Table 4 contains all m between $4 \cdot 10^3$ and $2 \cdot 10^4$ having a representation $4m = a^2 + 27$ or $1 + 27b^2$ or $9 + 27b^2$. In these 89 fields, $\mathrm{tr}(\epsilon)$ and $\mathrm{tr}(\epsilon^{-1})$ are never missing since they are known a priori. They equal $\pm 1/2(a \mp 3)$, $\pm 3/2(9b \mp 1)$ and $\pm 3/2(3b \mp 1)$, respectively. These units are relatively small and the class numbers, correspondingly, are relatively large. The largest is $h = 129$ for $m = 97 \cdot 181 = (1 + 27 \cdot 51^2)/4$.

These tables of cyclic cubic fields go far beyond earlier tables of Hasse, Cohn and Gorn, and Godwin. For the "simplest cubics", having $4m = a^2 + 27$, the reviewer has gone further [4] using an entirely different method.

D. S.

1. MARIE NICOLE GRAS, "Méthodes et algorithmes pour le calcul numérique du nombre de classes et des unités des extensions cubiques cycliques de Q," *Crelle's J.* (To appear.)

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3. MARIE-NICOLE MONTOUCHET, "Sur le nombre de classes du sous-corps cubique de $Q^{(p)}$ ($p \equiv 1(3)$)," Thèse, Grenoble, 1971.

4. DANIEL SHANKS, "The simplest cubic fields," *Math. Comp.*, v. 28, 1974, pp. 1137–1152.

7 [9].–WELLS JOHNSON, *The Irregular Primes to* 30000 *and Related Tables*, ms. of 28 computer pages (+ 1 introductory page), deposited in the UMT file, June 1974.

This unpublished table constitutes an appendix to a paper published elsewhere in this issue. The 13-column table presents the complete list of 1619 irregular pairs $(p, 2k)$ with $p < 30000$ together with some computations which depend upon this list. The table shows that Fermat's Last Theorem is true for all prime exponents $p <$ 30000. In addition, the tables of [1], [2], [3] are completed to 30000, so that the cyclotomic invariants of Iwasawa are completely determined for primes within this range. The computations were performed on the PDP-10 computer at Bowdoin College.

AUTHOR'S SUMMARY

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