\Phi(419^{76419}, 2)$
19970	$2 \cdot 7919^{50227} + 1$	195819	g428	12	Divides $\Phi(7919^{50227}, 2)$
20427	$2 \cdot 11987^{47063} + 1$	191957	g426	11	Divides $\Phi(11987^{47063}, 2)$
20716	$2 \cdot 191^{83009} + 1$	189347	g404	06	Divides $\Phi(191^{83009}, 2)$
21104	$659 \cdot 2^{617815} + 1$	185984	L732	09	Divides Fermat $F(617813)$
21458	$2 \cdot 131^{86365} + 1$	182859	g404	07	Divides $\Phi(131^{86365}, 2)$
22232	$351 \cdot 2^{588325} + 1$	177107	L651	09	Divides $GF(588323, 6)$
22380	$151 \cdot 2^{585044} + 1$	176118	L446	07	Divides Fermat $F(585042)$
23124	$519 \cdot 2^{567235} + 1$	170758	L656	09	Divides Fermat $F(567233)$
23236	$392113\# + 1$	169966	p16	01	Primorial
24696	$2 \cdot 1031^{53111} + 1$	160038	g404	09	Divides $\Phi(1031^{53111}, 2)$
24875	$366439\# + 1$	158936	p16	01	Primorial
25899	$2 \cdot 191^{66971} + 1$	152764	g404	06	Divides $\Phi(191^{66971}, 2)$
26339	$2 \cdot 431^{56947} + 1$	150026	g404	07	Divides $\Phi(431^{56947}, 2)$
26375	$2 \cdot 1931^{45605} + 1$	149849	g404	07	Divides $\Phi(1931^{45605}, 2)$
26474	$243 \cdot 2^{495732} + 1$	149233	L165	07	Divides Fermat $F(495728)$ , $GF(495726, 3)$ , $GF(495728, 6)$ , $GF(495727, 12)$
26748	$2 \cdot 16187^{35043} + 1$	147503	p358	13	Divides $\Phi(16187^{35043}, 2)$
27152	$9265 \cdot 2^{482072} + 1$	145123	L635	09	Divides $GF(482070, 10)$
27157	$481899 \cdot 2^{481899} + 1$	145072	gm	98	Cullen
27420	$651 \cdot 2^{476632} + 1$	143484	L668	08	Divides Fermat $F(476624)$
27505	$34790! - 1$	142891	p85	02	Factorial
27513	$6841 \cdot 2^{474348} + 1$	142797	L1065	09	Divides $GF(474347, 10)$
27640	$89 \cdot 2^{472099} + 1$	142118	p114	04	Divides Fermat $F(472097)$
28155	$3911 \cdot 2^{462579} + 1$	139254	L679	09	Divides $GF(462577, 10)$

rank	description	digits	who	year	comment
28226	$9 \cdot 2^{461081} + 1$	138801	g122	03	Divides Fermat $F(461076)$ , $GF(461077, 3)$ , $GF(461077, 6)$ , $GF(461077, 12)$
31684	$2^{364289} - 2^{182145} + 1$	109662	p58	01	Gaussian Mersenne norm 35
31818	$361275 \cdot 2^{361275} + 1$	108761	DS	98	Cullen
31985	$26951! + 1$	107707	p65	02	Factorial
33486	$65516468355 \cdot 2^{333333} + 1$	100355	L923	09	Twin ( $p + 2$ )
33487	$65516468355 \cdot 2^{333333} - 1$	100355	L923	09	Twin (p)
38356	$21480! - 1$	83727	p65	01	Factorial
38765	$183027 \cdot 2^{265441} - 1$	79911	L983	10	Sophie Germain ( $2p + 1$ )
38766	$183027 \cdot 2^{265440} - 1$	79911	L983	10	Sophie Germain (p)
38841	$262419 \cdot 2^{262419} + 1$	79002	DS	98	Cullen
39176	$648621027630345 \cdot 2^{253825} - 1$	76424	x24	09	Sophie Germain ( $2p + 1$ )
39177	$620366307356565 \cdot 2^{253825} - 1$	76424	x24	09	Sophie Germain ( $2p + 1$ )
39178	$648621027630345 \cdot 2^{253824} - 1$	76424	x24	09	Sophie Germain (p)
39179	$620366307356565 \cdot 2^{253824} - 1$	76424	x24	09	Sophie Germain (p)
39675	$primV(111534, 1, 27000)$	72683	x25	13	Generalized Lucas primitive part
41037	$2^{216091} - 1$	65050	S	85	Mersenne 31
41260	$(63847^{13339} - 1)/63846$	64091	p170	13	Generalized repunit
41418	$145823\# + 1$	63142	p21	00	Primorial
41693	$2^{203789} + 2^{101895} + 1$	61347	O	00	Gaussian Mersenne norm 34
41951	$(26371^{13681} - 1)/26370$	60482	p170	12	Generalized repunit
42621	$(4529^{16381} - 1)/4528$	59886	CH2	12	Generalized repunit
42983	$2003663613 \cdot 2^{195000} + 1$	58711	L202	07	Twin ( $p + 2$ )
42984	$2003663613 \cdot 2^{195000} - 1$	58711	L202	07	Twin (p)
43241	$primV(27655, 1, 19926)$	57566	x25	13	Generalized Lucas primitive part
44900	$607095 \cdot 2^{176312} - 1$	53081	L983	09	Sophie Germain ( $2p + 1$ )
44901	$607095 \cdot 2^{176311} - 1$	53081	L983	09	Sophie Germain (p)
45050	$(38284^{11491} - 1)/38283$	52659	CH2	13	Generalized repunit
45397	$48047305725 \cdot 2^{172404} - 1$	51910	L99	07	Sophie Germain ( $2p + 1$ )
45398	$48047305725 \cdot 2^{172403} - 1$	51910	L99	07	Sophie Germain (p)
45496	$137211941292195 \cdot 2^{171961} - 1$	51780	x24	06	Sophie Germain ( $2p + 1$ )
45497	$194772106074315 \cdot 2^{171960} + 1$	51780	x24	07	Twin ( $p + 2$ )
45498	$194772106074315 \cdot 2^{171960} - 1$	51780	x24	07	Twin (p)
45499	$137211941292195 \cdot 2^{171960} - 1$	51780	x24	06	Sophie Germain (p)
45500	$100314512544015 \cdot 2^{171960} + 1$	51780	x24	06	Twin ( $p + 2$ )
45501	$100314512544015 \cdot 2^{171960} - 1$	51780	x24	06	Twin (p)
45502	$16869987339975 \cdot 2^{171960} + 1$	51779	x24	05	Twin ( $p + 2$ )
45503	$16869987339975 \cdot 2^{171960} - 1$	51779	x24	05	Twin (p)
45717	$(34120^{11311} - 1)/34119$	51269	CH2	11	Generalized repunit
46315	$33218925 \cdot 2^{169690} + 1$	51090	g259	02	Twin ( $p + 2$ )
46316	$33218925 \cdot 2^{169690} - 1$	51090	g259	02	Twin (p)
47047	$2^{160423} - 2^{80212} + 1$	48293	O	00	Gaussian Mersenne norm 33
47171	$primV(40395, -1, 15588)$	47759	x23	07	Generalized Lucas primitive part
47240	$primV(53394, -1, 15264)$	47200	CH4	07	Generalized Lucas primitive part
47448	$22835841624 \cdot 7^{54321} + 1$	45917	p296	10	Twin ( $p + 2$ )
47449	$22835841624 \cdot 7^{54321} - 1$	45917	p296	10	Twin (p)
47485	$1679081223 \cdot 2^{151618} + 1$	45651	L527	12	Twin ( $p + 2$ )
47486	$1679081223 \cdot 2^{151618} - 1$	45651	L527	12	Twin (p)
47513	$151023 \cdot 2^{151023} - 1$	45468	g25	98	Woodall



rank	description	digits	who	year	comment
48086	$648309 \cdot 2^{148311} + 1$	44652	L983	10	Cunningham chain 2nd kind ( $2p - 1$ )
48087	$648309 \cdot 2^{148310} + 1$	44652	L983	10	Cunningham chain 2nd kind (p)
48285	$71509 \cdot 2^{143019} - 1$	43058	g23	98	Woodall, arithmetic progression ( $2, d = (143018 \cdot 2^{83969} - 80047) \cdot 2^{59049}$ ) [x12]
48388	$84966861 \cdot 2^{140219} + 1$	42219	L3121	12	Twin ( $p + 2$ )
48389	$84966861 \cdot 2^{140219} - 1$	42219	L3121	12	Twin (p)
48397	$31737014565 \cdot 2^{140004} - 1$	42156	L95	10	Sophie Germain ( $2p + 1$ )
48398	$31737014565 \cdot 2^{140003} - 1$	42156	L95	10	Sophie Germain (p)
48399	$14962863771 \cdot 2^{140002} - 1$	42155	L95	10	Sophie Germain ( $2p + 1$ )
48400	$12378188145 \cdot 2^{140002} + 1$	42155	L95	10	Twin ( $p + 2$ )
48401	$12378188145 \cdot 2^{140002} - 1$	42155	L95	10	Twin (p)
48402	$23272426305 \cdot 2^{140001} + 1$	42155	L95	10	Twin ( $p + 2$ )
48403	$23272426305 \cdot 2^{140001} - 1$	42155	L95	10	Twin (p)
48404	$14962863771 \cdot 2^{140001} - 1$	42155	L95	10	Sophie Germain (p)
48445	$(32556^{9283} - 1)/32555$	41887	CH2	11	Generalized repunit
48714	$(1549^{12973} - 1)/1548$	41382	p170	10	Generalized repunit
48763	$552903 \cdot 2^{136157} + 1$	40994	L983	10	Cunningham chain 2nd kind ( $2p - 1$ )
48764	$552903 \cdot 2^{136156} + 1$	40993	L983	10	Cunningham chain 2nd kind (p)
49604	$2^{132049} - 1$	39751	S	83	Mersenne 30
49617	<i>primV</i> (4836, 1, 16704)	39616	x25	13	Generalized Lucas primitive part
50108	$8151728061 \cdot 2^{125987} + 1$	37936	p35	10	Twin ( $p + 2$ )
50109	$8151728061 \cdot 2^{125987} - 1$	37936	p35	10	Twin (p)
50206	$163221 \cdot 2^{124601} + 1$	37514	L983	09	Cunningham chain 2nd kind ( $2p - 1$ )
50207	$163221 \cdot 2^{124600} + 1$	37514	L983	09	Cunningham chain 2nd kind (p)
50258	$33759183 \cdot 2^{123459} - 1$	37173	L527	09	Sophie Germain ( $2p + 1$ )
50259	$33759183 \cdot 2^{123458} - 1$	37173	L527	09	Sophie Germain (p)
50282	$(28839^{8317} - 1)/28838$	37090	CH6	06	Generalized repunit
50438	$(4366^{10099} - 1)/4365$	36758	x14	11	Generalized repunit
50477	$7068555 \cdot 2^{121302} - 1$	36523	L100	05	Sophie Germain ( $2p + 1$ )
50478	$7068555 \cdot 2^{121301} - 1$	36523	L100	05	Sophie Germain (p)
50483	[ Long prime 50483 ]	36498	p360	13	Sophie Germain ( $2p + 1$ )
50486	[ Long prime 50486 ]	36498	p360	13	Sophie Germain (p)
50634	[ Long prime 50634 ]	35851	p360	13	Twin ( $p + 2$ )
50635	[ Long prime 50635 ]	35851	p360	13	Twin (p)
50639	$598899 \cdot 2^{118987} + 1$	35825	L983	10	Twin ( $p + 2$ )
50640	$598899 \cdot 2^{118987} - 1$	35825	L983	10	Twin (p)
50642	$441797560 \cdot 3^{75001} + 1$	35794	L3323	12	Cunningham chain 2nd kind ( $2p - 1$ )
50644	$220898780 \cdot 3^{75001} + 1$	35793	L3323	12	Cunningham chain 2nd kind (p)
50735	[ Long prime 50735 ]	35206	p360	13	Sophie Germain ( $2p + 1$ )
50736	[ Long prime 50736 ]	35206	p360	13	Sophie Germain (p)
50798	$307259241 \cdot 2^{115599} + 1$	34808	g336	09	Twin ( $p + 2$ )
50799	$307259241 \cdot 2^{115599} - 1$	34808	g336	09	Twin (p)
50832	<i>primV</i> (38513, -1, 11502)	34668	x23	06	Generalized Lucas primitive part
50877	$2540041185 \cdot 2^{114730} - 1$	34547	g294	03	Sophie Germain ( $2p + 1$ )
50885	$2540041185 \cdot 2^{114729} - 1$	34547	g294	03	Sophie Germain (p)

rank	description	digits	who	year	comment
50991	$60194061 \cdot 2^{114689} + 1$	34533	g294	02	Twin ( $p + 2$ )
50992	$60194061 \cdot 2^{114689} - 1$	34533	g294	02	Twin (p)
51045	$\text{prim}V(9008, 1, 16200)$	34168	x23	05	Generalized Lucas primitive part
51176	$5558745 \cdot 10^{33334} + 1$	33341	p311	11	Twin ( $p + 2$ )
51177	$5558745 \cdot 10^{33334} - 1$	33341	p311	11	Twin (p)
51273	$2^{110503} - 1$	33265	WC	88	Mersenne 29
51279	$108615 \cdot 2^{110342} + 1$	33222	L113	08	Twin ( $p + 2$ )
51280	$108615 \cdot 2^{110342} - 1$	33222	L113	08	Twin (p)
51323	$\text{prim}V(6586, 1, 16200)$	32993	x25	13	Generalized Lucas primitive part
51675	$1124044292325 \cdot 2^{108000} - 1$	32524	L99	06	Sophie Germain ( $2p + 1$ )
51676	$1124044292325 \cdot 2^{107999} - 1$	32523	L99	06	Sophie Germain (p)
51677	$112886032245 \cdot 2^{108001} - 1$	32523	L99	06	Sophie Germain ( $2p + 1$ )
51678	$112886032245 \cdot 2^{108000} - 1$	32523	L99	06	Sophie Germain (p)
51760	$1765199373 \cdot 2^{107520} + 1$	32376	g182	02	Twin ( $p + 2$ )
51761	$1765199373 \cdot 2^{107520} - 1$	32376	g182	02	Twin (p)
52650	$2^{106693} + 2^{53347} + 1$	32118	O	00	Gaussian Mersenne norm 32
52753	$170152540 \cdot 3^{66215} - 1$	31601	L3323	12	Sophie Germain ( $2p + 1$ )
52754	$85076270 \cdot 3^{66215} - 1$	31601	L3323	12	Sophie Germain (p)
52796	$2243973027 \cdot 2^{104568} + 1$	31488	L99	12	Cunningham chain 2nd kind ( $2p - 1$ )
52797	$2243973027 \cdot 2^{104567} + 1$	31488	L99	12	Cunningham chain 2nd kind (p)
52812	$(V(77786, 1, 6453) + 1) / (V(77786, 1, 27) + 1)$	31429	x25	12	Lehmer primitive part
52882	[ Long prime 52882 ]	31112	p360	13	Sophie Germain ( $2p + 1$ )
52883	[ Long prime 52883 ]	31112	p360	13	Sophie Germain (p)
52896	$\text{prim}V(10987, 1, 14400)$	31034	x25	05	Generalized Lucas primitive part
53129	$133603707 \cdot 2^{100014} - 1$	30116	L167	12	Sophie Germain ( $2p + 1$ )
53130	$133603707 \cdot 2^{100013} - 1$	30116	L167	12	Sophie Germain (p)
53131	$38588805195 \cdot 2^{100003} - 1$	30115	L95	09	Sophie Germain ( $2p + 1$ )
53134	$38588805195 \cdot 2^{100002} - 1$	30115	L95	09	Sophie Germain (p)
53221	$(11379^{7411} - 1) / 11378$	30056	x14	09	Generalized repunit
53288	$49363 \cdot 2^{98727} - 1$	29725	Y	97	Woodall
53292	$U(2341, -1, 8819)$	29712	x25	08	Generalized Lucas number
54810	$\text{prim}V(24127, -1, 6718)$	29433	CH3	05	Generalized Lucas primitive part
54944	$(13320^{6997} - 1) / 13319$	28856	x14	10	Generalized repunit
54991	$\text{prim}V(45922, 1, 11520)$	28644	x25	11	Generalized Lucas primitive part
55003	$\text{prim}V(205011)$	28552	x39	09	Lucas primitive part
55034	$U(16531, 1, 6721) - U(16531, 1, 6720)$	28347	x36	07	Lehmer number
55214	$90825 \cdot 2^{90825} + 1$	27347	Y	97	Cullen
55377	$\text{prim}V(5673, 1, 13500)$	27028	CH3	05	Generalized Lucas primitive part
55493	$\text{prim}V(44368, 1, 9504)$	26768	CH3	05	Generalized Lucas primitive part
55540	$(3429^{7549} - 1) / 3428$	26684	x14	09	Generalized repunit
55554	"	tau;(157 <sup>2206</sup> )"	26643	FE1	11
ECPP					
55745	$\text{prim}V(10986, -1, 9756)$	26185	x23	05	Generalized Lucas primitive part
55846	$\text{prim}V(11076, -1, 12000)$	25885	x25	05	Generalized Lucas primitive part
55926	$2^{85237} + 2^{42619} + 1$	25659	x16	00	Gaussian Mersenne norm 31
56004	$\text{prim}V(17505, 1, 11250)$	25459	x25	11	Generalized Lucas primitive part
56006	$U(2325, -1, 7561)$	25451	x20	13	Generalized Lucas number

