TABLE ERRATA


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 \cite{1} to sum the hypergeometric series $\,_{2}F_{1}$.

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).

\textsc{Alistair R. Carr}

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


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 $\Gamma(\sigma - \beta + m - n + 1)$.

\textsc{Alistair R. Carr}

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


Equation 10.4.76, p. 449, should read

\[(M^{2})'' + 4x(M^{2})' + 2M^{2} = 0.\]

\textsc{Jackson B. Lackey}

Henry C. Thacher, Jr.

Department of Computer Science
University of Kentucky
Lexington, Kentucky 40506

536.—\textsc{Albert Eagle}, \textit{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 \cite{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, 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 \( \mu \) 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


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 \( s = 105, 115 \), 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 \( s = 56, 57, 58, 64, 66, 70, 74, 76, 87, 90, 93, 94, 96, 98, 103, 106, 113, 115, 119, 134, 135, 136, 142, 146, \) and 147, and decrease by a similar amount for \( s = 61, 69, 72, 78, 82, 83, 91, 92, 101, 128, 137, 140, \) 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 \( s = 34, 35, 43, 46, 54, 60, 73, 82, 88, 102, 105, 110, 125, 127, 133, 134, 140, \) and 148.

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


On p. 775, in the sixth line of the text, *for* $3^{2.7}$, *read* $3^{2.5.7}p$ ($11 < p < 41$), and at the end of the eleventh line, *for* $3^{4.5.13}$, *read* $3^{4.5.13}p$ ($17 < p < 23$).

SEPPO PAJUNEN

Department of Mathematics

Tampere University of Technology

Tampere, Finland