TABLE ERRATA

617. — I. S. Gradshteyn & I. M. Ryzhik, *Table of Integrals, Series, and Products*, 5th ed. (Alan Jeffrey, ed.) (translated from the Russian by Scripta Technica, Inc.), Academic Press, Boston, 1994.

Page	*Formula*	
xxxiii	line $l-3, \ldots$	Section **The Factorial (Gamma) Function.** By writing $\Psi(z+1)$ instead of $\Psi(z)$ in the formula on line 5 of page xxxiv, this section becomes useless, except for the notation $\Gamma(1+z) = z! = \Pi(z)$. In fact $\Psi(z)$ so defined is identical to $\psi(z)$ as defined in 8.36, and the letter ψ should in any case be used in the remaining four equations.
xxxv	line 9	For $(z \gg 1$ and $n > 0)$ read $[\lvert\arg z\rvert < \frac{3}{2}\pi]$.
xxxviii	line $l-5$	Add $= \frac{1}{\pi}\sqrt{\frac{z}{3}}K_{\frac{1}{3}}(\frac{2}{3}z^{\frac{3}{2}})$.
xli	line 11	For bei ber read bei_ν ber_ν.
xli	line 16	For (x) read (t).
xlii	line 8	For See probability read Probability.
xlii	line 9	For erfc read erf.
xlii	line 13	Delete.
xlii	line 18	For $F_\Lambda(\alpha{:}\ \beta_1$ read $F_A(\alpha;\ \beta_1$.
xlii	line $l-17$	For Other nonperiodic read Non-periodic.
xlii	line $l-12$	For Other nonperiodic read Non-periodic.
xliii	line 6,7	For Bessel functions of an imaginary argument read Modified Bessel functions.
xliii	line 14, 15	For Bessel functions of imaginary argument read Modified Bessel functions.
xliii	line 25	For Neumann's functions read Bessel functions of the second kind (Neumann functions) .
xliii	line $l-9$	For $p_\nu^\mu(x)$ read $P_\nu^\mu(x)$.
xliii	line $l-5$	For $p_n^{(\alpha,\beta)}(x)$ read $P_n^{(\alpha,\beta)}(x)$.
xliv	line $l-9, \ldots$	Replace the section between $T_n(x)$ and $U_n(x)$ by

$$\left.\begin{array}{l}\Theta(u)\,,\ \Theta_1(u)\,,\\ \vartheta_k(u)\,,\ \vartheta_k(u\,,\,q)\,,\ \vartheta_k(u|\tau)\,,\\ \theta_k(u)\,,\ \theta_k(u\,,\,q)\,,\ \theta_k(u|\tau)\,,\\ (k=0\,,\,\ldots\,,\,4)\,;\\ \vartheta_0\equiv\vartheta_4\,;\ \theta_0\equiv\theta_4\end{array}\right\}\quad \text{Jacobian theta functions}\quad 8.18,\ 8.19$$

xlv		This whole page "Notations" is superficial and confused.
3	0.132	Add $[n \to \infty]$.

