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Many “Wanted” numbers were factored on Page 78. From the old lists mailed with Page 76, the group NFSNET factored the “Most Wanted” numbers 2,571–, 5,239+, 12,149– and the “More Wanted” numbers 2,581–, 6,224+, 12,151+, all with the Number Field Sieve. The group CWI factored the “More Wanted” numbers 2,1042M, 2,1058L and 2,1066M, all with NFS. An anonymous factorer who calls himself “Marin Mersenne” factored the “Most Wanted” number 7,193+ and the “More Wanted” number 5,254+.

New wanted lists were issued with Update 2.B last month. From these new lists, NFSNET factored the “Most Wanted” number 5,247– by NFS, Paul Zimmermann factored the “Most Wanted” number 2,599– by the Elliptic Curve Method, and the group ECMNET factored the “More Wanted” number 3,353+ by ECM.

On Page 78, Tables 5– and 12– joined Tables 3–, $6\pm$, 7–, $11\pm$ and 12+ in being completed up to the second edition limit.

There was one new champion for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. P. Zimmermann found a 45-digit factor of 2,599–, setting a new record (second largest) for factoring a Cunningham number by ECM. The 75-digit penultimate factor of 2,1058L found by CWI is almost as large as the 75-digit penultimate factor of 12,167+. A list of recent champions and the first holes in each table is given on another sheet.

CWI means Henk Boender, Stefania Cavallar, Marije Elkenbracht-Huizing, Walter Lioen, Peter Montgomery, Herman te Riele and Dik Winter at the Centrum voor Wiskunde en Informatica in Amsterdam. NFSNET is a group which uses NFS and includes Bob Silverman, Peter Montgomery, Marije Elkenbracht-Huizing, Stefania Cavallar, Richard Wackerbarth, me and many volunteer sievers. ECMNET means Paul Zimmermann, Torbjörn Granlund, Michel Quercia, Witold Grabysz, Vilmar Trevisan and many helpers who use Granlund’s GMP-ECM program.

The first holes done on Page 78 are in # 4117, # 4127, # 4137, # 4141, # 4147, # 4148, # 4151, # 4152, # 4154, # 4157, # 4162 and # 4163. The second holes done on Page 78 are in # 4125, # 4134, # 4138, # 4143, # 4144, # 4164 and # 4166. The third holes done on Page 78 are in # 4113, # 4116, # 4118, # 4130, # 4140, # 4146, # 4158 and # 4165. No fourth holes were done on Page 78. The fifth holes done on Page 78 are in # 4115, # 4120, # 4155, # 4156 and # 4168.

The smallest new factor reported on Page 78 has 26 digits. See # 4136. The largest number factored on Page 78 has 280 digits. See # 4139.

Since Page 77 appeared last December, R. Clarkson, G. Woltman, S. Kurowski, et al. of GIMPS discovered the Mersenne prime $M_{3021377}$, already reported in Update 2.B.

If your address changes, please tell me.

Keep the factors coming!

Sam Wagstaff