

Similar check calculations for  $f_2(x)$  reveal a persistent error of about 0.0024. Thus the tables of the numerical values of the integrals should be used, if at all, with caution. We have corresponded with one of the authors (D.J.B.). He has checked those entries in Tables 1 and 3 against known values of Legendre polynomials and finds that they are correct. The reason for the bias in the values of the integrals is not known, but he suspects that it arises from the binary-to-decimal conversion. We conclude with the "trite" observation that automatic computers cannot be trusted implicitly, and that the need for analysis and checking remains.

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1. A. ERDÉLYI, et al., *Higher Transcendental Functions*, Vol. 1, McGraw-Hill, New York, 1953.

8[L]. LUDO K. FREVEL & J. W. TURLEY, *Tables of Iterated Sine-Integral*, The Dow Chemical Company, Midland, Michigan, 1961. Deposited in UMT File.

Three tables of decimal values of the iterated sine-integral,  $S_i^n(x)$ , are herein presented, as computed on a Burroughs 220 system supplemented by Cardatron equipment, which permitted on-line printing of the results in the desired tabular format.

Table 1 presents the values of  $S_i^n(x)$  to 9D for  $n = 1(1)10$ ,  $x = 0(0.2)10$ . Table 2 gives values of this function to 7D for  $n = 0(0.05)10$ ,  $\pi$ ,  $2\pi$ ,  $3\pi$ , and Table 3 gives for  $n = 1(1)10$  the values to 9D of the first thirty extrema, which correspond to  $x = m\pi$ , where  $m = 1(1)30$ .

In an accompanying text of three pages the authors describe in detail the method of calculation and the underlying mathematical formulas. It is there stated that the entries in Table 2 were computed to 9D prior to rounding. The entries in Table 3 are claimed to be accurate to within a unit in the final decimal place, and the authors imply in their explanatory text that comparable accuracy was attained in the computation of the entries in Table 1.

The tabular data corresponding to the values of  $n$  different from unity constitute an original contribution to the literature of mathematical tables.

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9[L, X]. HANS SAGAN, *Boundary and Eigenvalue Problems in Mathematical Physics*, John Wiley & Sons, Inc., New York, 1961, xviii + 381 p., 24 cm. Price \$9.50.

This attractive newcomer to the ranks of the textbooks on methods of mathematical physics comes to us directly from Moscow (where, for the past four years, the author has been an Associate Professor of Mathematics at the University of Idaho). This book contains material which has been used in the author's classes to seniors and beginning graduate students in mathematics, applied mathematics, physics, and engineering for the past five years. The author's stated purpose is not to present a vast number of seemingly unrelated mathematical techniques and tricks that are used in the mathematical treatment of problems which arise in