rank	description	digits	who	year	comment	
56061	$primV(42, -1, 23376)$		25249	x23	07	Generalized Lucas primitive part
56097	$primV(7577, -1, 10692)$		25140	x33	07	Generalized Lucas primitive part
56103	$primV(44573, -1, 10125)$		25105	CH4	07	Generalized Lucas primitive part
56121	$6753^{5122} + 5122^{6753}$		25050	FE1	10	ECPP
56188	$primV(13896, 1, 11250)$		24858	x25	11	Generalized Lucas primitive part
56256	$U(1766, 1, 7561) -$ $U(1766, 1, 7560)$		24548	x25	13	Lehmer number
56269	$(13096^{5953} - 1)/13095$		24506	CH6	07	Generalized repunit
56924	$492590931 \cdot 2^{80000} - 1631979959 \cdot$ $2^{25001} - 1$		24092	p199	10	Arithmetic progression ( $4, d =$ $164196977 \cdot 2^{80000} - 1631979959 \cdot$ $2^{25000}$ )
57064	" -	tau;(691 <sup>1522</sup> )"		23770	c65	14
ECPP						
57071	$U(1383, 1, 7561) +$ $U(1383, 1, 7560)$		23745	x25	13	Lehmer number
57118	$6917! - 1$		23560	g1	98	Factorial
57154	$(89^{11971} - 1)/88$		23335	CH2	09	Generalized repunit
57156	$(23151^{5347} - 1)/23150$		23333	x14	08	Generalized repunit
57171	$2^{77291} + 2^{38646} + 1$		23267	O	00	Gaussian Mersenne norm 30
57177	$(V(59936, 1, 4863) +$ $1)/(V(59936, 1, 3) + 1)$		23220	x25	13	Lehmer primitive part
57213	$(5855^{6121} - 1)/5854$		23058	CH1	05	Generalized repunit
57215	$U(1118, 1, 7561) -$ $U(1118, 1, 7560)$		23047	x25	13	Lehmer number
57315	$(V(45366, 1, 4857) +$ $1)/(V(45366, 1, 3) + 1)$		22604	x25	13	Lehmer primitive part
57334	"(257 <sup>1698</sup> )"		22506	c72	14	ECPP
57358	$(2008^{6781} - 1)/2007$		22393	CH6	10	Generalized repunit
57391	$10^{22250} + 57913$		22251	c35	14	ECPP
57400	$2^{73845} + 14717$		22230	c61	13	ECPP
57544	$U(19258, -1, 5039)$		21586	x23	07	Generalized Lucas number
57571	$6380! + 1$		21507	g1	98	Factorial
57654	$(V(23354, 1, 4869) -$ $1)/(V(23354, 1, 9) - 1)$		21231	x25	13	Lehmer primitive part
57655	$(19979^{4933} - 1)/19978$		21211	x14	11	Generalized repunit
57684	$U(15631, 1, 5040) -$ $U(15631, 1, 5039)$		21134	x25	03	Lehmer number
57840	[ Long prime 57840 ]		20562	FE1	06	ECPP, Mills' prime
57899	$U(11200, -1, 5039)$		20400	x25	04	Generalized Lucas number, cy- clotomy
57964	$Phi(23749, -10)$		20160	c47	14	Unique, ECPP
58122	$V(94823)$		19817	c73	14	Lucas number, ECPP
58130	$U(8454, -1, 5039)$		19785	x25	13	Generalized Lucas number
58139	$(9473^{4969} - 1)/9472$		19756	CH2	08	Generalized repunit
59025	$(14261^{4663} - 1)/14260$		19367	x14	07	Generalized repunit
59196	$U(6584, -1, 5039)$		19238	x23	07	Generalized Lucas number
59221	$(2^{63703} - 1)/42808417$		19169	c59	14	Mersenne cofactor, ECPP
59356	$V(89849)$		18778	c70	14	Lucas number, ECPP
59371	$primV(145353)$		18689	c69	13	ECPP, Lucas primitive part
59372	$Phi(14943, -100)$		18688	c47	14	Unique, ECPP

rank	description	digits	who	year	comment
59379	$Phi(741, -63847^9)/44250132909040111$	18666	c54	13	ECPP
59385	$587 \cdot 43103\#/2310 + 657402$	18662	c35	13	ECPP
59386	$587 \cdot 43103\#/2310 - 455704$	18662	c35	13	ECPP
59406	$2^{61792} + 21661$	18602	c61	12	ECPP
59482	$Phi(18827, 10)$	18480	c47	14	Unique, ECPP
59610	$42209\# + 1$	18241	p8	99	Primorial
60112	$(V(46662, 1, 3879) - 1)/(V(46662, 1, 9) - 1)$	18069	x25	12	Lehmer primitive part
60151	$7457 \cdot 2^{59659} + 1$	17964	Y	97	Cullen
60404	$Phi(26031, -10)$	17353	c47	14	Unique, ECPP
60450	$U(9657, 1, 4321) - U(9657, 1, 4320)$	17215	x23	05	Lehmer number
60500	$U(81839)$	17103	p54	01	Fibonacci number
60511	$V(81671)$	17069	c66	13	Lucas number, ECPP
60662	$6521953289619 \cdot 2^{55555} + 1$	16737	p296	13	Triplet (3)
60663	$6521953289619 \cdot 2^{55555} - 1$	16737	p296	13	Triplet (2)
60664	$6521953289619 \cdot 2^{55555} - 5$	16737	c58	13	Triplet (1), ECPP
60708	$U(15823, 1, 3960) - U(15823, 1, 3959)$	16625	x25	02	Lehmer number, cyclotomy
60774	$U(10803, 1, 4081) - U(10803, 1, 4080)$	16457	x25	05	Lehmer number, cyclotomy
60812	$U(11091, -1, 4049)$	16375	CH3	05	Generalized Lucas number
60859	$(V(21151, 1, 3777) - 1)/(V(21151, 1, 3) - 1)$	16324	x25	11	Lehmer primitive part
60895	$U(2554, -1, 4751)$	16185	CH3	05	Generalized Lucas number
60919	$U(1599, -1, 5039)$	16141	x23	07	Generalized Lucas number
60980	$U(2878, 1, 4620) - U(2878, 1, 4619)$	15978	x25	13	Lehmer number
60981	$U(10853, 1, 3960) + U(10853, 1, 3959)$	15977	x25	02	Lehmer number, cyclotomy
61172	$U(9667, 1, 3960) - U(9667, 1, 3959)$	15778	x25	02	Lehmer number, cyclotomy
61190	$Phi(2949, -100000000)$	15713	c47	13	Unique, ECPP
61194	$U(14257, -1, 3779)$	15694	x25	04	Generalized Lucas number, cyclotomy
61262	[ Long prime 61262 ]	15537	x38	09	Lehmer primitive part
61341	$(V(824, 1, 5277) - 1)/(V(824, 1, 3) - 1)$	15379	x25	13	Lehmer primitive part
61384	$U(13283, 1, 3697) + U(13283, 1, 3696)$	15240	x25	11	Lehmer number
62307	$1008075799 \cdot 34687\# + 1$	15004	p252	10	Arithmetic progression ( $4, d = 2571033 \cdot 34687\#$ )
62343	$(V(42995, 1, 3231) + 1)/(V(42995, 1, 9) + 1)$	14929	x25	12	Lehmer primitive part
62356	$U(8747, 1, 3780) + U(8747, 1, 3779)$	14897	x25	05	Lehmer number
62378	$Phi(5015, -10000)$	14848	c47	13	Unique, ECPP
62388	$U(25700, 1, 3360) + U(25700, 1, 3359)$	14813	x25	04	Lehmer number, cyclotomy
62389	$2^{49207} - 2^{24604} + 1$	14813	x16	00	Gaussian Mersenne norm 29

rank	description	digits	who	year	comment
62458	$(V(8003, 1, 3771) + 1)/(V(8003, 1, 9) + 1)$		14685	x25	13 Lehmer primitive part
62469	$U(1493, -1, 4621)$		14665	CH3	05 Generalized Lucas number
62483	$U(7431, 1, 3781) - U(7431, 1, 3780)$		14633	x25	13 Lehmer number
62485	$U(4951, 1, 3960) - U(4951, 1, 3959)$		14628	CH3	05 Lehmer number
62560	$U(6571, 1, 3781) - U(6571, 1, 3780)$		14431	x25	13 Lehmer number
62661	$U(6396, 1, 3781) + U(6396, 1, 3780)$		14387	x25	13 Lehmer number
62664	$U(12924, -12925, 3499)$		14382	x25	05 Generalized Lucas number
62719	$U(12113, -1, 3499)$		14284	CH3	05 Generalized Lucas number
62726	$U(5192, 1, 3841) - U(5192, 1, 3840)$		14267	x23	05 Lehmer number
62743	$U(2441, -1, 4201)$		14228	CH3	05 Generalized Lucas number
62749	$U(3865, 1, 3960) + U(3865, 1, 3959)$		14202	x25	02 Lehmer number, cyclotomy
62848	$(V(5111, 1, 3789) + 1)/(V(5111, 1, 9) + 1)$		14019	x25	13 Lehmer primitive part
62852	$(V(5763, 1, 3753) + 1)/(V(5763, 1, 27) + 1)$		14013	x25	11 Lehmer primitive part
63003	[ Long prime 63003 ]		13862	c71	14 Irregular, ECPP
63017	$(V(5132, 1, 3753) + 1)/(V(5132, 1, 27) + 1)$		13825	x25	11 Lehmer primitive part
63089	$(V(4527, 1, 3771) + 1)/(V(4527, 1, 9) + 1)$		13754	x25	13 Lehmer primitive part
63209	[ Long prime 63209 ]		13657	c64	13 Irregular, ECPP
63337	$U(11194, -11195, 3361)$		13605	x25	04 Generalized Lucas number
63438	$263821581 \cdot 2^{45001} - 487069965 \cdot 2^{25002} - 1$		13556	p199	10 Arithmetic progression ( $4, d = 87940527 \cdot 2^{45001} - 487069965 \cdot 2^{25001}$ )
63439	$4103163 \cdot 2^{45007} - 183009063 \cdot 2^{25003} - 1$		13556	p199	10 Arithmetic progression ( $4, d = 1367721 \cdot 2^{45007} - 183009063 \cdot 2^{25002}$ )
63456	$664227 \cdot 2^{45001} - 21037539 \cdot 2^{25006} - 1$		13553	p199	10 Arithmetic progression ( $4, d = 221409 \cdot 2^{45001} - 21037539 \cdot 2^{25005}$ )
63464	$U(2219, -1, 4049)$		13546	CH3	05 Generalized Lucas number
63544	$U(475, -1, 5039)$		13486	x25	03 Generalized Lucas number, cyclotomy
63561	$(V(3813, 1, 3771) - 1)/(V(3813, 1, 9) - 1)$		13473	x25	11 Lehmer primitive part
63801	$(V(3476, 1, 3771) - 1)/(V(3476, 1, 9) - 1)$		13322	x25	11 Lehmer primitive part
63806	$(V(3755, 1, 3753) - 1)/(V(3755, 1, 27) - 1)$		13319	x25	11 Lehmer primitive part
63999	$(V(3177, 1, 3771) - 1)/(V(3177, 1, 9) - 1)$		13175	x25	11 Lehmer primitive part
64059	$(V(3088, 1, 3771) + 1)/(V(3088, 1, 9) + 1)$		13129	x25	11 Lehmer primitive part

