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No “Most Wanted” or “More Wanted” numbers from the wanted lists issued with Page 146 were factored on Page 147.

Two “Smaller-but-Needed” numbers from the wanted lists issued with Page 146 were factored on Page 147. NFS@Home factored 7,419– and 2,2874M by the General Number Field Sieve.

New wanted lists are enclosed. The “Wanted” numbers are unchanged, but there are new “Needed” numbers.

ECMNET means Paul Zimmermann, Alex Kruppa, Torbjörn Granlund, Michel Quercia, Witold Grabysz, Vilmar Trevisan and many helpers who use the GMP-ECM program of Kruppa and Zimmermann. NFS@Home is a group led by Greg Childers.

There were no new champions for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. A list of recent champions is enclosed.

No first or third hole was factored on Page 147. The second holes factored on Page 147 are in # 6822, # 6823 and # 6830. The only fourth hole was factored on Page 147 is in # 6818. The fifth holes factored on Page 147 are in # 6837 and # 6840.

The smallest new factor reported on Page 147 has 62 digits. See # 6826. The largest number factored on Page 147 has 402 digits. See # 6813.

See the URL <http://www.prothsearch.com/fermat.html> for a list of all known Fermat factors.

One new Mersenne prime was found since the last page. It was found by Luke Durant on October 20, 2024 and has 41024320 decimal digits. The current largest known prime is $2^{136279841} - 1$. See the URL <http://t5k.org/primes/> for the database of the largest known primes.

See the URL <http://homes.cerias.purdue.edu/~ssw/cun/index.html> for the online Cunningham book.

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff