

## REVIEWS AND DESCRIPTIONS OF TABLES AND BOOKS

The numbers in brackets are assigned according to the revised indexing system printed in Volume 28, Number 128, October 1974, pages 1191–1194.

1 [7].—DANIEL SHANKS & JOHN W. WRENCH, JR., *Sums of Reciprocals to 1,000,000*, 1961, ms. of 20 computer sheets deposited in the UMT file.

Herein are tabulated values of the partial sums  $\sum_1^N n^{-1}$  of the harmonic series for  $N = 10^4(10^4)10^6$ , truncated to 1060D. These were computed on an IBM 7090 system at the same time that we evaluated  $\pi$  [1] and  $e$  [2], and they were intended to be used by the second author in computing Euler's constant,  $\gamma$ , by means of the Euler-Maclaurin formula. However, Knuth [3] computed  $\gamma$  to higher precision before this was completed.

For the sake of comparison we list these sums truncated to 1000D for  $N = 10^4$ ,  $10^5$ , and  $10^6$ , respectively, with  $*(M)*$  denoting the omission of  $M$  digits:

9.7876060360 4438226417 \*(960)\* 9216446619 7618373424,  
 12.0901461298 6342794736 \*(960)\* 7602452004 8801442625,  
 14.3927267228 6572363138 \*(960)\* 3436083266 8760078693.

Our value corresponding to  $N = 10^4$  agrees in its entirety with the value found to 1275D by Knuth, which has been deposited in the UMT file along with his unpublished table of Bernoulli numbers mentioned on p. 277 of [3].

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1. DANIEL SHANKS & JOHN W. WRENCH, JR., "Calculation of  $\pi$  to 100,000 decimals," *Math. Comp.*, v. 16, 1962, pp. 76–99.
2. UMT 46, *Math. Comp.*, v. 23, 1969, pp. 679–680.
3. DONALD E. KNUTH, "Euler's constant to 1271 places," *Math. Comp.*, v. 16, 1962, pp. 275–281.

2 [9].—DAVID BALLEW, JANELLE CASE & ROBERT N. HIGGINS, *Table of  $\phi(n) = \phi(n + 1)$* , South Dakota School of Mines and Technology, 1974, ii + 3 pages, deposited in the UMT file.

There are listed here the 88 solutions of  $\phi(n) = \phi(n + 1)$  from  $n = 3$  to  $n = 2792144$ . (Previous tables have listed  $n = 1$  also; counting this, there are 89 solutions for  $n < 2.8 \cdot 10^6$ .) This extends the tables of the 36 solutions to  $n = 10^5$  by Lal and Gillard [1] and the 56 solutions to  $n = 5 \cdot 10^5$  by Miller [2]. Note that Miller is wrong in stating that the next solution is  $n = 525986$ . She has omitted  $n = 524432$ .