rank	description	digits	who	year	comment	
64185	$U(7537, -7538, 3361)$		13028	x23	07	Generalized Lucas number
64191	$U(7512, -7513, 3361)$		13023	x25	04	Generalized Lucas number
64207	$U(2783, -1, 3779)$		13014	CH3	05	Generalized Lucas number
64357	$(2^{42737} + 1)/3$		12865	M	07	ECPP, generalized Lucas number, Wagstaff
64540	$(V(49596, 1, 3375) + 1)/(V(49596, 1, 675) + 1)$		12678	x25	06	Lehmer primitive part
64719	[ Long prime 64719 ]		12533	c63	13	Irregular, ECPP
64796	[ Long prime 64796 ]		12459	c54	12	Mersenne cofactor, ECPP
64906	[ Long prime 64906 ]		12395	c59	12	Mersenne cofactor, ECPP
65156	$p(120052058)$		12198	c59	12	Partitions, ECPP
65157	$p(120037981)$		12197	c59	14	Partitions, ECPP
65733	$primV(57724)$		12063	p54	01	Lucas primitive part, cyclotomy
66163	$V(56003)$		11704	p193	06	Lucas number
66174	$p(110030755)$		11677	c59	14	Partitions, ECPP
66387	$primU(67825)$		11336	x23	07	Fibonacci primitive part
66425	$3610! - 1$		11277	C	93	Factorial
66519	$p(100077222)$		11136	c59	12	Partitions, ECPP
66521	$p(100057273)$		11135	c59	14	Partitions, ECPP
66631	$3507! - 1$		10912	C	92	Factorial
66698	[ Long prime 66698 ]		10763	c64	13	Irregular, ECPP
66721	$primV(77058)$		10729	CH3	05	Lucas primitive part
66736	$V(51169)$		10694	p54	01	Lucas number
66777	$Phi(13285, -10)$		10625	c47	12	Unique, ECPP
66778	$U(50833)$		10624	CH4	05	Fibonacci number
66810	$p(90048122)$		10563	c59	12	Partitions, ECPP
66822	$1213266377 \cdot 2^{35000} + 4859$		10546	c4	14	ECPP, consecutive primes arithmetic progression ( $3, d = 2430$ )
66823	$1213266377 \cdot 2^{35000} + 2429$		10546	c4	14	ECPP, consecutive primes arithmetic progression ( $2, d = 2430$ )
66824	$1213266377 \cdot 2^{35000} - 1$		10546	p44	14	Consecutive primes arithmetic progression ( $1, d = 2430$ )
66825	$1043085905 \cdot 2^{35000} + 18197$		10546	c4	14	ECPP, consecutive primes arithmetic progression ( $3, d = 18198$ )
66826	$1043085905 \cdot 2^{35000} - 1$		10546	p44	14	Consecutive primes arithmetic progression ( $2, d = 18198$ )
66827	$1043085905 \cdot 2^{35000} - 18199$		10546	c4	14	ECPP, consecutive primes arithmetic progression ( $1, d = 18198$ )
66828	$109061779 \cdot 2^{35003} + 11855$		10545	c4	14	ECPP, consecutive primes arithmetic progression ( $3, d = 5928$ )
66829	$109061779 \cdot 2^{35003} + 5927$		10545	c4	14	ECPP, consecutive primes arithmetic progression ( $2, d = 5928$ )
66830	$109061779 \cdot 2^{35003} - 1$		10545	p44	14	Consecutive primes arithmetic progression ( $1, d = 5928$ )
66833	$350049825 \cdot 2^{35000} + 7703$		10545	c4	14	ECPP, consecutive primes arithmetic progression ( $3, d = 3852$ )
66834	$350049825 \cdot 2^{35000} + 3851$		10545	c4	14	ECPP, consecutive primes arithmetic progression ( $2, d = 3852$ )
66835	$350049825 \cdot 2^{35000} - 1$		10545	p44	14	Consecutive primes arithmetic progression ( $1, d = 3852$ )

rank	description	digits	who	year	comment	
66838	$146462479 \cdot 2^{35001} + 8765$		10545	c4	13	ECPP, consecutive primes arithmetic progression ( $3, d = 8766$ )
66839	$146462479 \cdot 2^{35001} - 1$		10545	p44	13	Consecutive primes arithmetic progression ( $2, d = 8766$ )
66840	$146462479 \cdot 2^{35001} - 8767$		10545	c4	13	ECPP, consecutive primes arithmetic progression ( $1, d = 8766$ )
66875	$5110664609396115 \cdot 2^{34946} - 1$		10536	p375	14	Cunningham chain ( $4p + 3$ )
66876	$5110664609396115 \cdot 2^{34945} - 1$		10536	p375	14	Cunningham chain ( $2p + 1$ )
66877	$5110664609396115 \cdot 2^{34944} - 1$		10535	p375	14	Cunningham chain ( $p$ )
66893	$primV(77841)$		10496	x25	05	Lucas primitive part
66902	$914546877 \cdot 2^{34774} - 1$		10477	L983	10	Cunningham chain ( $4p + 3$ )
66903	$914546877 \cdot 2^{34773} - 1$		10477	L983	10	Cunningham chain ( $2p + 1$ )
66904	$914546877 \cdot 2^{34772} - 1$		10477	L983	10	Cunningham chain ( $p$ )
66940	$1288726869465789 \cdot 2^{34567} + 1$		10421	p296	14	Triplet (3)
66941	$1288726869465789 \cdot 2^{34567} - 1$		10421	p296	14	Triplet (2)
66942	$1288726869465789 \cdot 2^{34567} - 5$		10421	c58	14	ECPP, Triplet (1)
66960	$24029\# + 1$		10387	C	93	Primorial
66986	$6 \cdot Bern(4306)/2153$		10342	FE8	09	Irregular, ECPP
67005	$V(49391)/298414424560419239$		10305	c8	13	Lucas cofactor, ECPP
67023	$23801\# + 1$		10273	C	93	Primorial
67132	$p(82479677)$		10109	c59	12	Partitions, ECPP
67141	$p(82352631)$		10101	c56	12	Partitions, ECPP
67151	$81505264551807 \cdot 2^{33444} + 5$		10082	c58	12	Triplet (3), ECPP
67152	$81505264551807 \cdot 2^{33444} + 1$		10082	p296	12	Triplet (2)
67153	$81505264551807 \cdot 2^{33444} - 1$		10082	p296	12	Triplet (1)
67159	$Phi(427, -10^{28})$		10081	FE9	09	Unique, ECPP
67181	$2072644824759 \cdot 2^{33333} + 5$		10047	FE5	08	Triplet (3), ECPP
67182	$2072644824759 \cdot 2^{33333} + 1$		10047	L645	08	Triplet (2)
67183	$2072644824759 \cdot 2^{33333} - 1$		10047	L645	08	Triplet (1)
67515	$p(80036992)$		9958	c46	11	Partitions, ECPP
67625	$32469 \cdot 2^{32469} + 1$		9779	MM	97	Cullen
67627	$(2^{32531} - 1)/(65063 \cdot 25225122959)$		9778	c60	12	Mersenne cofactor, ECPP
67653	$8073 \cdot 2^{32294} + 1$		9726	MM	97	Cullen
67729	$V(45953)/4561241750239$		9591	c56	12	Lucas cofactor, ECPP
67785	$Phi(5161, -100)$		9505	c47	12	Unique, ECPP
67876	$primV(67359)$		9385	c8	14	Lucas primitive part, ECPP
67887	$primA(196035)$		9359	c8	14	Lucas Aurifeuillian primitive part, ECPP
67941	$V(44507)$		9302	CH3	05	Lucas number
68044	$V(43987)/175949$		9188	c8	14	Lucas cofactor, ECPP
68096	$primV(47647)$		9129	c8	14	Lucas primitive part, ECPP
68097	$p(67230446)$		9126	c56	11	Partitions, ECPP
68115	$primV(43931)$		9094	c8	14	Lucas primitive part, ECPP
68301	$primV(71577)$		9029	c8	14	Lucas primitive part, ECPP
68302	$primV(89100)$		9029	c8	14	Lucas primitive part, ECPP
68313	[ Long prime 68313 ]		9010	c8	13	Fibonacci cofactor, ECPP
68381	$primU(44113)$		8916	c8	14	Fibonacci primitive part, ECPP
68382	[ Long prime 68382 ]		8916	c8	14	Fibonacci cofactor, ECPP
68438	[ Long prime 68438 ]		8835	c59	12	Mersenne cofactor, ECPP
68441	$primV(44914)$		8828	c8	13	Lucas primitive part, ECPP

rank	description	digits	who	year	comment
68464	$primA(159165)$		8803	c8	13 Lucas Aurifeuillian primitive part, ECPP
68483	$U(42043)/1681721$		8780	c56	12 Fibonacci cofactor, ECPP
68566	$(2^{28771} - 1)/104726441$		8653	c56	12 Mersenne cofactor, ECPP
68569	$(2^{28759} - 1)/226160777$		8649	c60	12 Mersenne cofactor, ECPP
68657	$Phi(6105, -1000)$		8641	c47	10 Unique, ECPP
68669	$primV(65943)$		8628	c8	13 Lucas primitive part, ECPP
68674	$p(60016427)$		8622	c46	11 Partitions, ECPP
68841	$Phi(4667, -100)$		8593	c47	09 Unique, ECPP
68918	$U(40763)/643247084652261620737$		8498	c8	13 Fibonacci cofactor, ECPP
69011	$primV(50210)$		8394	c8	13 Lucas primitive part, ECPP
69038	$primU(46711)$		8367	c8	13 Fibonacci primitive part, ECPP
69115	$V(39769)/18139109172816581$		8295	c8	13 Lucas cofactor, ECPP
69122	$2^{27529} - 2^{13765} + 1$		8288	O	00 Gaussian Mersenne norm 28
69126	$primB(148605)$		8282	c8	13 Lucas Aurifeuillian primitive part, ECPP
69127	$903445893 \cdot 6^{10628} + 5$		8280	c67	13 Triplet (3)
69128	$903445893 \cdot 6^{10628} + 1$		8280	p364	13 Triplet (2)
69129	$903445893 \cdot 6^{10628} - 1$		8280	p364	13 Triplet (1)
69134	$V(39607)/158429$		8273	c46	11 Lucas cofactor, ECPP
69175	$p(54534155)$		8219	c56	11 Partitions, ECPP
69190	$primB(103645)$		8202	c8	13 Lucas Aurifeuillian primitive part, ECPP
69205	$primV(39124)$		8176	CH3	05 Lucas primitive part
69206	$379185609 \cdot 2^{27129} - 1$		8176	L983	09 Cunningham chain $(4p + 3)$
69208	$379185609 \cdot 2^{27128} - 1$		8175	L983	09 Cunningham chain $(2p + 1)$
69209	$379185609 \cdot 2^{27127} - 1$		8175	L983	09 Cunningham chain (p)
69212	$primU(62373)$		8173	c8	13 Fibonacci primitive part, ECPP
69220	$primB(119945)$		8165	c8	13 Lucas Aurifeuillian primitive part, ECPP
69249	$82659189 \cdot 2^{26999} + 1$		8136	L983	10 Cunningham chain 2nd kind $(4p - 3)$
69252	$173028555 \cdot 2^{26995} + 1$		8135	L983	10 Cunningham chain 2nd kind $(4p - 3)$
69262	$primB(99835)$		8126	c8	13 Lucas Aurifeuillian primitive part, ECPP
69296	$primB(96545)$		8070	c8	13 Lucas Aurifeuillian primitive part, ECPP
69305	[ Long prime 69305 ]		8063	c55	11 Mersenne cofactor, ECPP
69336	$p(52155970)$		8037	c4	14 Partitions, ECPP
69339	$p(52126820)$		8035	c4	14 Partitions, ECPP
69340	$p(52108003)$		8034	c4	14 Partitions, ECPP
69353	$p(51983878)$		8024	c4	14 Partitions, ECPP
69354	$p(51975657)$		8023	c4	14 Partitions, ECPP
69360	$p(51911300)$		8018	c4	14 Partitions, ECPP
69361	$p(51873600)$		8015	c4	14 Partitions, ECPP
69362	$p(51864465)$		8015	c4	14 Partitions, ECPP
69374	$18523\# + 1$		8002	D	89 Primorial
69385	$42989535 \cdot 2^{26545} + 1$		7999	L983	10 Cunningham chain 2nd kind $(4p - 3)$



rank	description	digits	who	year	comment	
69403	$primU(43121)$		7975	c8	13	Fibonacci primitive part, ECPP
69420	[ Long prime 69420 ]		7945	c8	13	Irregular, ECPP
69428	$164210699973 \cdot 2^{26328} - 1$		7937	p158	06	Cunningham chain ( $4p + 3$ )
69430	$164210699973 \cdot 2^{26327} - 1$		7937	p158	06	Cunningham chain ( $2p + 1$ )
69431	$164210699973 \cdot 2^{26326} - 1$		7937	p158	06	Cunningham chain (p)
69447	[ Long prime 69447 ]		7906	c39	12	Fibonacci cofactor, ECPP
69491	$U(37511)$		7839	x13	05	Fibonacci number
69522	$primB(145545)$		7824	c8	13	Lucas Aurifeuillian primitive part, ECPP
69530	$primV(56058)$		7810	c8	13	Lucas primitive part, ECPP
69544	$V(37357)/20210113386303842894568629$		7782	c8	13	Lucas cofactor, ECPP
69556	$U(37217)/4466041$		7771	c46	11	Fibonacci cofactor, ECPP
69568	$-E(2762)/2670541$		7760	c11	04	Euler irregular, ECPP
69652	$V(36779)$		7687	CH3	05	Lucas number
69826	$primV(36536)$		7634	c8	13	Lucas primitive part, ECPP
70146	$U(35999)$		7523	p54	01	Fibonacci number, cyclotomy
70165	$Phi(4029, -1000)$		7488	c47	09	Unique, ECPP
70256	$V(35449)$		7409	p12	01	Lucas number
70390	$V(35107)/525110138418084707309$		7317	c8	13	Lucas cofactor, ECPP
70392	$primA(161595)$		7313	c8	13	Lucas Aurifeuillian primitive part, ECPP
70492	$U(34897)/4599458691503517435329$		7272	c8	13	Fibonacci cofactor, ECPP
70515	$V(34759)/27112021$		7257	c33	05	Lucas cofactor, ECPP
70609	[ Long prime 70609 ]		7239	c8	13	Fibonacci cofactor, ECPP
70667	$primV(52779)$		7223	c8	13	Lucas primitive part, ECPP
70672	$U(34607)/13088506284255296513$		7213	c8	13	Fibonacci cofactor, ECPP
70709	$Phi(9455, -10)$		7200	c33	05	Unique, ECPP
70751	$primV(37193)$		7173	c8	13	Lucas primitive part, ECPP
70755	$Phi(1479, -100000000)$		7168	c47	09	Unique, ECPP
70774	$primB(134415)$		7163	c8	13	Lucas Aurifeuillian primitive part, ECPP
71217	$primV(36647)$		7067	c8	13	Lucas primitive part, ECPP
71227	$primV(34532)$		7063	c8	13	Lucas primitive part, ECPP
71243	[ Long prime 71243 ]		7053	c8	13	Fibonacci cofactor, ECPP
71398	$primU(48965)$		7012	c8	13	Fibonacci primitive part, ECPP
71402	$164084347 \cdot 16229\# + 1$		7009	p155	09	Arithmetic progression ( $5, d = 20333209 \cdot 16229\#$ )
71500	$V(33353)/279902102741094707003083072429$		6941	c8	13	Lucas cofactor, ECPP
71509	$primA(82975)$		6935	p54	01	Lucas Aurifeuillian primitive part
71520	$23005 \cdot 2^{23005} - 1$		6930	Y	97	Woodall
71533	$22971 \cdot 2^{22971} - 1$		6920	Y	97	Woodall
71539	$2852851249 \cdot 16001\#/5 + 1$		6913	p199	08	Arithmetic progression ( $5, d = 2653152 \cdot 16001\#$ )
71544	$2399771561 \cdot 16001\#/5 + 1$		6913	p199	08	Arithmetic progression ( $5, d = 86574302 \cdot 16001\#$ )
71546	$1638535589 \cdot 16001\#/5 + 1$		6913	p199	08	Arithmetic progression ( $5, d = 2003735 \cdot 16001\#$ )
71553	$Phi(2405, -10000)$		6912	c47	09	Unique, ECPP
71623	$15877\# - 1$		6845	CD	92	Primorial