13	0.243.2.	For i read 1 in the upper limit of the integral.
20	0.320.3.	For t read l in the limits of the integral.
27	1.211 1.	For x^h read x^k.
170	2.532 2.	Insert a $-$ sign before the first term on the right-hand side.
170	2.533 1.	For $\cos(a+b)$ read $\cos(a+b)x$.
170	2.533 2.	For $\sin dx$ read $\sin cx\, dx$.
263	line 7	Insert *Cauchy* before *principal*.
334	3.194 4.	For $\operatorname{Re}\nu$ read $\operatorname{Re}\mu$.
353	3.313 2.	For β read B.
354	3.318 2.	For $\sqrt{\pi e}$ read $\sqrt{\pi}e$.
354	3.322 1.	For $u > 0$ read $u \geq 0$.
355	3.323 1.	For $\sim$ read $=$; delete $[q \neq -2]$.
355	3.323 2.	For $\frac{\sqrt{\pi}}{p}$ read $\frac{\sqrt{\pi}}{\lvert p\rvert}$; delete $[p > 0]$.
357	3.351 1. – 9.	All these entries are superfluous. They can easily be deduced from the indefinite integrals in 2.32.
359	3.353 2.	For $n > 2$ read $n \geq 2$.
359	3.353 5.	Add $n \geq 0$ in the restrictions.
359	3.354 5.	For $\frac{\pi}{a}$ read $\frac{\pi}{\lvert a\rvert}$; for $[a > 0]$, p real read $[a \neq 0, p$ real$]$.
360	3.355 3., 4.	For $\operatorname{Im}(a^2) > 0$ read $\operatorname{Im}(a^2) \neq 0$.
365	3.383 5.	For $\psi(q, q+1-\nu, p/a)$ read $\Psi(q, q+1-\nu; p/a)$; for $0(a/p)^{N+1}$ read $O((a/p)^{N+1})$.
369	3.389 2.	For $\left\lvert T^{1-\nu}_{1-\rho-\nu,0,\frac{1}{2}}\right)$ read $\left\lvert \begin{matrix} 1-\nu \\ 1-\rho-\nu, 0, \frac{1}{2} \end{matrix}\right)$.
369	3.389 3.	For $L_{\nu+\frac{1}{2}}$ read $\mathbf{L}_{\nu+\frac{1}{2}}$.
371	3.411 6.	For β^η read β^μ.
373	3.415 2.	For B_{2k+2} read B_{2k+2}.
373	3.416 3.	For 2^{2^n} read 2^{2n}.
375	3.423 3.	For $a < 1$ read $-1 \leq a < 1$.
376	3.423 4.	For $\Phi(\beta; \nu-1; \mu) - (\mu-1)\Phi(\beta; \nu; \mu)$ read $\Phi(\beta, \nu-1, \mu) - (\mu-1)\Phi(\beta, \nu, \mu)$.
376	3.424 2.	For $n!$ read $-n!$; add $[a > -1, n=1, 2, \ldots]$.
376	3.425 2.	For **B** read B.
382	3.461	This number is missing.
385	3.475 1.	This integral is incorrect. In [4, Table 92(14)], the first term reads $\exp(-x^{2^n})$ instead of $\exp(-x^2)$. From 3.475 2. on p. 386, and under the assumption that this integral is valid for all $n \in \mathbb{Z}$, 3.475 1. can be written as

$$\int_0^\infty \left\{ e^{-x^2} - \frac{1}{1+x^{2^n}} \right\} \frac{dx}{x} = -\frac{1}{2}C \qquad [n \in \mathbb{Z}].$$

This would also imply

$$\int_0^\infty \frac{x^{2^n-1} - x}{(1+x^2)(1+x^{2^n})}\, dx = 0 \qquad [n \in \mathbb{Z}].$$

There is numerical evidence that the integrals in

3.475, and maybe others in this section, are also valid for noninteger values of n.

391 3.518 4. For $2^{\mu+\nu-\rho}\beta$ read $2^{\mu+\nu-\rho-2}\mathrm{B}$; for $2-\frac{1}{2}\mu-\nu$ read $\rho+2-\frac{1}{2}\mu-\nu$.

391 3.518 5. For $\mathrm{Re}(2+\rho)\,\mathrm{Re}(\mu+\nu)$ read $\mathrm{Re}(2+\rho)>\mathrm{Re}(\mu+\nu)$.

391 3.518 6. For ${}_2F_1$ read $\frac{1}{2}\,{}_2F_1$; for 2B read B.

394 Insert 9. — after the double line.

394 3.524 9. For "is divergent" read

$$\frac{\pi^3}{4b^3}\sin\frac{a\pi}{2b}\sec^3\frac{a\pi}{2b}\quad [b>|a|].$$

394 3.524 9.–23. Increase the numbers 9. to 23. by 1, thus read 10. to 24.

408 3.612 7. Replace $\cos x$ by $\cos^{2m+1}x$; add $[n>m\ge 0]$.

410 3.614 For $a<b$ read $a^2<b$ in third line.

415 3.63 In many of these integrals, add $[n\ge 0]$.

415 3.631 2. Delete the factor 2 in the integrand.

416 3.631 13. In the second line, for $(2m-2n-3)!!$ read $(2n-2m+1)!!$; in the third line, for $(2m-2n+3)!!$ read $(2m-2n-3)!!$.

