

TABLE ERRATA

533.—A. ERDÉLYI, W. MAGNUS, F. OBERHETTINGER & F. G. TRICOMI, *Tables of Integral Transforms*, Vol. 2, McGraw-Hill Book Co., New York, 1954.

On p. 284, in formula (1) of Section 16.4, for $\Gamma(\alpha + n + 1)$, read $\Gamma(\alpha + 1)$. This formula will then agree with the result of putting $\rho = \alpha$ in formula (3), p. 284, and using Vandermonde's theorem [1] to sum the hypergeometric series ${}_2F_1$.

On p. 286, in formula (12) of Section 16.4, for $\Gamma(\sigma - \beta + m + 1)$, read $\Gamma(\sigma - \beta + m - n + 1)$. When $\beta = 0$, the resultant expression agrees with formula (13) of the same section. In the special case $\sigma = \beta$, $m = n$, it agrees with certain special cases of formulae (5), (7), (10), (16), (17), and (20); when $\sigma = \beta$, $m \neq n$, it gives the zero result of formula (9).

ALISTAIR R. CARR

School of Physics
University of Melbourne
Parkville, Victoria 3052, Australia

1. L. J. SLATER, *Generalised Hypergeometric Functions*, Cambridge Univ. Press, Cambridge, 1966, Section 1.7.

534.—I. S. GRADSHTEYN & I. M. RYZHIK, *Tables of Integrals, Series, and Products*, 4th ed., Academic Press, New York, 1965.

In formula 7.391 (3), for $\Gamma(\alpha + n + 1)$ read $\Gamma(\alpha + 1)$.

In formula 7.391 (9), for $\Gamma(\sigma - \beta + m + 1)$ read $\Gamma(\sigma - \beta + m - n + 1)$.

ALISTAIR R. CARR

School of Physics
University of Melbourne,
Parkville, Victoria 3052, Australia

535.—MILTON ABRAMOWITZ & IRENE A. STEGUN, *Handbook of Mathematical Functions, with Formulas, Graphs, and Mathematical Tables*, National Bureau of Standards Applied Mathematics Series No. 55, U. S. Government Printing Office, Washington, D. C., 1964.

Equation 10.4.76, p. 449, should read

$$(M^2)''' + 4x(M^2)' + 2M^2 = 0.$$

JACKSON B. LACKEY
HENRY C. THACHER, JR.

Department of Computer Science
University of Kentucky
Lexington, Kentucky 40506

536.—ALBERT EAGLE, *The Elliptic Functions as They Should Be*, Galloway & Porter, Ltd., Cambridge, 1958.

Table I in Supplement B, pp. 476–479, has been completely checked by a calculation briefly described in [1].

A total of 24 last-figure corrections are required in the values of the modulus k as a function of the period-ratio $\mu = K'/K$; namely, increase k by a final unit when $\mu = 1.30, 1.32, 1.36, 1.52, 1.54, 1.82, 1.92, 1.94, 1.96, 1.98, 2.04, 2.14, 2.20, 2.24, 2.32, 2.34, 2.36, 2.40, 2.80, 2.84, 2.88$; decrease by a unit when $\mu = 1.18, 1.78, 2.96$.

The following 21 last-figure corrections are required in the complementary

modulus k' : increase by a final unit when $\mu = 1.06, 1.74, 1.78, 1.80, 1.88, 1.90, 2.00, 2.02, 2.04, 2.06, 2.20, 2.44, 3.20$; decrease by a similar amount when $1.16, 1.36, 1.38, 1.50, 1.52, 1.58, 1.94, 2.60$.

Twenty corrections are required for the complete elliptic integral of the first kind, K ; namely, increase the final digit by a unit when $\mu = 1.26, 1.38, 1.60, 1.62, 1.64, 1.70, 1.94, 2.38, 2.76$; decrease by a like amount when $\mu = 1.02, 1.46, 1.76, 1.88, 1.98, 2.02, 2.24, 2.44, 3.25, 3.40$; and for 914, read 194 when $\mu = 1.04$.

Thirty-three corrections are required for the associated complete elliptic integral of the first kind, K' . Of these, 28 are of a unit in the last place; namely, increase by that amount when $\mu = 1.06, 1.26, 1.52, 1.60, 1.62, 1.64, 1.68, 1.70, 2.38, 2.50, 2.62, 2.82, 3.50$; decrease when $\mu = 1.14, 1.56, 1.78, 1.88, 1.90, 2.00, 2.02, 2.20, 2.22, 2.26, 2.28, 2.44, 3.20, 3.25, 3.35$. The remaining corrections are as follows: increase by two final units when $\mu = 1.72$; decrease by three units when $\mu = 1.76$; decrease by six units when $\mu = 1.74$; when $\mu = 2.58$, for 476 read 576; and when $\mu = 2.64$, for 410 read 511.

The 18 values of k and k' as functions of μ in Table 3.31, p. 76 were found to be free from error.

OVE SKOVGAARD

Institute of Hydrodynamics & Hydraulic Engineering
Technical University of Denmark
DK-2800 Lyngby, Denmark

1. *Math. Comp.*, v. 28, 1974, p. 1181, MTE 512.

537.—BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, *Mathematical Tables*, Vol. VI: *Bessel Functions, Part I*, Cambridge Univ. Press, Cambridge, 1937, reprinted 1950 and 1958.

A complete check of Table II, pp. 171–173, revealed a total of 78 terminal-digit errors (none exceeding a unit) of which 70 are new.

In addition to the eight errors noted by Gerber [1], the values of $j_{0,s}$ are too low by a final unit when $s = 105, 115, \text{ and } 145$.

Of the 150 tabulated values of $j_{1,s}$ a total of 38 require correction in the last place. Thus, increase the values of $j_{1,s}$ each by a final unit for $s = 56, 57, 58, 64, 66, 70, 74, 76, 87, 90, 93, 94, 96, 98, 103, 106, 113, 115, 119, 134, 135, 136, 142, 146, \text{ and } 147$, and decrease by a similar amount for $s = 61, 69, 72, 78, 82, 83, 91, 92, 101, 128, 137, 140, \text{ and } 141$.

The following 20 corrections are required in the values of $J_1(j_{0,s})$: increase by a final unit for $s = 2$ and 94, and decrease by the same amount for $s = 34, 35, 43, 46, 54, 60, 73, 82, 88, 102, 105, 110, 125, 127, 133, 134, 140, \text{ and } 148$.

Similarly, for $J_0(j_{1,s})$ increase by a final unit when $s = 90$, and decrease by a similar amount when $s = 54, 80, 94, 98, 99, 109, 113, \text{ and } 126$.

The first 100 zeros $j_{0,s}$ were checked against the table in [1] and the remaining values of $j_{0,s}$ were computed from the first five terms of Mc Mahon's expansion. The first five values of $j_{1,s}$ were checked by using a table of Luke [2, p. 233], and the remainder were computed from the first eight terms of the appropriate Mc Mahon expansion.

The values of $J_1(j_{0,s})$ and $J_0(j_{1,s})$ were calculated to 15S by means of a PI/I version of BESLRI [3].

OVE SKOVGAARD

Institute of Hydrodynamics & Hydraulic Engineering
Technical University of Denmark
DK-2800 Lyngby, Denmark

1. HENRY GERBER, "First one hundred zeros of $J_0(x)$ accurate to 19 significant figures," *Math. Comp.*, v. 18, 1964, pp. 319–322.
2. Y. L. LUKE, *The Special Functions and Their Applications*, Vol. II, Academic Press, New York, 1969.
3. D. J. SOOKNE, "Bessel functions of real argument and integer order," *J. Res. Nat. Bur. Standards Sect. B*, v. 77, 1973, pp. 125–132.

538.—C. R. WALL, P. L. CREWS & D. B. JOHNSON, "Density bounds for the sum of divisors function," *Math. Comp.*, v. 26, 1972, pp. 773–777.

On p. 775, in the sixth line of the text, for $3^2 \cdot 5 \cdot 7$, read $3^2 \cdot 5 \cdot 7p$ ($11 \leq p \leq 41$), and at the end of the eleventh line, for $3^4 \cdot 5 \cdot 13$, read $3^4 \cdot 5 \cdot 13p$ ($17 \leq p \leq 23$).

SEPPO PAJUNEN

Department of Mathematics
Tampere University of Technology
Tampere, Finland