rank	description	digits	who	year	comment
71628	$\Phi(10887, 10)$		6841	c33	05 Unique, ECPP
71643	$\text{prim}U(58773)$		6822	c8	13 Fibonacci primitive part, ECPP
71711	$\text{prim}U(40295)$		6737	p12	01 Fibonacci primitive part
71785	[ Long prime 71785 ]		6669	c8	13 Fibonacci cofactor, ECPP
71812	[ Long prime 71812 ]		6637	c8	13 Irregular, ECPP
72037	$\text{prim}A(123405)$		6502	c8	13 Lucas Aurifeuillian primitive part, ECPP
72092	$1797706581 \cdot 2^{21355} - 1$		6438	L100	12 Cunningham chain ( $4p + 3$ )
72094	$1797706581 \cdot 2^{21354} - 1$		6438	L100	12 Cunningham chain ( $2p + 1$ )
72095	$1797706581 \cdot 2^{21353} - 1$		6438	L100	12 Cunningham chain ( $p$ )
72106	$U(30757)$		6428	p54	01 Fibonacci number, cyclotomy
72112	[ Long prime 72112 ]		6425	c8	13 Lucas cofactor, ECPP
72154	$U(30727)/2281521813578534245193$		6400	c8	13 Fibonacci cofactor, ECPP
72158	$U(30671)/1141737296775689$		6395	c41	05 Fibonacci cofactor, ECPP
72315	$\Phi(7357, -10)$		6301	c33	04 Unique, ECPP
72378	$\Phi(6437, 10)$		6240	c47	08 Unique, ECPP
72390	[ Long prime 72390 ]		6229	c4	09 Mersenne cofactor, ECPP
72451	$\text{prim}A(118275)$		6170	c8	13 Lucas Aurifeuillian primitive part, ECPP
72566	$\text{prim}U(43653)$		6082	CH7	10 Fibonacci primitive part
72885	$\text{prim}U(70455)$		6019	c8	13 Fibonacci primitive part, ECPP
72891	$E(2220)/392431891068600713525$		6011	c8	13 Euler irregular, ECPP
72921	$\text{prim}B(83825)$		5994	c8	13 Lucas Aurifeuillian primitive part, ECPP
72983	$\text{prim}U(43359)$		5939	c8	13 Fibonacci primitive part, ECPP
72985	[ Long prime 72985 ]		5938	c8	13 Euler irregular, ECPP
73024	$\text{prim}U(28667)$		5914	c8	13 Fibonacci primitive part, ECPP
73093	$U(28277)/347428330081374457$		5892	c8	13 Fibonacci cofactor, ECPP
73116	$13649\# + 1$		5862	D	87 Primorial
73130	$55339803 \cdot 2^{19402} + 1$		5849	L983	09 Cunningham chain 2nd kind ( $4p - 3$ )
73164	$\text{prim}B(104385)$		5816	c8	13 Lucas Aurifeuillian primitive part, ECPP
73186	$V(27827)/3579579016301$		5803	c4	11 Lucas cofactor, ECPP
73296	[ Long prime 73296 ]		5701	c8	13 Irregular, ECPP
73298	$\text{prim}B(72505)$		5699	c8	13 Lucas Aurifeuillian primitive part, ECPP
73309	$18885 \cdot 2^{18885} - 1$		5690	K	87 Woodall
73451	$1963! - 1$		5614	CD	92 Factorial
73456	$13033\# - 1$		5610	CD	92 Primorial
73491	$289 \cdot 2^{18502} + 1$		5573	K	84 Cullen, generalized Fermat
73555	[ Long prime 73555 ]		5521	c8	13 Fibonacci cofactor, ECPP
73581	$\text{prim}U(39489)$		5502	c8	13 Fibonacci primitive part, ECPP
73593	$\text{prim}U(27721)$		5485	c8	13 Fibonacci primitive part, ECPP
73597	$V(26309)/42316339086094085101$		5479	c8	13 Lucas cofactor, ECPP
73708	$E(2028)/11246153954845684745$		5412	c55	11 Euler irregular, ECPP
73755	$387977793 \cdot 2^{17866} + 1$		5387	L983	09 Cunningham chain 2nd kind ( $4p - 3$ )
73971	[ Long prime 73971 ]		5364	c8	13 Lucas cofactor, ECPP
74033	[ Long prime 74033 ]		5354	c63	13 Irregular ECPP

rank	description	digits	who	year	comment	
74104	$U(25561)$		5342	p54	01	Fibonacci number
74142	[ Long prime 74142 ]		5338	c8	13	Lucas cofactor, ECPP
74161	$V(25577)/147374713548027019$		5329	c4	11	Lucas cofactor, ECPP
74201	$primB(65305)$		5298	c8	13	Lucas Aurifeuillian primitive part, ECPP
74210	$primB(63235)$		5287	c8	13	Lucas Aurifeuillian primitive part, ECPP
74223	[ Long prime 74223 ]		5274	c4	09	Mersenne cofactor, ECPP
74240	[ Long prime 74240 ]		5258	c8	13	Euler irregular, ECPP
74461	$primB(108465)$		5177	c8	13	Lucas Aurifeuillian primitive part, ECPP
74495	$primA(92445)$		5151	c8	13	Lucas Aurifeuillian primitive part, ECPP
74552	[ Long prime 74552 ]		5132	p179	07	Arithmetic progression ( $5, d = (681402540 \cdot 205881 \cdot 4001\# \cdot (205881 \cdot 4001\# + 1) \cdot (205881 \cdot 4001\# - 1)/35)$ )
74646	$(2^{17029} - 1)/418879343$		5118	c8	06	Mersenne cofactor, ECPP
74774	$33957462 \cdot Bern(2370)/40685$		5083	c11	03	Irregular, ECPP
75533	$11549\# + 1$		4951	D	86	Primorial
75958	[ Long prime 75958 ]		4896	c8	13	Lucas cofactor, ECPP
76047	[ Long prime 76047 ]		4812	c4	11	Euler irregular, ECPP
76081	$7911 \cdot 2^{15823} - 1$		4768	K	87	Woodall
76099	$V(22811)/(2469062641 \cdot 84961206854418761)$		4741	c8	04	Lucas cofactor, ECPP
76137	$primU(25493)$		4695	c8	07	Fibonacci primitive part, ECPP
76478	$Phi(6685, -10)$		4560	c8	03	Unique, ECPP
76666	[ Long prime 76666 ]		4498	c4	04	Euler irregular, ECPP
76689	[ Long prime 76689 ]		4479	c8	04	Fibonacci cofactor, ECPP
76714	$primU(34593)$		4444	c8	07	Fibonacci primitive part, ECPP
76727	$2^{14699} + 2^{7350} + 1$		4425	O	00	Gaussian Mersenne norm 27
76736	$primU(38181)$		4414	c8	07	Fibonacci primitive part, ECPP
76786	$(2^{14561} - 1)/8074991336582835391$		4365	c8	04	Mersenne cofactor, ECPP
76787	[ Long prime 76787 ]		4365	c4	08	Mersenne cofactor, ECPP
76791	$Phi(3273, -100)$		4361	c8	03	Unique, ECPP
76793	$(2^{14479} + 1)/3$		4359	c4	04	Generalized Lucas number, Wagstaff, ECPP
76966	$U(20749)/40143391315257666998313330569$		4308	c8	13	Fibonacci cofactor, ECPP
77006	$primU(21053)$		4274	c8	07	Fibonacci primitive part, ECPP
77013	$primU(31209)$		4264	c8	07	Fibonacci primitive part, ECPP
77074	[ Long prime 77074 ]		4200	c8	03	Irregular, ECPP
77075	$primU(25115)$		4199	CH3	05	Fibonacci primitive part
77205	[ Long prime 77205 ]		4099	c8	13	Fibonacci cofactor, ECPP
77206	$U(19709)/5442947509995472691549$		4097	c8	13	Fibonacci cofactor, ECPP
77239	$V(19469)$		4069	x25	02	Lucas number, cyclotomy, APR-CL assisted
77282	$1477! + 1$		4042	D	84	Factorial
77509	[ Long prime 77509 ]		4002	c8	04	Fibonacci cofactor, ECPP
77606	$-2730 \cdot Bern(1884)/100983617849$		3844	c8	03	Irregular, ECPP

rank	description	digits	who	year	comment	
77624	$2840178 \cdot \text{Bern}(1870)/85$		3821	c8	03	Irregular, ECPP
77712	[ Long prime 77712 ]		3734	c8	03	Irregular, ECPP
77714	$12379 \cdot 2^{12379} - 1$		3731	K	84	Woodall
77715	$(2^{12391} + 1)/3$		3730	M	96	Generalized Lucas number, Wagstaff
77802	[ Long prime 77802 ]		3708	c4	08	Mersenne cofactor, ECPP
77830	[ Long prime 77830 ]		3682	c8	13	Euler irregular, ECPP
77838	[ Long prime 77838 ]		3671	c4	03	Euler irregular, ECPP
77861	$642 \cdot \text{Bern}(1802)/15720728189$		3641	c8	03	Irregular, ECPP
77958	$V(17029)/(9570299 \cdot 495749440031)$		3541	c8	04	Lucas cofactor, ECPP
77979	$(2^{11813} - 1)/(70879 \cdot 207971134271377)$		3537	c8	02	Mersenne cofactor, ECPP
78085	$2339662057597 \cdot 10^{3490} + 9$		3503	c67	13	Quadruplet (4)
78086	$2339662057597 \cdot 10^{3490} + 7$		3503	c67	13	Quadruplet (3)
78087	$2339662057597 \cdot 10^{3490} + 3$		3503	c67	13	Quadruplet (2)
78088	$2339662057597 \cdot 10^{3490} + 1$		3503	p364	13	Quadruplet (1)
78141	$305136484659 \cdot 2^{11399} + 7$		3443	c67	13	Quadruplet (4)
78142	$305136484659 \cdot 2^{11399} + 5$		3443	c67	13	Quadruplet (3)
78143	$305136484659 \cdot 2^{11399} + 1$		3443	p364	13	Quadruplet (2)
78144	$305136484659 \cdot 2^{11399} - 1$		3443	p364	13	Quadruplet (1)
78928	$(2^{11279} + 1)/3$		3395	PM	98	Cyclotomy, generalized Lucas number, Wagstaff
79127	$722047383902589 \cdot 2^{11111} + 7$		3360	c26	13	Quadruplet (4)
79128	$722047383902589 \cdot 2^{11111} + 5$		3360	c26	13	Quadruplet (3)
79129	$722047383902589 \cdot 2^{11111} + 1$		3360	L165	13	Quadruplet (2)
79130	$722047383902589 \cdot 2^{11111} - 1$		3360	L165	13	Quadruplet (1)
79215	[ Long prime 79215 ]		3284	c4	11	Mersenne cofactor, ECPP
79233	[ Long prime 79233 ]		3247	c8	13	Lucas cofactor, ECPP
79246	$V(15511)/394599841$		3234	c8	04	Lucas cofactor, ECPP
79262	$(2^{10691} + 1)/3$		3218	c4	04	Generalized Lucas number, Wagstaff, ECPP
79319	$(2^{10501} + 1)/3$		3161	M	96	Generalized Lucas number, Wagstaff
79435	$2^{10141} + 2^{5071} + 1$		3053	O	00	Gaussian Mersenne norm 26
79494	[ Long prime 79494 ]		3030	c4	10	Mersenne cofactor, ECPP
79500	$43697976428649 \cdot 2^{9999} + 7$		3024	c58	12	Quadruplet (4)
79501	$43697976428649 \cdot 2^{9999} + 5$		3024	c58	12	Quadruplet (3)
79502	$43697976428649 \cdot 2^{9999} + 1$		3024	p349	12	Quadruplet (2)
79503	$43697976428649 \cdot 2^{9999} - 1$		3024	p349	12	Quadruplet (1)
79506	[ Long prime 79506 ]		3022	c8	02	Mersenne cofactor, ECPP
79510	$62037039993 \cdot 7001\# + 7811555813$		3021	x38	13	Consecutive primes arithmetic progression ( $4, d = 30$ ), ECPP
79514	$50946848056 \cdot 7001\# + 7811555813$		3021	x38	13	Consecutive primes arithmetic progression ( $4, d = 30$ ), ECPP
79521	$26997933312 \cdot 7001\# + 7811555753$		3020	x38	13	Consecutive primes arithmetic progression ( $4, d = 30$ ), ECPP
79525	$25506692100 \cdot 7001\# + 7811555783$		3020	x38	13	Consecutive primes arithmetic progression ( $4, d = 30$ ), ECPP
79529	$V(14449)$		3020	DK	95	Lucas number

rank	description	digits	who	year	comment
79533	$3124777373 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $7, d = 481789017 \cdot 7001\#$ )
79534	$2996180304 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $6, d = 46793757 \cdot 7001\#$ )
79536	$2946259686 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $6, d = 313558156 \cdot 7001\#$ )
79537	$2915000572 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $6, d = 3093612 \cdot 7001\#$ )
79541	$2903168860 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $6, d = 370654742 \cdot 7001\#$ )
79545	$2884761225 \cdot 7001\# + 1$		3019	p155	12 Arithmetic progression ( $6, d = 46112185 \cdot 7001\#$ )
80050	$U(14431)$		3016	p54	01 Fibonacci number
80280	[ Long prime 80280 ]		2979	c8	02 Mersenne cofactor, ECPP
80397	$V(13963)$		2919	c11	02 Lucas number, ECPP
80436	[ Long prime 80436 ]		2888	c8	02 Mersenne cofactor, ECPP
80459	$9531 \cdot 2^{9531} - 1$		2874	K	84 Woodall
80492	$9992783016 \cdot 6599\# - 1$		2836	p295	11 Cunningham chain ( $8p + 7$ )
80504	[ Long prime 80504 ]		2829	c8	13 Euler irregular, ECPP
80520	$6569\# - 1$		2811	D	92 Primorial
81168	$-E(1078)/361898544439043$		2578	c4	02 Euler irregular, ECPP
81179	$198267970563 \cdot 6007\# + 7811555753$		2575	x38	13 Consecutive primes arithmetic progression ( $4, d = 30$ ), ECPP
81408	$V(12251)$		2561	p54	01 Lucas number
82082	$46359065729523 \cdot 2^{8258} + 7$		2500	c26	11 Quadruplet (4)
82083	$46359065729523 \cdot 2^{8258} + 5$		2500	c26	11 Quadruplet (3)
82084	$46359065729523 \cdot 2^{8258} + 1$		2500	L165	11 Quadruplet (2)
82085	$46359065729523 \cdot 2^{8258} - 1$		2500	L165	11 Quadruplet (1)
82160	$974! - 1$		2490	CD	92 Factorial
82641	$E(1028)/(6415 \cdot 56837916301577)$		2433	c4	02 Euler irregular, ECPP
82869	$E(1004)/(579851915 \cdot 80533376783)$		2364	c4	02 Euler irregular, ECPP
82880	$953477584 \cdot 5501\# - 1$		2355	p133	05 Cunningham chain ( $8p + 7$ )
83106	$7755 \cdot 2^{7755} - 1$		2339	K	84 Woodall
83628	[ Long prime 83628 ]		2276	c4	02 Irregular, ECPP
83650	$-36870 \cdot \text{Bern}(1228)/1043706675925609$		2272	c4	02 Irregular, ECPP
83870	$V(10691)$		2235	DK	95 Lucas number
84436	$872! + 1$		2188	D	83 Factorial
85272	$5045589688 \cdot 4933\# + 1$		2106	p295	10 Cunningham chain 2nd kind ( $8p - 7$ )
85600	[ Long prime 85600 ]		2069	c4	02 Euler irregular, ECPP
85755	$-E(886)/68689$		2051	c4	02 Euler irregular, ECPP
85865	$4787\# + 1$		2038	D	84 Primorial
86133	$U(9677)$		2023	c2	00 Fibonacci number, ECPP
87969	$6611 \cdot 2^{6611} + 1$		1994	K	84 Cullen
88040	$4583\# - 1$		1953	D	92 Primorial
88062	$U(9311)$		1946	DK	95 Fibonacci number
88082	$4547\# + 1$		1939	D	84 Primorial
88331	$4297\# - 1$		1844	D	92 Primorial