416 3.631 15. Replace the clumsy second and third line by

$$=[1-(-1)^{m+n}]\frac{m!}{(m+n)!!}\left\{\sum_{k=0}^{\min(m,n)-1}\frac{(m+n-2k-2)!!}{(m-k)!}+s\right\}$$

$$s=\begin{cases}0 & [n-m\le 0 \text{ or } \frac{1}{2}(n-m) \text{ even}],\\ (n-m-2)!! & [n-m \text{ odd}],\\ 2(n-m-2)!! & [\frac{1}{2}(n-m) \text{ odd}].\end{cases}$$

416 3.631 17. Replace the clumsy formula on top of p. 417 by [9, No. 2.5.12.24,25.]

$$=[1+(-1)^{m+n}]\begin{cases}0 & [n<m],\\ \dfrac{sn!}{(n-m)!!(n+m)!!} & [n\ge m]\end{cases}$$

$$(s=\tfrac{1}{2}\pi \text{ if } n-m \text{ even},\ s=1 \text{ if } n-m \text{ odd.})$$

417 3.631 20. For n read ν (4 times).

418 3.635 1. Replace the right-hand side by $\frac{1}{2}\beta(\mu)$.

419 3.635 2. For $2^{p+2+n+1}$ read 2^{p+2n+1}.

422 3.651 1. In the reviewer's copy this formula is mutilated. It should read

$$\int_0^{\frac{\pi}{4}}\frac{\mathrm{tg}^{\mu}x\,dx}{1+\sin x\cos x}=\frac{1}{3}\left[\psi\left(\frac{\mu+2}{3}\right)-\psi\left(\frac{\mu+1}{3}\right)\right].$$

423 3.653 2. Delete the factor 2 in the integrand.

445 3.722 2., 4. For iab read $ia\beta$.

445 3.722 6., 8. For iab read $ia\beta$.

455	3.747 1.	Add $= 2\pi \boldsymbol{G} - \frac{7}{2}\zeta(3)$ $[m = 2]$.
458	3.761 6.	For ${}_1F_1(\mu; u+1; ia) + {}_1F_1(\mu, u+1; -ia)$ read ${}_1F_1(\mu; \mu+1; ia) + {}_1F_1(\mu; \mu+1; -ia)$.
461	3.766 4.	Replace $\Gamma[2(\mu+\frac{1}{2})]$ by $\Gamma(2\mu+1)$.
465	3.771 12.	For $s_{(\nu-1)\nu+1}$ read $s_{\nu-1,\nu+1}$.
467	3.773 6.	For $0 \le m < n + \frac{1}{2}$ read $0 \le m \le n$.
477	3.812 4.	Delete [divergent if $a^2 = 0$].
477	3.812 5.	For $0 \neq a^2 \neq 1$ read $0 < a^2 < 1$; delete [divergent if $a^2 = 0$].
480	3.816 2.	For $\frac{\pi}{2}$ read $\frac{\pi}{a}$.
484	3.824 3.	For $\cdot\frac{\pi}{2}$ read $\frac{\pi}{a}$. The simpler formula $$\frac{\pi}{2^{2m+1}a}\sum_{k=0}^{m}(-1)^k\binom{2m}{m-k}e^{-2ka}$$ which has been proposed in [1] is incorrect; for $m = 1$, it yields $\frac{\pi}{8a}(2-e^{-2a})$ instead of $\frac{\pi}{4a}(1-e^{-2a})$ [9, No. 2.5.6.11].
484	3.824 4.	For $\sin^{2^m+1} x$ read $\sin^{2m+1} x$.
484	3.824 5.	Replace the right-hand side by the simpler formula $$\frac{\pi}{2^{2m+1}}e^{-(2m+1)a}\sum_{k=0}^{m}(-1)^{m+k}\binom{2m+1}{k}e^{2ka}.$$ Delete BI ((160))(15).
484	3.824 6.	For 2^{2m} read $2^{2m}a$.
495	3.836 5.	Delete $I_n(b) = \frac{2}{\pi}$; for $n(2^{n-1}n!)^{-1}$ read $\frac{\pi}{2^{n-2}(n-1)!}$; write second line as $[0 \le b < n,\ n \ge 1,\ r = (n-b)/2]$.
512	3.893 4.	Replace first line by 4. — ; delete second and third lines.
513	3.895 9.	Add $[p > 0]$.
514	3.895 10.	Delete $[p \neq 0]$.
514	3.895 12.	For $a \ge 0$ read $a > 0$.
515	3.899 1.	For p^2x^2 read $-p^2x^2$.
556	4.212 5.	For $1 + \ln x$ read $a + \ln x$.
560	4.224 11.	This entry is confused and should be given as follows:

