$k = 3$ (called "crowds" in England) but Borho's analytical work may assist in settling this.

It is stated here that no amicable pair is known that does not terminate an aliquot chain. A priori, the reviewer sees no compelling reason to doubt the existence of one since, analogously, the perfect number 28 does not terminate a chain.

D. S.

1. ELVIN J. LEE, *The Discovery of Amicable Numbers*, *Math. Comp.*, v. 24, 1970, pp. 493–494, RMT **40.**

37[9].—RUDOLF ONDREJKA, *Mersenne Primes and Perfect Numbers*, ms. of 91 computer sheets (undated) deposited in the UMT file.

Herein are listed in decimal, octal, and binary form, respectively, the exact values of the first 23 Mersenne primes and the corresponding perfect numbers. Also presented are such relevant statistics as the number of decimal digits in each number, the corresponding digital sum, the frequency distribution of these digits and the associated cumulative frequency distribution.

The author includes explicit expressions of the perfect numbers as sums of cubes of successive odd numbers, sums of successive powers of 2, and sums of arithmetic progressions.

Appropriate entries in these tables were compared by the author with corresponding results of Uhler [1]. Also, the eighteenth Mersenne prime was checked against the value of Riesel [2], and the last three Mersenne primes listed here were checked against the corresponding results of Gillies [3].

Furthermore, this reviewer has successfully compared the statistics herein with corresponding data found by Lal [4].

It seems appropriate to note here that an additional Mersenne prime has been recently announced by Tuckerman [5].

J. W. W.

1. H. S. UHLER, "Full values of the first seventeen perfect numbers," *Scripta Math.*, v. 20, 1954, p. 240, where references to Professor Uhler's previous related calculations are given.
2. H. RIESEL, "A new Mersenne prime," *MTAC*, v. 12, 1958, p. 60.
3. D. B. GILLIES, *Three New Mersenne Primes and a Conjecture*, Report No. 138, Digital Computer Laboratory, University of Illinois, Urbana, Illinois, 1964.
4. M. LAL, *Decimal Expansion of Mersenne Primes*, Department of Mathematics, Memorial University of Newfoundland, St. John's, Newfoundland, 1967. (See *Math. Comp.*, v. 22, 1968, p. 232, RMT **20.**)
5. B. TUCKERMAN, "The 24th Mersenne prime," *Proc. Nat. Acad. Sci. U.S.A.*, v. 68, 1971, pp. 2319–2320.

38[9].—G. AARON PAXSON, *Table of Aliquot Sequences*, Standard Oil Co. of California, 225 Bush Street, San Francisco, California 94120, computer output, 134 sheets filed in stiff covers and deposited in the UMT file in 1966.

Let $s(n)$ be the sum of the *aliquot parts* of n, i.e. divisors of n other than n itself. According as $s(n) = n$, $< n$ or $> n$, n is *perfect*, *deficient* or *abundant*. Define $s^0(n) = n$, $s^{k+1}(n) = s(s^k(n))$, $k \geqq 0$. The author tabulates $s^k(n)$ for $k = 0, 1, 2, \cdots$, and each