rank	description	digits	who	year	comment
88381	$125848198864 \cdot 4253\# + 1$		1829	p199	10 Cunningham chain 2nd kind ( $8p - 7$ )
88382	$113419228920 \cdot 4253\# + 1$		1829	p199	10 Cunningham chain 2nd kind ( $8p - 7$ )
88385	$45912427272 \cdot 4253\# + 1$		1829	p199	10 Cunningham chain 2nd kind ( $8p - 7$ )
88630	$11628008104 \cdot 4127\# + 1$		1770	p133	05 Cunningham chain 2nd kind ( $8p - 7$ )
88635	$V(8467)$		1770	c2	00 Lucas number, ECPP
88718	$4093\# - 1$		1750	CD	92 Primorial
88730	$5795 \cdot 2^{5795} + 1$		1749	K	84 Cullen
88736	$(2^{5807} + 1)/3$		1748	PM	98 Cyclotomy, generalized Lucas number, Wagstaff
89115	[ Long prime 89115 ]		1640	c62	13 Irregular, ECPP
89188	$V(7741)$		1618	DK	95 Lucas number
89246	$20438086160 \cdot 3733\# - 1$		1605	p295	10 Cunningham chain ( $8p + 7$ )
89250	$17758152104 \cdot 3733\# - 1$		1605	p295	10 Cunningham chain ( $8p + 7$ )
89264	$83 \cdot 2^{5318} - 1$		1603	K	84 Woodall
90477	$163252711105 \cdot 3371\#/2 + 4$		1443	c67	14 Quintuplet (5)
90478	$163252711105 \cdot 3371\#/2 + 2$		1443	c67	14 Quintuplet (4)
90479	$163252711105 \cdot 3371\#/2 - 2$		1443	c67	14 Quintuplet (3)
90480	$163252711105 \cdot 3371\#/2 - 4$		1443	c67	14 Quintuplet (2)
90481	$163252711105 \cdot 3371\#/2 - 8$		1443	c67	14 Quintuplet (1)
90761	$4713 \cdot 2^{4713} + 1$		1423	K	84 Cullen
90835	[ Long prime 90835 ]		1418	c4	02 Irregular, ECPP
91025	$460226463 \cdot 3301\# + 1$		1402	p252	10 Arithmetic progression ( $7, d =$ $30017636 \cdot 3301\#$ )
91036	$9039840848561 \cdot 3299\#/35 + 7$		1401	c67	13 Quintuplet (5)
91037	$9039840848561 \cdot 3299\#/35 + 5$		1401	c67	13 Quintuplet (4)
91038	$9039840848561 \cdot 3299\#/35 + 1$		1401	p364	13 Quintuplet (3)
91039	$9039840848561 \cdot 3299\#/35 - 1$		1401	p364	13 Quintuplet (2)
91040	$9039840848561 \cdot 3299\#/35 - 5$		1401	c67	13 Quintuplet (1)
91152	[ Long prime 91152 ]		1391	c8	13 Euler irregular, ECPP
91534	$3229\# + 1$		1368	D	84 Primorial
91566	$580182204072 \cdot 3203\# - 1$		1366	p295	11 Cunningham chain ( $8p + 7$ )
92142	[ Long prime 92142 ]		1343	c4	02 Euler irregular, ECPP
92467	$1233917739 \cdot 3121\# + 1$		1335	p155	10 Arithmetic progression ( $7, d =$ $5893725 \cdot 3121\#$ )
92741	$1461401630 \cdot 3109\# + 1$		1328	p252	09 Arithmetic progression ( $7, d =$ $35777939 \cdot 3109\#$ )
93291	[ Long prime 93291 ]		1311	c4	02 Irregular, ECPP
94164	$699549860111847 \cdot 2^{4244} + 11$		1293	c26	13 Quintuplet (5)
94165	$699549860111847 \cdot 2^{4244} + 7$		1293	c26	13 Quintuplet (4)
94166	$699549860111847 \cdot 2^{4244} + 5$		1293	c26	13 Quintuplet (3)
94167	$699549860111847 \cdot 2^{4244} + 1$		1293	p371	13 Quintuplet (2)
94168	$699549860111847 \cdot 2^{4244} - 1$		1293	p371	13 Quintuplet (1)
94243	$833000864 \cdot 3011\# + 1$		1290	p155	06 Arithmetic progression ( $7, d =$ $114858412 \cdot 3011\#$ )
95956	$546! - 1$		1260	D	92 Factorial
97241	$V(5851)$		1223	DK	95 Lucas number

rank	description	digits	who	year	comment	
97804	$406463527990 \cdot 2801\# + 1633050403$		1209	x38	13	Consecutive primes arithmetic progression ( $5, d = 30$ )
99059	$68002763264 \cdot 2749\# - 1$		1185	p35	12	Cunningham chain ( $16p + 15$ )
101270	[ Long prime 101270 ]		1143	c8	13	Euler irregular, ECPP
101747	$1290733709840 \cdot 2677\# + 1$		1141	p295	11	Cunningham chain 2nd kind ( $16p - 15$ )
102264	$U(5387)$		1126	WM	90	Fibonacci number
102755	$720128166480 \cdot 2621\# + 1$		1117	p199	10	Cunningham chain 2nd kind ( $16p - 15$ )
102764	$566650659276 \cdot 2621\# + 1615853$		1117	x38	13	Quintuplet (5)
102765	$566650659276 \cdot 2621\# + 1615849$		1117	x38	13	Quintuplet (4)
102766	$566650659276 \cdot 2621\# + 1615847$		1117	x38	13	Quintuplet (3)
102767	$566650659276 \cdot 2621\# + 1615843$		1117	x38	13	Quintuplet (2)
102768	$566650659276 \cdot 2621\# + 1615841$		1117	x38	13	Quintuplet (1)
102770	$554729409262 \cdot 2621\# + 1615853$		1117	x38	13	Quintuplet (5)
102771	$554729409262 \cdot 2621\# + 1615849$		1117	x38	13	Quintuplet (4)
102772	$554729409262 \cdot 2621\# + 1615847$		1117	x38	13	Quintuplet (3)
102773	$554729409262 \cdot 2621\# + 1615843$		1117	x38	13	Quintuplet (2)
102774	$554729409262 \cdot 2621\# + 1615841$		1117	x38	13	Quintuplet (1)
105127	$993530619517 \cdot 2503\# + 1633050373$		1073	x38	13	Consecutive primes arithmetic progression ( $5, d = 30$ )
105141	$495690450643 \cdot 2503\# + 1633050403$		1072	x38	13	Consecutive primes arithmetic progression ( $5, d = 30$ )
105167	$150822742857 \cdot 2503\# + 1633050373$		1072	x38	13	Consecutive primes arithmetic progression ( $5, d = 30$ )
105179	$94807777362 \cdot 2503\# + 1633050373$		1072	x38	13	Consecutive primes arithmetic progression ( $5, d = 30$ )
105562	$(2^{3539} + 1)/3$		1065	M	89	First titanic by ECPP, generalized Lucas number, Wagstaff
105779	$-E(510)$		1062	c4	02	Euler irregular, ECPP
105829	[ Long prime 105829 ]		1060	c4	02	Euler irregular, ECPP
106037	$2968802755 \cdot 2459\# + 1$		1057	p155	09	Arithmetic progression ( $8, d = 359463429 \cdot 2459\#$ )
106231	$469! - 1$		1051	BC	81	Factorial
106862	$6179783529 \cdot 2411\# + 1$		1037	p102	03	Arithmetic progression ( $8, d = 176836494 \cdot 2411\#$ )
107195	$R(1031)$		1031	WD	85	Repunit
107536	$51800236080 \cdot 2377\# - 1$		1017	p295	11	Cunningham chain ( $16p + 15$ )
107617	$418059269664 \cdot 2371\# + 1$		1015	p308	11	Cunningham chain 2nd kind ( $16p - 15$ )
107642	$116040452086 \cdot 2371\# + 1$		1014	p308	12	Arithmetic progression ( $9, d = 6317280828 \cdot 2371\#$ )
107643	$115248484057 \cdot 2371\# + 1$		1014	p308	13	Arithmetic progression ( $8, d = 7327002535 \cdot 2371\#$ )
107645	$113236255068 \cdot 2371\# + 1$		1014	p308	13	Arithmetic progression ( $8, d = 6601354956 \cdot 2371\#$ )
107646	$112929231161 \cdot 2371\# + 1$		1014	p308	13	Arithmetic progression ( $8, d = 6982118533 \cdot 2371\#$ )
107792	$97336164242 \cdot 2371\# + 1$		1014	p308	13	Arithmetic progression ( $9, d = 6350457699 \cdot 2371\#$ )

rank	description	digits	who	year	comment
107916	$93537753980 \cdot 2371\# + 1$		1014	p308	13 Arithmetic progression ( $9, d = 3388165411 \cdot 2371\#$ )
107948	$92836168856 \cdot 2371\# + 1$		1014	p308	13 Arithmetic progression ( $9, d = 127155673 \cdot 2371\#$ )
109561	$69318339141 \cdot 2371\# + 1$		1014	p308	11 Arithmetic progression ( $9, d = 1298717501 \cdot 2371\#$ )
112800	$V(4793)$		1002	DK	95 Lucas number
112843	$V(4787)$		1001	DK	95 Lucas number

## 2 The Long Primes

These are the primes that were too long to fit above.

Prime with rank 222 (712748 digits by p360) See on-line version for the rest of the digits

“57671892869766803925...(712708 other digits)...06520121133805600769”

Prime with rank 6424 (320237 digits by p44)

$$\text{Phi}(3, 10^{160118}) + (137 \cdot 10^{160119} + 731 \cdot 10^{159275}) \cdot (10^{843} - 1)/999$$

Prime with rank 6429 (320097 digits by p44)

$$\text{Phi}(3, 10^{160048}) + (137 \cdot 10^{160049} + 731 \cdot 10^{157453}) \cdot (10^{2595} - 1)/999$$

Prime with rank 9382 (276340 digits by x38)

$$\text{Phi}(5, (422716551 \cdot 16001\#/5 + 1) \cdot (24696 \cdot 16001\# - 1)^9)$$

Prime with rank 9383 (276340 digits by x38)

$$\text{Phi}(5, (572949246 \cdot 16001\#/5 + 1) \cdot (23208 \cdot 16001\# - 1)^9)$$

Prime with rank 9384 (276337 digits by x38)

$$\text{Phi}(5, (130813006 \cdot 16001\#/5 + 1) \cdot (23208 \cdot 16001\# - 1)^9)$$

Prime with rank 9385 (276333 digits by x38)

$$\text{Phi}(5, (323243446 \cdot 16001\#/5 + 1) \cdot (16051 \cdot 16001\# - 1)^9)$$

Prime with rank 9386 (276332 digits by x38)

$$\text{Phi}(5, (815932961 \cdot 16001\#/5 + 1) \cdot (13303 \cdot 16001\# - 1)^9)$$

Prime with rank 9387 (276331 digits by x38)

$$\text{Phi}(5, (1353907141 \cdot 16001\#/5 + 1) \cdot (11725 \cdot 16001\# - 1)^9)$$

Prime with rank 9388 (276330 digits by x38)

$$\text{Phi}(5, (1381740026 \cdot 16001\#/5 + 1) \cdot (10862 \cdot 16001\# - 1)^9)$$

Prime with rank 9390 (276329 digits by x38)

$$\text{Phi}(5, (323094346 \cdot 16001\#/5 + 1) \cdot (12015 \cdot 16001\# - 1)^9)$$

Prime with rank 9391 (276328 digits by x38)

$$\text{Phi}(5, (996217306 \cdot 16001\#/5 + 1) \cdot (10349 \cdot 16001\# - 1)^9)$$



Prime with rank 9392 (276323 digits by x38)

$$\text{Phi}(5, (1043959916 \cdot 16001\# / 5 + 1) \cdot (7184 \cdot 16001\# - 1)^9)$$

Prime with rank 9393 (276320 digits by x38)

$$\text{Phi}(5, (1247341201 \cdot 16001\# / 5 + 1) \cdot (6071 \cdot 16001\# - 1)^9)$$

Prime with rank 9394 (276320 digits by x38)

$$\text{Phi}(5, (1242474561 \cdot 16001\# / 5 + 1) \cdot (6071 \cdot 16001\# - 1)^9)$$

Prime with rank 9395 (276318 digits by x38)

$$\text{Phi}(5, (364740596 \cdot 16001\# / 5 + 1) \cdot (6071 \cdot 16001\# - 1)^9)$$

Prime with rank 9396 (276317 digits by x38)

$$\text{Phi}(5, (1512607666 \cdot 16001\# / 5 + 1) \cdot (4961 \cdot 16001\# - 1)^9)$$

Prime with rank 9397 (276316 digits by x38)

$$\text{Phi}(5, (855408961 \cdot 16001\# / 5 + 1) \cdot (4961 \cdot 16001\# - 1)^9)$$

Prime with rank 9399 (276309 digits by x38)

$$\text{Phi}(5, (207685826 \cdot 16001\# / 5 + 1) \cdot (3668 \cdot 16001\# - 1)^9)$$

Prime with rank 9400 (276291 digits by x38)

$$\text{Phi}(5, (277516296 \cdot 16001\# / 5 + 1) \cdot (1085 \cdot 16001\# - 1)^9)$$

Prime with rank 9479 (275495 digits by p44)

$$\text{Phi}(3, 10^{137747}) + (137 \cdot 10^{137748} + 731 \cdot 10^{129293}) \cdot (10^{8454} - 1) / 999$$

Prime with rank 14051 (221071 digits by x34)

$$\text{Phi}(5, (3668 \cdot 16001\# - 1) \cdot (378266 \cdot 16001\# / 5 + 1)^7)$$

Prime with rank 15455 (208559 digits by p44)

$$\text{Phi}(3, 10^{104279}) + (137 \cdot 10^{104280} + 731 \cdot 10^{93395}) \cdot (10^{10884} - 1) / 999$$

Prime with rank 15456 (208553 digits by p44)

$$\text{Phi}(3, 10^{104276}) + (137 \cdot 10^{104277} + 731 \cdot 10^{99683}) \cdot (10^{4593} - 1) / 999$$

Prime with rank 15463 (208515 digits by p44)

$$\text{Phi}(3, 10^{104257}) + (137 \cdot 10^{104258} + 731 \cdot 10^{99193}) \cdot (10^{5064} - 1) / 999$$

Prime with rank 15708 (206579 digits by p44)

$$\text{Phi}(3, 10^{103289}) + (137 \cdot 10^{103290} + 731 \cdot 10^{90449}) \cdot (10^{12840} - 1) / 999$$

Prime with rank 15710 (206565 digits by p44)

$$\text{Phi}(3, 10^{103282}) + (137 \cdot 10^{103283} + 731 \cdot 10^{85009}) \cdot (10^{18273} - 1) / 999$$

Prime with rank 15737 (206365 digits by x29)

$$\text{Phi}(3, 10^{103182}) + (137 \cdot 10^{103183} + 731 \cdot 10^{66639}) \cdot (10^{36543} - 1) / 999$$

Prime with rank 15739 (206349 digits by p44)

$$\text{Phi}(3, 10^{103174}) + (137 \cdot 10^{103175} + 731 \cdot 10^{78103}) \cdot (10^{25071} - 1)/999$$

Prime with rank 15743 (206267 digits by p44)

$$\text{Phi}(3, 10^{103133}) + (137 \cdot 10^{103134} + 731 \cdot 10^{98675}) \cdot (10^{4458} - 1)/999$$

Prime with rank 15744 (206263 digits by p44)

$$\text{Phi}(3, 10^{103131}) + (137 \cdot 10^{103132} + 731 \cdot 10^{78393}) \cdot (10^{24738} - 1)/999$$

Prime with rank 15746 (206249 digits by p44)

$$\text{Phi}(3, 10^{103124}) + (137 \cdot 10^{103125} + 731 \cdot 10^{84659}) \cdot (10^{18465} - 1)/999$$

Prime with rank 15760 (206157 digits by p44)

$$\text{Phi}(3, 10^{103078}) + (137 \cdot 10^{103079} + 731 \cdot 10^{81751}) \cdot (10^{21327} - 1)/999$$

Prime with rank 15772 (206085 digits by p44)

$$\text{Phi}(3, 10^{103042}) + (137 \cdot 10^{103043} + 731 \cdot 10^{69745}) \cdot (10^{33297} - 1)/999$$

Prime with rank 15773 (206085 digits by p44)

$$\text{Phi}(3, 10^{103042}) + (137 \cdot 10^{103043} + 731 \cdot 10^{88753}) \cdot (10^{14289} - 1)/999$$

Prime with rank 15779 (206057 digits by p44)

$$\text{Phi}(3, 10^{103028}) + (137 \cdot 10^{103029} + 731 \cdot 10^{69587}) \cdot (10^{33441} - 1)/999$$

Prime with rank 50483 (36498 digits by p360)

$$2 \cdot (2^{1562} \cdot 3^{109} \cdot 828814575031^{420} \cdot 955637315837^{480} \cdot 672198801383^{498} \cdot 162946224587^{484} \cdot 258724139309^{335} \cdot 327170641169^{422} \cdot 880151556857^{437} - 1) + 1$$

Prime with rank 50486 (36498 digits by p360)

$$2^{1562} \cdot 3^{109} \cdot 828814575031^{420} \cdot 955637315837^{480} \cdot 672198801383^{498} \cdot 162946224587^{484} \cdot 258724139309^{335} \cdot 327170641169^{422} \cdot 880151556857^{437} - 1$$

Prime with rank 50634 (35851 digits by p360)

$$2^{1799} \cdot 3^{137} \cdot 474579581429^{465} \cdot 443749004359^{326} \cdot 644541865141^{488} \cdot 561014826899^{421} \cdot 725590842793^{493} \cdot 623163115793^{476} \cdot 383657519591^{332} + 1$$

Prime with rank 50635 (35851 digits by p360)

$$2^{1799} \cdot 3^{137} \cdot 474579581429^{465} \cdot 443749004359^{326} \cdot 644541865141^{488} \cdot 561014826899^{421} \cdot 725590842793^{493} \cdot 623163115793^{476} \cdot 383657519591^{332} - 1$$

Prime with rank 50735 (35206 digits by p360)

$$2 \cdot (2^{1512} \cdot 3^{143} \cdot 973012422269^{378} \cdot 471613096919^{407} \cdot 540579043769^{407} \cdot 251138810633^{368} \cdot 589234783037^{445} \cdot 475774278173^{498} \cdot 579909737837^{457} - 1) + 1$$

Prime with rank 50736 (35206 digits by p360)

$$2^{1512} \cdot 3^{143} \cdot 973012422269^{378} \cdot 471613096919^{407} \cdot 540579043769^{407} \cdot 251138810633^{368} \cdot 589234783037^{445} \cdot 475774278173^{498} \cdot 579909737837^{457} - 1$$

Prime with rank 52882 (31112 digits by p360)

$$2^{1515} \cdot 48688484017^{560} \cdot 133579779967^{573} \cdot 383159376767^{784} \cdot 960310896529^{769} + 3$$

Prime with rank 52883 (31112 digits by p360)

$$2^{1514} \cdot 48688484017^{560} \cdot 133579779967^{573} \cdot 383159376767^{784} \cdot 960310896529^{769} + 1$$

Prime with rank 57840 (20562 digits by FE1)

$$((((((2521008887^3 + 80)^3 + 12)^3 + 450)^3 + 894)^3 + 3636)^3 + 70756)^3 + 97220$$

Prime with rank 61262 (15537 digits by x38)

$$(U(9275, 1, 3961) + U(9275, 1, 3960))/(U(9275, 1, 45) + U(9275, 1, 44))$$

Prime with rank 63003 (13862 digits by c71)

$$6 \cdot \text{Bern}(5534)/(89651360098907 \cdot 22027790155387 \cdot 114866371)$$

Prime with rank 63209 (13657 digits by c64)

$$6 \cdot \text{Bern}(5462)/(724389557 \cdot 8572589 \cdot 3742097186099)$$

Prime with rank 64719 (12533 digits by c63)

$$6 \cdot \text{Bern}(5078)/(64424527603 \cdot 9985070580644364287)$$

Prime with rank 64796 (12459 digits by c54)

$$(2^{41521} - 1)/41602235382028197528613357724450752065089$$

Prime with rank 64906 (12395 digits by c59)

$$(2^{41263} - 1)/(1402943 \cdot 983437775590306674647)$$

Prime with rank 66698 (10763 digits by c64)

$$1258566 \cdot \text{Bern}(4462)/(2231 \cdot 596141126178107 \cdot 4970022131749)$$

Prime with rank 68313 (9010 digits by c8)

$$U(43399)/470400609575881344601538056264109423291827366228494341196421$$

Prime with rank 68382 (8916 digits by c8)

$$U(42829)/107130175995197969243646842778153077$$

Prime with rank 68438 (8835 digits by c59)

$$(2^{29473} - 1)/(5613392570256862943 \cdot 24876264677503329001)$$

Prime with rank 69305 (8063 digits by c55)

$$(2^{26903} - 1)/1113285395642134415541632833178044793$$

Prime with rank 69420 (7945 digits by c8)

$$6 \cdot \text{Bern}(3458)/28329084584758278770932715893606309$$

Prime with rank 69447 (7906 digits by c39)

$$U(37987)/(16117960073 \cdot 94533840409 \cdot 1202815961509)$$

Prime with rank 70609 (7239 digits by c8)

$$U(34807)/551750980997908879677508732866536453$$

Prime with rank 71243 (7053 digits by c8)

$$U(33997)/8119544695419968014626314520991088099382355441843013$$

Prime with rank 71785 (6669 digits by c8)

$$U(32077)/153087505413829037510511957221947361$$

Prime with rank 71812 (6637 digits by c8)

$$6 \cdot \text{Bern}(2974)/19622040971147542470479091157507$$

Prime with rank 72112 (6425 digits by c8)

$$V(31547)/221409808384144085062492986575402586918348866650893130934479823303462278246861842289773757623993825502645720726313249552565534024996670996378968020508259098756301$$

Prime with rank 72390 (6229 digits by c4)

$$(2^{20887} - 1)/(694257144641 \cdot 3156563122511 \cdot 28533972487913 \cdot 1893804442513836092687)$$

Prime with rank 72985 (5938 digits by c8)

$$-E(2202)/53781055550934778283104432814129020709$$

Prime with rank 73296 (5701 digits by c8)

$$274386 \cdot \text{Bern}(2622)/8518594882415401157891061256276973722693$$

Prime with rank 73555 (5521 digits by c8)

$$U(26591)/1929661069931436974692472737757606381$$

Prime with rank 73971 (5364 digits by c8)

$$V(25873)/34396575615094965590217427573609664640790259$$

Prime with rank 74033 (5354 digits by c63)

$$-30 \cdot \text{Bern}(2504)/(313 \cdot 424524649821233650433 \cdot 117180678030577350578887 \cdot 8016621720796146291948744439)$$

Prime with rank 74142 (5338 digits by c8)

$$V(25763)/92864275685263243511877732271066626563444291249$$

Prime with rank 74223 (5274 digits by c4)

$$(2^{17683} - 1)/(234000819833373807217 \cdot 62265855698776681155719328257)$$

Prime with rank 74240 (5258 digits by c8)

$$-E(1990)/8338208577950624722417016286765473477033741642105671913$$

Prime with rank 74552 (5132 digits by p179)

$$(51803036889 \cdot 205881 \cdot 4001\# \cdot (205881 \cdot 4001\# + 1) + 210) \cdot (205881 \cdot 4001\# - 1)/35 + 7$$

Prime with rank 75958 (4896 digits by c8)

$$V(23663)/102462573963822806622784417315446994815407287584779$$

Prime with rank 76047 (4812 digits by c4)

$$E(1840)/31237282053878368942060412182384934425$$

Prime with rank 76666 (4498 digits by c4)

$$E(1736)/(55695515 \cdot 75284987831 \cdot 3222089324971117)$$

Prime with rank 76689 (4479 digits by c8)

$$U(21577)/(8626362776257 \cdot 608114436652075009)$$

Prime with rank 76787 (4365 digits by c4)

$$(2^{14621} - 1)/(1958650799081 \cdot 9787919624201558678734079)$$

Prime with rank 77074 (4200 digits by c8)

$$276474 \cdot \text{Bern}(2030)/(19426085 \cdot 24191786327543)$$

Prime with rank 77205 (4099 digits by c8)

$$U(19777)/38707773384498015680717776815690169$$

Prime with rank 77509 (4002 digits by c8)

$$U(19433)/(8200903423639793 \cdot 124790158973035710313 \cdot 163702910239586286961573)$$

Prime with rank 77712 (3734 digits by c8)

$$-197676570 \cdot 18851280661 \cdot \text{Bern}(1836)/(59789 \cdot 3927024469727)$$

Prime with rank 77802 (3708 digits by c4)

$$(2^{12451} - 1)/(4980401 \cdot 15289230353 \cdot 1143390212315192593598809)$$

Prime with rank 77830 (3682 digits by c8)

$$-E(1466)/167900532276654417372106952612534399239$$

Prime with rank 77838 (3671 digits by c4)

$$E(1468)/(95 \cdot 217158949445380764696306893 \cdot 597712879321361736404369071)$$

Prime with rank 79215 (3284 digits by c4)

$$(2^{11117} - 1)/358196436964270608221221853970927519972222557196875442622337153$$

Prime with rank 79233 (3247 digits by c8)

$$V(15907)/2351579891055 \backslash \\ 05688534907917009892725773407652816592568932322486925769136001261$$

Prime with rank 79494 (3030 digits by c4)

$$(2^{10211} - 1)/306772303457009724362047724636324707614338377$$

Prime with rank 79506 (3022 digits by c8)

$$(2^{10169} - 1)/10402314702094700470118039921523041260063$$

Prime with rank 80280 (2979 digits by c8)

$$(2^{10007} - 1)/(14477908246561 \cdot 136255313 \cdot 10368448917257)$$

Prime with rank 80436 (2888 digits by c8)

$$(2^{9697} - 1)/(724126946527 \cdot 19092282046942032847)$$

Prime with rank 80504 (2829 digits by c8)

$$-E(1174)/50550511342697072710795058639332351763$$

Prime with rank 83628 (2276 digits by c4)

$$-2090369190 \cdot \text{Bern}(1236)/(103 \cdot 939551962476779 \cdot 157517441360851951)$$

Prime with rank 85600 (2069 digits by c4)

$$-E(902)/(9756496279 \cdot 314344516832998594237)$$

Prime with rank 89115 (1640 digits by c62)

$$6 \cdot \text{Bern}(998)/(11511758102983 \cdot 55034215982714323 \cdot 70834556505031411 \cdot 38698489087506303607099 \cdot 4712129605357293035277301907 \cdot 362429490639499678761278968817)$$

Prime with rank 90835 (1418 digits by c4)

$$-54570 \cdot \text{Bern}(848)/(428478023 \cdot 5051145078213134269)$$

Prime with rank 91152 (1391 digits by c8)

$$E(676)/878618128969410121818976030235415 \backslash \\ 67004933531313911504892717789158174298202475475590955674162377015$$

Prime with rank 92142 (1343 digits by c4)

$$-E(638)/(7235862947323 \cdot 11411779188663863 \cdot 526900327479624797)$$

Prime with rank 93291 (1311 digits by c4)

$$138 \cdot \text{Bern}(814)/(28409964671 \cdot 335055893 \cdot 351085907 \cdot 520460183 \cdot 30348030379 \cdot 17043083582983)$$

Prime with rank 101270 (1143 digits by c8)

$$E(576)/1035784073998708077865 \backslash \\ 03857073455806041088176158903345179750769398899240791530780628185$$

Prime with rank 105829 (1060 digits by c4)

$$-E(526)/(5062100689 \cdot 71096484738291757946225730043997)$$

### 3 Table of Proof-Codes

Key to Proof-Codes (primality provers):

	<u>code</u>	<u>description</u>
BC		Penk, Buhler, Crandall
C		Caldwell, Cruncher
c2		Water, Primo
c4		Broadhurst, Primo
c8		Water, Broadhurst, Primo
c11		Oakes, Primo
c26		Keiser, OpenPFGW, Primo
c33		Chaglassian, Primo
c35		Cami, Primo
c39		Minovic, OpenPFGW, Primo
c41		Andersen, Rosenthal, Primo
c46		Boncompagni, Primo
c47		Chandler, Primo
c54		Wu <sub>T</sub> , <i>Primo</i>
c55		Gramolin, Primo
c56		Soule, Minovic, OpenPFGW, Primo
c58		Kaiser1, OpenPFGW, NewPGen, Primo
c59		Metcalfe, OpenPFGW, Primo
c60		Lemsafer, Primo
c61		Kaiser1, Broadhurst, OpenPFGW, NewPGen, Primo
c62		Minovic, TOPS, Primo
c63		Ritschel, TOPS, Primo
c64		Metcalfe, Minovic, Ritschel, TOPS, Primo
c65		Lygeros, Rozier, Primo
c66		Steine, Primo
c67		Batalov, OpenPFGW, NewPGen, Primo
c69		Jacobsen, Primo
c70		Underwood, Dubner, Primo
c71		Metcalfe, Ritschel, Andersen, TOPS, Primo
c72		Deloche, Lygeros, Rozier, Primo
c73		Lifchitz, Underwood, Primo
CD		Dubner, Caldwell, Cruncher
CH1		Soule, Minovic, CHG, Primo, OpenPFGW
CH2		Wu <sub>T</sub> , <i>CHG, Primo, OpenPFGW</i>
CH3		Water, Broadhurst, CHG, Primo, OpenPFGW
CH4		Irvine, Water, Broadhurst, CHG, Primo, OpenPFGW
CH6		Steward, CHG, Primo, OpenPFGW
CH7		Broadhurst, CHG, OpenPFGW
D		Dubner, Cruncher
DK		Dubner, Keller, Cruncher
DS		Smith <sub>Darren</sub> , <i>Proth.exe</i>
FE1		Morain, FastECPP
FE5		Luhn, Morain, FastECPP
FE8		Oakes, Morain, Water, Broadhurst, FastECPP
FE9		Morain, Water, Broadhurst, FastECPP
g0		Gallot, <i>Proth.exe</i>
G1		Armengaud, GIMPS, Prime95
g1		Caldwell, <i>Proth.exe</i>
G2		Spence, GIMPS, Prime95
G3		Clarkson, <u>Kurowski, GIMPS, Prime95</u>

