

is the increase in precision of Table 1060 (Some Numerical Constants), so that all the entries appear now to 10 decimal places.

Errata pointed out in the earlier reviews have been corrected. However, the correction of $K(87.6)$ in Table 1040 was not followed by appropriate changes in the column of first differences. The reviewer has compared the entries in Table 1050 with the corresponding data in the tables of Lowell [1], and thereby has detected 72 last-figure errors in Dwight's values of the Kelvin functions of zeroth order and of their first derivatives.

This useful new edition of Professor Dwight's popular tables of integrals constitutes a valuable contribution to the increasing store of such mathematical literature.

J. W. W.

1. HERMAN H. LOWELL, *Tables of the Bessel-Kelvin Functions Ber, Bei, Ker, Kei, and their Derivatives for the Argument Range 0(0.01)107.50*, Technical Report R-32, National Aeronautics and Space Administration, Washington, D.C., 1959. (See Review 9, *Math. Comp.* v. 14, 1960, p. 81.)

43 [M].—W. F. HUGHES & F. T. DODGE, *A Table of J Integrals of Hydrodynamic Lubrication Theory*. Manuscript deposited in UMT file.

This unpublished table of the numerical values, mainly to five significant figures, of the integrals $J_n = \int_0^\theta (1 - \epsilon \cos \theta)^{-n} d\theta$, corresponding to $n = 1, 2, 3$, $\epsilon = 0.1(0.1)0.9$, and $\theta = 0^\circ(5^\circ)360^\circ$, was prepared on an electronic digital computer by members of the Mechanical Engineering Department of the Carnegie Institute of Technology.

In the prefatory text the authors state that these integrals occur in the theory of the hydrodynamic lubrication of the journal bearings. The film thickness h is approximated by the formula $h = c(1 - \epsilon \cos \theta)$, in terms of the angular coordinate θ , the radial clearance c , and the ratio ϵ of the eccentricity of the journal to the radial clearance. Values of the ratio h/c to four decimal places are included in the table.

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44 [M].—G. PETIT BOIS, *Tables of Indefinite Integrals*, Dover Publications, Inc., New York, 1961, xiv + 151 p. 24 cm. Price \$1.65.

This is a new printing, in an inexpensive paperback edition, of the original *Table d'Intégrales Indéfinies* published by Gauthier-Villars in Paris in 1906, and at the same time by Teubner in Leipzig under the title *Tafeln unbestimmte Integrale*.

This unabridged English translation contains 2544 indefinite integrals, systematically arranged according to integrands, as outlined in the table of contents. A preface lists the principal source books and tables. This is followed by an explanatory section devoted to notation and by a section listing 49 "transformations of integral expressions," that is, pairs of expressions possessing the same derivative.

With few exceptions, the indefinite integrals listed here involve elementary functions. Several integrals are shown to depend upon the evaluation of such functions as the sine and cosine integrals, although these are not identified as such. Examples of such higher transcendental functions, which are left in the form of