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January 30, 2018

Five “Most Wanted” numbers from the wanted lists issued with Page 133 were factored on Page 134. NFS@Home factored 5,431−, 5,431+, 6,391−, 6,391+ and 7,356+, all by the Special Number Field Sieve.

Three “More Wanted” numbers from the wanted lists issued with Page 133 were factored on Page 134. NFS@Home factored 5,436+, 5,439+, and 6,394+, all by the SNFS. Note: NFS@Home also factored the “More Wanted” number 7,359+, the first number on Page 135.

Two “Smaller-but-Needed” numbers from the wanted lists issued with Page 133 were factored on Page 134, all by the SNFS. Ryan Propper factored 2,2562L and 3,671−.

New wanted lists are enclosed.

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.

The first holes factored on Page 134 are in # 6426, # 6427, # 6428, # 6429, # 6430, # 6433, # 6446, # 6447, # 6450, and # 6451. The only second hole factored on Page 134 is in # 6437. The only third hole factored on Page 134 is in # 6434. The fourth holes factored on Page 134 are in # 6436, # 6438, # 6444, and # 6445. The fifth holes factored on Page 134 are in # 6448, # 6449,

The smallest new factor reported on Page 134 has 60 digits. See # 6431. The largest number factored on Page 134 has 322 digits. See # 6445.

See the URL <http://www.prothsearch.net/fermat.html> for a list of all known Fermat factors. Several new factors were found since the last page.

One new Mersenne prime was found since the last page. The new largest known prime is $2^{77232917} - 1$. See the URL <http://primes.utm.edu/primes/> for Chris Caldwell’s database of the largest known primes (updated hourly).

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