code	description
G4	Hajratwala, Kurowski, GIMPS, Prime95
G5	Cameron, Kurowski, GIMPS, Prime95
G6	Shafer, GIMPS, Prime95
G7	Findley <sub>J</sub> , <i>GIMPS, Prime95</i>
G8	Nowak, GIMPS, Prime95
G9	Boone, Cooper, GIMPS, Prime95
G10	Smith <sub>E</sub> , <i>GIMPS, Prime95</i>
G11	Elvenich, GIMPS, Prime95
G12	Strindmo, GIMPS, Prime95
G13	Cooper, GIMPS, Prime95
g23	Ballinger, Proth.exe
g25	OHare, Proth.exe
g55	Toplic, Proth.exe
g122	Nohara, Proth.exe
g124	Crickman, Proth.exe
g157	Loeh, Proth.exe
g182	McElhatton, Proth.exe
g196	Odermatt, Proth.exe
g236	Heuer, GFNSearch, GFN17Sieve, Proth.exe
g245	Cosgrave, PRP, NewPGen, Proth.exe
g259	Papp, Proth.exe
g260	AYENI, Proth.exe
g267	Grobstich, PRP, NewPGen, Proth.exe
g277	Eaton, PRP, NewPGen, Proth.exe
g279	Cooper, PRP, NewPGen, Proth.exe
g294	Underbakke, TwinGen, PRP, Proth.exe
g300	Zilmer, Proth.exe
g308	Angel, GFNSearch, GFN17Sieve, Proth.exe
g336	Tornberg, PRP, NewPGen, Proth.exe
g403	Yoshimura, ProthSieve, LLR, PrimeSierpinski, Proth.exe
g404	Taniguchi, Proth.exe
g407	HermleGC, MultiSieve, PRP, Proth.exe
g411	Brittenham, PRP, NewPGen, Proth.exe
g413	Scott, AthGFNSieve, Proth.exe
g414	Gilvey, Srsieve, LLR, PrimeGrid, PrimeSierpinski, Proth.exe
g418	Taura, PRP, NewPGen, Proth.exe
g424	Broadhurst, OpenPFGW, NewPGen, Proth.exe
g425	Buechel, Keller, Broadhurst, PRP, OpenPFGW, Proth.exe
g426	Nemeth, OpenPFGW, NewPGen, Proth.exe
g428	Peets, OpenPFGW, NewPGen, Proth.exe
g429	Underbakke, GenefX64, AthGFNSieve, PrimeGrid, Proth.exe
gm	Morii, Proth.exe
K	Keller
L51	Hedges, PRP, NewPGen, LLR
L53	Zaveri, ProthSieve, PRP, RieselSieve, LLR
L95	Urushi, LLR
L99	Underbakke, TwinGen, LLR
L100	Minovic, TwinGen, LLR
L113	Chatfield, NewPGen, LLR
L124	Rodenkirch, MultiSieve, LLR



	<u>code</u>	<u>description</u>
L129		Snyder, LLR
L137		Jaworski, Rieselprime, LLR
L153		Eckhard, LLR
L158		Underwood, NewPGen, 321search, LLR
L160		Wong, ProthSieve, RieselSieve, LLR
L162		Banka, NewPGen, 12121search, LLR
L165		Keiser, OpenPFGW, NewPGen, LLR
L167		Curtis, NewPGen, Rieselprime, LLR
L172		Smith, ProthSieve, RieselSieve, LLR
L175		Duggan, ProthSieve, RieselSieve, LLR
L179		White, ProthSieve, RieselSieve, LLR
L185		Hassler, NewPGen, LLR
L191		Banka, NewPGen, LLR
L192		Jaworski, LLR
L193		Rosink, ProthSieve, RieselSieve, LLR
L197		DaltonJ, ProthSieve, RieselSieve, LLR
L201		Siemelink, LLR
L202		Vautier, McKibbon, Gribenko, NewPGen, PrimeGrid, TPS, LLR
L251		Burt, NewPGen, Rieselprime, LLR
L256		Underwood, Srsieve, NewPGen, 321search, LLR
L259		Schwieger, NewPGen, PrimeGrid, TPS, LLR
L260		Soule, Srsieve, Rieselprime, LLR
L268		Metcalfe, Srsieve, Rieselprime, LLR
L282		Curtis, Srsieve, Rieselprime, LLR
L321		Broadhurst, OpenPFGW, NewPGen, LLR
L346		Moreno <sub>A</sub> , <i>NewPGen, PrimeGrid, TPS, LLR</i>
L376		DUrso, NewPGen, PrimeGrid, TPS, LLR
L381		Mate, Siemelink, Rodenkirch, MultiSieve, LLR
L384		Pinho, Srsieve, Rieselprime, LLR
L426		Jaworski, Srsieve, Rieselprime, LLR
L436		Andersen2, Gcwsieve, MultiSieve, PrimeGrid, LLR
L446		Saridis, NewPGen, Proth.exe, LLR
L447		Kohlman, Gcwsieve, MultiSieve, PrimeGrid, LLR
L466		Zhou, NewPGen, LLR
L503		Benson, Srsieve, LLR
L521		Thompson1, Gcwsieve, MultiSieve, PrimeGrid, LLR
L527		Tornberg, TwinGen, LLR
L545		AndersonM, NewPGen, Rieselprime, LLR
L587		Dettweiler, Srsieve, CRUS, LLR
L591		Penne, Srsieve, CRUS, LLR
L606		Bennett, Srsieve, NewPGen, PrimeGrid, 321search, LLR
L613		Keogh, Srsieve, ProthSieve, RieselSieve, LLR
L622		Cardall, Srsieve, ProthSieve, RieselSieve, LLR
L635		Vogel, Srsieve, PrimeGrid, LLR
L645		Luhn, LLR
L651		Courty, Srsieve, PrimeGrid, LLR
L656		Yama, Srsieve, PrimeGrid, LLR
L668		Ueda, Srsieve, PrimeGrid, LLR
L669		Harvey, Srsieve, PrimeGrid, LLR
L679		Foody, Srsieve, PrimeGrid, LLR

	<u>code</u>	<u>description</u>
L689	Brown1,	Srsieve, PrimeGrid, LLR
L690	Cholt,	Srsieve, PrimeGrid, LLR
L732	Embling,	Srsieve, PrimeGrid, LLR
L753	Wolfram,	Srsieve, PrimeGrid, LLR
L764	Ewing,	Srsieve, PrimeGrid, LLR
L780	Brady,	Srsieve, PrimeGrid, LLR
L801	Gesker,	Gcwsieve, MultiSieve, PrimeGrid, LLR
L895	Dinkel,	Srsieve, LLR
L917	Bergman1,	Gcwsieve, MultiSieve, PrimeGrid, LLR
L923	Kaiser1,	Klahn, NewPGen, PrimeGrid, TPS, SunGard, LLR
L934	Desmond,	TwinGen, PrimeGrid, LLR
L967	Courty,	TwinGen, PrimeGrid, LLR
L983	Wu <sub>T</sub> ,	<i>LLR</i>
L1008	Fries,	TwinGen, PrimeGrid, LLR
L1016	Hartel,	Srsieve, PrimeGrid, LLR
L1065	Gockel,	Srsieve, PrimeGrid, LLR
L1125	Laluk,	PSieve, Srsieve, PrimeGrid, LLR
L1129	Slomma,	PSieve, Srsieve, PrimeGrid, LLR
L1139	Harvey1,	PSieve, Srsieve, PrimeGrid, LLR
L1183	Gaster,	TwinGen, PrimeGrid, LLR
L1204	Brown1,	PSieve, Srsieve, PrimeGrid, LLR
L1209	Wong,	PSieve, Srsieve, PrimeGrid, LLR
L1223	Courty,	PSieve, Srsieve, PrimeGrid, LLR
L1224	Domanov1,	PSieve, Srsieve, PrimeGrid, LLR
L1230	Yooil1,	PSieve, Srsieve, PrimeGrid, LLR
L1286	Scullin,	TwinGen, PrimeGrid, LLR
L1300	Yama,	PSieve, Srsieve, PrimeGrid, LLR
L1349	Wallace,	Srsieve, NewPGen, PrimeGrid, LLR
L1353	Mumper,	Srsieve, PrimeGrid, LLR
L1356	Gockel,	PSieve, Srsieve, PrimeGrid, LLR
L1360	Tatterson,	PSieve, Srsieve, PrimeGrid, LLR
L1403	Andrews1,	PSieve, Srsieve, PrimeGrid, LLR
L1413	Morton,	PSieve, Srsieve, PrimeGrid, LLR
L1422	Steichen,	PSieve, Srsieve, PrimeGrid, LLR
L1446	Harvey,	PSieve, Srsieve, PrimeGrid, LLR
L1460	Salah,	Srsieve, PrimeGrid, PrimeSierpinski, LLR
L1471	Gunn,	Srsieve, CRUS, LLR
L1480	Goudie,	PSieve, Srsieve, PrimeGrid, LLR
L1498	Goral,	PSieve, Srsieve, PrimeGrid, LLR
L1502	Champ,	PSieve, Srsieve, PrimeGrid, LLR
L1576	Craig,	PSieve, Srsieve, PrimeGrid, LLR
L1595	Cilliers,	PSieve, Srsieve, PrimeGrid, LLR
L1633	Gott,	TwinGen, PrimeGrid, LLR
L1661	Mitchell1,	TwinGen, PrimeGrid, LLR
L1675	Schwieger,	PSieve, Srsieve, PrimeGrid, LLR
L1706	Brand,	TwinGen, PrimeGrid, LLR
L1728	Gasewicz,	PSieve, Srsieve, PrimeGrid, LLR
L1741	Granowski,	PSieve, Srsieve, PrimeGrid, LLR
L1751	Eckhard,	Srsieve, PrimeGrid, LLR
L1780	Ming,	PSieve, Srsieve, PrimeGrid, LLR

	<u>code</u>	<u>description</u>
L1792	Tang,	PSieve, Srsieve, PrimeGrid, LLR
L1823	Larsson,	PSieve, Srsieve, PrimeGrid, LLR
L1828	Benson,	PSieve, Srsieve, Rieselprime, LLR
L1847	Liu1,	PSieve, Srsieve, PrimeGrid, LLR
L1862	Curtis,	PSieve, Srsieve, Rieselprime, LLR
L1884	Jaworski,	PSieve, Srsieve, Rieselprime, LLR
L1921	Winslow,	TwinGen, PrimeGrid, LLR
L1935	Channing,	PSieve, Srsieve, PrimeGrid, LLR
L1945	Clark2,	TwinGen, PrimeGrid, LLR
L1949	Pritchard,	Srsieve, PrimeGrid, RieselSieve, LLR
L1958	DUrso,	Srsieve, OpenPFGW, NewPGen, LLR
L1959	Metcalfe,	PSieve, Srsieve, Rieselprime, LLR
L2046	Melvold,	Srsieve, PrimeGrid, LLR
L2054	Kaiser1,	Srsieve, CRUS, LLR
L2055	Soule,	PSieve, Srsieve, Rieselprime, LLR
L2074	Minovic,	PSieve, Srsieve, Rieselprime, LLR
L2078	Dahlman,	TwinGen, PrimeGrid, LLR
L2085	Dodson1,	PSieve, Srsieve, PrimeGrid, LLR
L2100	Christensen,	PSieve, Srsieve, PrimeGrid, LLR
L2103	Schmidt1,	PSieve, Srsieve, PrimeGrid, LLR
L2117	Karlsteen,	PSieve, Srsieve, PrimeGrid, LLR
L2121	VanRangelrooij,	PSieve, Srsieve, PrimeGrid, LLR
L2122	Megele,	PSieve, Srsieve, PrimeGrid, LLR
L2125	Greer,	PSieve, Srsieve, PrimeGrid, LLR
L2126	Senftleben,	PSieve, Srsieve, PrimeGrid, LLR
L2137	Hayashi1,	PSieve, Srsieve, PrimeGrid, LLR
L2163	VanRooijen1,	PSieve, Srsieve, PrimeGrid, LLR
L2233	Herder,	Srsieve, PrimeGrid, LLR
L2269	Schori,	Srsieve, PrimeGrid, LLR
L2322	Szafranski,	PSieve, Srsieve, PrimeGrid, LLR
L2327	Oh,	PSieve, Srsieve, PrimeGrid, LLR
L2338	Burt,	PSieve, Srsieve, Rieselprime, LLR
L2371	Luszczek,	Srsieve, PrimeGrid, LLR
L2373	Tarasov1,	Srsieve, PrimeGrid, LLR
L2408	Reinman,	Srsieve, PrimeGrid, LLR
L2413	Blyth,	PSieve, Srsieve, PrimeGrid, LLR
L2425	DallOsto,	LLR
L2429	Bliedung,	TwinGen, PrimeGrid, LLR
L2432	Sutton1,	PSieve, Srsieve, Rieselprime, LLR
L2444	Batalov,	PSieve, Srsieve, Rieselprime, LLR
L2484	Ritschel,	PSieve, Srsieve, Rieselprime, LLR
L2487	Liao,	PSieve, Srsieve, PrimeGrid, LLR
L2503	Zhan1,	PSieve, Srsieve, PrimeGrid, LLR
L2507	Geis,	PSieve, Srsieve, PrimeGrid, LLR
L2518	Karevik,	PSieve, Srsieve, PrimeGrid, LLR
L2520	Mamanakis,	PSieve, Srsieve, PrimeGrid, LLR
L2526	Martinik,	PSieve, Srsieve, PrimeGrid, LLR
L2545	Nose,	PSieve, Srsieve, PrimeGrid, LLR
L2561	Vinklät,	PSieve, Srsieve, PrimeGrid, LLR
L2562	Jones3,	PSieve, Srsieve, PrimeGrid, LLR