$$\int_0^{\frac{\pi}{2}} \ln(1 + a\sin x)^2\,dx$$

$$= \pi\ln(a/2) + 4\boldsymbol{G} + 4\sum_{k=1}^{\infty}\frac{b^k}{k}\sum_{n=1}^{k}\frac{(-1)^{n+1}}{2n-1} \quad [a > 0],$$

$$= -\pi\ln 2 - 4\boldsymbol{G} \quad [a = -1];$$

$$b = (1-a)/(1+a).$$

		Note the unusual notation $\ln(1+a\sin x)^2$. It occurs also in other formulas and means $2\ln\lvert 1+a\sin x\rvert$. Delete BI((308))(5,6,7,8).
562	4.227 4.	For n even, the right-hand side is equal to $\frac{1}{2}\left(\frac{\pi}{2}\right)^{n+1}\lvert E_n\rvert$.
562	4.227 5.	Replace the right-hand side by $\left(\frac{\pi}{2}\right)^{2n+1}\lvert E_{2n}\rvert$.
564	4.231 5.	For $[0<a<1]$ read $[a>0]$.
564	4.231 7. – 10.	By replacing the parameters in the right-hand side by their absolute values, the restrictions can be replaced by $[ab\neq 0]$. There are more of such cases.
565	4.233 3.	For $2\pi^2$ read $7\pi^2$.
570	4.253 6.	For " $\mu-a$ is not a natural number" read $\lvert\arg a\rvert<\pi$.
570	4.253 7.	For $-\sum_{k=1}^{n-2}\frac{1}{k}-2\sum_{k=n=1}^{2n-3}\frac{1}{k}$ read $-2\sum_{k=1}^{n-1}\frac{1}{2k-1}$; For $a>0$ read $\lvert\arg a\rvert<\pi$, $n=1,2,\ldots$.
573	4.261 17.	For $\psi 7(\mu)$ read $\psi'(\mu)$.
575	4.267 3.	For $\frac{1}{2}(n-1)$ read $[\frac{1}{2}(n-1)]$.
589	4.293 9.	Replace $-\psi(1)$ by $+\boldsymbol{C}$.
603	4.335 3.	Replace $-\psi''(1)$ by $+2\zeta(3)$.
603	4.337 4.	For $\frac{\beta}{\beta-x}$ read $\lvert\frac{\beta}{\beta-x}\rvert$; delete " β cannot be a real positive number,".
606	4.356 4. – 6.	Delete the text before the formula.
607	4.358 4.	For $\frac{\Gamma(\nu)}{\nu}$ read $\frac{\Gamma(\nu)}{\mu^\nu}$.
612	4.376 8.	Move $[n=1,2,\ldots,a>0]$ to first line; move BI((356))(2) to second line.
613	4.384 2.	Delete the incorrect second line.
626	4.416 4.	The two results given are incorrect. Replace them by $\frac{1}{2}(-1)^n(n-1)!(1-2^{-(n+1)})\zeta(n+1)$. Delete BI((287))(20).
632	4.441 1.	For $\frac{\varrho}{c}$ read $\frac{\varrho}{2}$.
661	5.56	The footnote is misleading. For example, $\int I_1(x)\,dx=I_0(x)$.
672	6.244 1., 2.	For [si(px)] read si(px).
689	6.443 4.	Replace 0 on the right-hand side by $\frac{2}{\pi^2}\left[\frac{1}{(2n+1)^2}(\boldsymbol{C}+\ln 2\pi)+2\sum_{k=2}^{\infty}\frac{\ln k}{4k^2-(2n+1)^2}\right]$. Delete NH 203(6).
691	6.465 1.	Replace 0 on the right-hand side by $-\frac{2}{\pi}\left[\boldsymbol{C}+\ln 2\pi+2\sum_{k=2}^{\infty}\frac{\ln k}{4k^2-1}\right]$. Delete NH 204. Note the relation to 6.443 4.