	<u>code</u>	<u>description</u>
L2583		Nakamura, PSieve, Srsieve, PrimeGrid, LLR
L2594		Sheridan, PSieve, Srsieve, PrimeGrid, LLR
L2626		DeKlerk, PSieve, Srsieve, PrimeGrid, LLR
L2659		Reber, PSieve, Srsieve, PrimeGrid, LLR
L2664		Koluvare, PSieve, Srsieve, PrimeGrid, LLR
L2675		Ling, PSieve, Srsieve, PrimeGrid, LLR
L2691		Pettersen, PSieve, Srsieve, PrimeGrid, LLR
L2719		Yost, PSieve, Srsieve, PrimeGrid, LLR
L2742		Flutttert, PSieve, Srsieve, PrimeGrid, LLR
L2777		Ritschel, Gcwsieve, TOPS, LLR
L2785		Meili, PSieve, Srsieve, PrimeGrid, LLR
L2803		Barbyshev, PSieve, Srsieve, PrimeGrid, LLR
L2823		Loureiro, PSieve, Srsieve, PrimeGrid, LLR
L2826		Jeudy, PSieve, Srsieve, PrimeGrid, LLR
L2840		Santana, PSieve, Srsieve, PrimeGrid, LLR
L2841		Minovic, Gcwsieve, MultiSieve, TOPS, LLR
L2842		English1, PSieve, Srsieve, PrimeGrid, LLR
L2959		Derrera, PSieve, Srsieve, PrimeGrid, LLR
L2967		Ryjkov, PSieve, Srsieve, PrimeGrid, LLR
L2973		Kurtovic, Srsieve, PrimeGrid, LLR
L2975		Loureiro, GeneferCUDA, AthGFNSieve, PrimeGrid, LLR
L3023		Winslow, PSieve, Srsieve, PrimeGrid, 12121search, LLR
L3033		Snow, PSieve, Srsieve, PrimeGrid, 12121search, LLR
L3035		Scalise, PSieve, Srsieve, PrimeGrid, LLR
L3054		Winslow, Srsieve, PrimeGrid, LLR
L3105		Eldredge, PSieve, Srsieve, PrimeGrid, LLR
L3118		Yama, GeneferCUDA, AthGFNSieve, PrimeGrid, LLR
L3121		Kwok, NewPGen, TPS, LLR
L3125		Rizman, PSieve, Srsieve, PrimeGrid, LLR
L3141		Kus, PSieve, Srsieve, PrimeGrid, LLR
L3154		Hentrich, PSieve, Srsieve, PrimeGrid, LLR
L3168		Schwegler, PSieve, Srsieve, PrimeGrid, LLR
L3174		Boniecki, PSieve, Srsieve, PrimeGrid, LLR
L3183		Haller, Srsieve, PrimeGrid, LLR
L3184		Hayslette, GeneferCUDA, AthGFNSieve, PrimeGrid, LLR
L3209		McArdle, GenefX64, AthGFNSieve, PrimeGrid, LLR
L3222		Yamamoto, PSieve, Srsieve, PrimeGrid, LLR
L3230		Kumagai, GeneferCUDA, AthGFNSieve, PrimeGrid, LLR
L3249		Lind, PSieve, Srsieve, PrimeGrid, LLR
L3260		Stanko, PSieve, Srsieve, PrimeGrid, LLR
L3262		Molder, PSieve, Srsieve, PrimeGrid, LLR
L3269		Ritschel, Gcwsieve, GenWoodall, LLR
L3276		Jeka, PSieve, Srsieve, PrimeGrid, LLR
L3278		Fischer1, PSieve, Srsieve, PrimeGrid, LLR
L3290		Bednar1, PSieve, Srsieve, PrimeGrid, LLR
L3294		Bartlett, PSieve, Srsieve, PrimeGrid, LLR
L3313		Yost, Srsieve, PrimeGrid, SierpinskiRiesel, LLR
L3323		Ritschel, NewPGen, TOPS, LLR
L3325		Elvy, PSieve, Srsieve, PrimeGrid, LLR
L3345		Domanov1, PSieve, <u>Rieselprime</u> , LLR

	<u>code</u>	<u>description</u>
L3354	Willig, Srsieve, PrimeGrid, SierpinskiRiesel, LLR	
L3378	Glasgow, PSieve, Srsieve, PrimeGrid, LLR	
L3422	Micom, PSieve, Srsieve, PrimeGrid, LLR	
L3430	Durstewitz, PSieve, Srsieve, PrimeGrid, LLR	
L3432	Batalov, Srsieve, LLR	
L3440	Pelikan, PSieve, Srsieve, PrimeGrid, LLR	
L3446	Marshall3, PSieve, Srsieve, PrimeGrid, LLR	
L3453	Benes, PSieve, Srsieve, PrimeGrid, LLR	
L3459	Boruvka, PSieve, Srsieve, PrimeGrid, LLR	
L3464	Ferrell, PSieve, Srsieve, PrimeGrid, LLR	
L3487	Ziemann, PSieve, Srsieve, PrimeGrid, LLR	
L3494	Batalov, NewPGen, LLR	
L3512	Tsuji, PSieve, Srsieve, PrimeGrid, LLR	
L3514	Bishop1, PSieve, Srsieve, OpenPFGW, PrimeGrid, LLR	
L3518	Papendick, PSieve, Srsieve, PrimeGrid, LLR	
L3519	Kurtovic, PSieve, Srsieve, Rieselprime, LLR	
L3523	Brown1, Srsieve, PrimeGrid, SierpinskiRiesel, LLR	
L3528	Batalov, Srsieve, PrimeGrid, SierpinskiRiesel, LLR	
L3532	Batalov, Gcwsieve, LLR	
L3538	Beard1, PSieve, Srsieve, PrimeGrid, LLR	
L3539	Jacobs, PSieve, Srsieve, PrimeGrid, LLR	
L3543	Yama, PrimeGrid, LLR	
L3544	Minovic, Gcwsieve, GenWoodall, LLR	
L3547	Ready, Srsieve, PrimeGrid, LLR	
L3548	Ready, PSieve, Srsieve, PrimeGrid, LLR	
L3549	Hirai, Srsieve, PrimeGrid, LLR	
L3552	Benson2, Srsieve, PrimeGrid, LLR	
L3553	Cilliers, Srsieve, PrimeGrid, LLR	
L3555	Cervelle, PSieve, Srsieve, PrimeGrid, LLR	
L3562	Schouten, Srsieve, PrimeGrid, LLR	
L3564	Jaworski, Srsieve, CRUS, LLR	
L3566	Slakans, Srsieve, PrimeGrid, LLR	
L3567	Meili, Srsieve, PrimeGrid, LLR	
L3580	Nelson1, PSieve, Srsieve, PrimeGrid, LLR	
L3588	Matousek, PSieve, Srsieve, PrimeGrid, LLR	
L3601	Jablonski1, PSieve, Srsieve, PrimeGrid, LLR	
L3625	Haymoz, PSieve, Srsieve, PrimeGrid, LLR	
L3659	Volynsky, Srsieve, PrimeGrid, LLR	
L3665	Kelava1, PSieve, Srsieve, Rieselprime, LLR	
L3668	Prokopchuk, PSieve, Srsieve, PrimeGrid, LLR	
L3686	Yost, Srsieve, PrimeGrid, LLR	
L3696	Linderson, PSieve, Srsieve, PrimeGrid, LLR	
L3700	Kim4, PSieve, Srsieve, PrimeGrid, LLR	
L3720	Ohno, Srsieve, PrimeGrid, LLR	
L3728	Rietveld, PSieve, Srsieve, PrimeGrid, LLR	
L3735	Kurtovic, Srsieve, LLR	
L3744	Green1, PSieve, Srsieve, PrimeGrid, LLR	
L3749	Meador, Srsieve, PrimeGrid, LLR	
L3760	Okazaki, PSieve, Srsieve, PrimeGrid, LLR	
L3764	Diepeveen, PSieve, Srsieve, Rieselprime, LLR	

	<u>code</u>	<u>description</u>
L3767	Huang1,	PSieve, Srsieve, PrimeGrid, LLR
L3770	Tang,	Srsieve, PrimeGrid, LLR
L3772	Ottusch,	Srsieve, PrimeGrid, LLR
L3784	Cavanaugh,	PSieve, Srsieve, PrimeGrid, LLR
L3785	Reichel,	PSieve, Srsieve, PrimeGrid, LLR
L3787	Palumbo,	PSieve, Srsieve, PrimeGrid, LLR
L3789	Toda,	Srsieve, PrimeGrid, LLR
L3790	Tamagawa,	PSieve, Srsieve, PrimeGrid, LLR
L3797	Schmidt3,	PSieve, Srsieve, PrimeGrid, LLR
L3800	Amschl,	PSieve, Srsieve, PrimeGrid, LLR
L3802	Aggarwal,	Srsieve, LLR
L3803	Bredl,	PSieve, Srsieve, PrimeGrid, LLR
L3838	Boyden,	PSieve, Srsieve, PrimeGrid, LLR
L3839	Batalov,	EMSieve, LLR
L3843	Whiteley,	PSieve, Srsieve, PrimeGrid, LLR
L3849	Smith10,	Srsieve, PrimeGrid, SierpinskiRiesel, LLR
L3855	Lunner,	PSieve, Srsieve, PrimeGrid, LLR
L3857	Hudec,	PSieve, Srsieve, PrimeGrid, LLR
L3859	Clifton,	PSieve, Srsieve, PrimeGrid, LLR
L3860	Cimrman,	PSieve, Srsieve, PrimeGrid, LLR
L3861	Roemer,	PSieve, Srsieve, PrimeGrid, LLR
L3862	Gudenschwager,	PSieve, Srsieve, PrimeGrid, LLR
L3863	WaldenForrest,	PSieve, Srsieve, PrimeGrid, LLR
L3864	Piantoni,	PSieve, Srsieve, PrimeGrid, LLR
L3865	Silva,	PSieve, Srsieve, PrimeGrid, LLR
L3867	Traebert,	PSieve, Srsieve, PrimeGrid, LLR
L3868	Miller3,	PSieve, Srsieve, PrimeGrid, LLR
L3869	Cholt,	Srsieve, PrimeGrid, SierpinskiRiesel, LLR
L3873	Sala,	PSieve, Srsieve, PrimeGrid, LLR
L3876	Apreutesei,	PSieve, Srsieve, PrimeGrid, LLR
L3890	Beeson,	PSieve, Srsieve, PrimeGrid, LLR
L3895	Englehard1,	PSieve, Srsieve, PrimeGrid, LLR
M	Morain	
MM	Morii	
O	Oakes	
p3	Dohmen,	OpenPFGW
p8	Caldwell,	OpenPFGW
p12	Water,	OpenPFGW
p16	Heuer,	OpenPFGW
p21	Anderson, Robinson,	OpenPFGW
p35	Augustin,	NewPGen, OpenPFGW
p44	Broadhurst,	OpenPFGW
p54	Water,	Broadhurst, OpenPFGW
p58	Glover,	Oakes, OpenPFGW
p65	DavisK,	Kuosa, OpenPFGW
p85	Marchal,	Carmody, Kuosa, OpenPFGW
p102	Underwood,	Frind, OpenPFGW
p114	Samidoost,	FermFact, PRP, OpenPFGW
p133	Sun,	NewPGen, OpenPFGW
p148	Yama, Noda, Nohara,	PRP, NewPGen, MatGFN, OpenPFGW

	<u>code</u>	<u>description</u>
p155	DavisK, NewPGen,	OpenPFGW
p158	Paridon, NewPGen,	OpenPFGW
p166	Yamada, Noda, Nohara, PRP, NewPGen,	MatGFN, OpenPFGW
p169	Eaton, PRP, NewPGen,	OpenPFGW
p170	Wu <sub>T</sub> , <i>Primo</i> ,	<i>OpenPFGW</i>
p179	DavisK, APTreeSieve,	OpenPFGW
p189	Bohanon, LLR,	OpenPFGW
p193	Irvine, Broadhurst, Primo,	OpenPFGW
p199	Broadhurst, NewPGen,	OpenPFGW
p227	Harvey, Srsieve, PRP,	OpenPFGW
p235	Bedwell,	OpenPFGW
p236	Cooper, PRP, NewPGen,	OpenPFGW
p252	Oakes, NewPGen,	OpenPFGW
p254	Vogel, Srsieve, CRUS,	OpenPFGW
p258	Batalov, Srsieve, CRUS,	OpenPFGW
p259	Underbakke, GenefX64, AthGFNSieve,	OpenPFGW
p260	Harvey, Gcwsieve, MultiSieve, GenWoodall,	OpenPFGW
p262	Vogel, Gcwsieve, MultiSieve, PrimeGrid,	OpenPFGW
p271	Dettweiler, Srsieve, CRUS,	OpenPFGW
p286	Batalov, Srsieve,	OpenPFGW
p290	Domanov1, Fpsieve, PrimeGrid,	OpenPFGW
p292	Dausch, Srsieve, SierpinskiRiesel,	OpenPFGW
p294	Domanov1, Srsieve, Prime95, Rieselprime,	OpenPFGW
p295	Angel, NewPGen,	OpenPFGW
p296	Kaiser1, Srsieve, LLR,	OpenPFGW
p297	Broadhurst, Srsieve, LLR, NewPGen,	OpenPFGW
p300	Gramolin, NewPGen,	OpenPFGW
p301	Winskill1, Fpsieve, PrimeGrid,	OpenPFGW
p302	Gasewicz, Fpsieve, PrimeGrid,	OpenPFGW
p308	DavisK, Underwood, NewPGen, PrimeForm <sub>e</sub> group,	<i>OpenPFGW</i>
p309	Yama, GenefX64, AthGFNSieve, PrimeGrid,	OpenPFGW
p310	Hubbard, Gcwsieve, MultiSieve, PrimeGrid,	OpenPFGW
p311	DUrso, NewPGen,	OpenPFGW
p312	Doggart, Fpsieve, PrimeGrid,	OpenPFGW
p314	Hubbard, GenefX64, AthGFNSieve, PrimeGrid,	OpenPFGW
p325	Broadhurst, Gcwsieve, MultiSieve,	OpenPFGW
p332	Johnson6, GeneferCUDA, AthGFNSieve, PrimeGrid,	OpenPFGW
p334	Goetz, GeneferCUDA, AthGFNSieve, PrimeGrid,	OpenPFGW
p338	Tomecko, GeneferCUDA, AthGFNSieve, PrimeGrid,	OpenPFGW
p342	Trice,	OpenPFGW
p346	Burt, Fpsieve, PrimeGrid,	OpenPFGW
p349	Kaiser1, NewPGen,	OpenPFGW
p350	Koen, Gcwsieve, GenWoodall,	OpenPFGW
p354	Koen, Gcwsieve,	OpenPFGW
p355	Domanov1, Srsieve, CRUS,	OpenPFGW
p356	Rajala, Srsieve, NewPGen,	OpenPFGW
p357	Gruenewald, Gcwsieve, GenWoodall,	OpenPFGW
p358	Rajala, Srsieve, Proth.exe,	OpenPFGW
p360	Kinne, Exoo,	OpenPFGW
p362	Snow, Fpsieve, PrimeGrid,	OpenPFGW

	<u>code</u>	<u>description</u>
p363		Batalov, OpenPFGW
p364		Batalov, NewPGen, OpenPFGW
p366		Demeyer, Siemelink, Srsieve, CRUS, OpenPFGW
p371		Keiser, OpenPFGW
p373		Morelli, OpenPFGW
p374		Lasher, Ksieve, TOPS, OpenPFGW
p375		Gevay, Vatai, Farkas, Jarai, OpenPFGW
PM		Mihailescu
S		Slowinski
SB10		Agafonov, SoBSieve, ProthSieve, Ksieve, Proth.exe, SB, PRP
SB11		Sunde, SoBSieve, ProthSieve, Ksieve, Proth.exe, SB, PRP
SB6		Sundquist, SoBSieve, ProthSieve, Ksieve, Proth.exe, SB, PRP
SB7		Team $_{primeRib}$ , SoBSieve, ProthSieve, Ksieve, SB, PRP
SB8		Gordon, SoBSieve, ProthSieve, Ksieve, Proth.exe, SB, PRP
SB9		Hassler, SoBSieve, ProthSieve, Ksieve, Proth.exe, SB, PRP
SG		Slowinski, Gage
WC		Colquitt, Welsh
WD		Dubner, Williams, Cruncher
WM		Morain, Williams
x13		Renze
x14		Steward, Primo, OpenPFGW
x16		Doumen, Beelen
x20		Irvine, Water, Broadhurst
x23		Water, Renze, Broadhurst, Primo, OpenPFGW
x24		Jarai $_Z$ , Farkas, Csajbok, Kasza, Jarai
x25		Water, Broadhurst, Primo, OpenPFGW
x28		Iskra
x29		Broadhurst, OpenPFGW
x33		Carmody, Water, Renze, Broadhurst, Primo, OpenPFGW
x34		Caldwell, Broadhurst, OpenPFGW
x36		Irvine, Carmody, Water, Renze, Broadhurst, Primo, OpenPFGW
x38		Broadhurst, Primo, OpenPFGW
x39		Dubner, Keller, Broadhurst, Primo, OpenPFGW
Y		Young