691	6.469 2.	For $=0$ read $=\dfrac{n}{1-n^2}$; for $[n - \text{odd}]$ read $[n > 1 \text{ odd}]$.
693	6.512 2.	Add $[n \geq 0]$.
703	6.541 2.	For $\Gamma(1-\nu+k)$ read $\Gamma(1+\nu+k)$ in second line. Replace the third line, which does not contain new information, by [2]: For $0 < a < b$, interchange a and b in the right-hand side.
704	6.541 3.	For $(x^2+z^2)p$ read $(x^2+z^2)^p$. The notation $\Gamma\begin{bmatrix} a_1, \dots, a_p \\ b_1, \dots, b_q \end{bmatrix} = \dfrac{\Gamma(a_1)\cdots\Gamma(a_p)}{\Gamma(b_1)\cdots\Gamma(b_q)}$ used in this entry is apparently not defined.
707	6.561 13.	For $a^{\mu+1}$ read $a^{\mu+1}\Gamma$.
717	6.577 1.	For $1+\operatorname{Re}\mu-2n$ read $2+\operatorname{Re}\mu-2n$.
717	6.577 2.	For $\operatorname{Re}\nu-2n+1$ read $\operatorname{Re}\nu-2n+2$.
718	6.578 5.	This integral is probably wrong. In any case it is divergent for certain values of μ.
722	6.584 5.	It is not clear what is meant by $\prod_{j,n}$. For $\sum \mu_j$ read $\sum_j \mu_j$ in the fourth line.
730	6.613	For $x2$ read x^2.
742	6.646 3.	For e^{-bx} read e^{-bs}.
743	6.647 3.	For $-(a/2)$ read $-(\alpha/2)$.
778	6.753 3., 4.	The complicated form of the results for these two integrals, which are newly introduced without giving a reference, differs considerably from the results given in [10, No. 2.12.25.3., 2.15.11.2] for more general integrals. Also, it is unclear why these integrals have not been introduced as 6.753 7. and 6.753 8. The integrals 6.753 3. and 6.753 4. in the previous edition [6], which are now deleted, are not covered by 6.753 5. and 6.753 6., as it might appear at first glance.
830	7.229	This formula is identical to 7.228. Delete.
847	7.391 9.	For $\Gamma(\alpha-\beta+m$ read $\Gamma(\sigma-\beta+m$.
853	7.422 2.	In [14], referring to the previous edition [6], this formula is said to be *incorrect, in particular for* $n=0$, $\sigma=0$, $\alpha=1$. It does not necessarily become correct merely by excluding these values, as has been done. Also sign errors are now present in the superscript of the first L on the right-hand side. The problem lies, however, in the interchanged subscripts of the two L on the right-hand side. Numerical tests suggest that: For $L_n^{\sigma+m-n}$ read $L_m^{\sigma-m+n}$; for $L_m^{\nu-\sigma+m-n}$ read $L_n^{\nu-\sigma+m-n}$; retain from the restrictions only $[y>0, \operatorname{Re}\alpha>0, \operatorname{Re}\nu>-1]$.
871	7.629 1.	For $\sqrt{as}$ read $\sqrt{a}s$.
887	7.683	For $\frac{\mu-\alpha-1}{1}$ read $\frac{\mu-\alpha-1}{2}$ in the subscript of M.

914 8.130 8. Delete "which is not a constant".
926 8.178 2. For $t^1\sigma$ read $t\sigma$.
926 8.18–19 The notation used for the theta functions in this volume is deplorably inconsistent, not only with respect to the letters ϑ and θ. See in particular formulas 8.199(1)–(3) and §6.16.
928 8.186 In the equation, for ∂_τ read $\partial\tau$.
929 8.189 1. For $\vartheta_4(i)$ read $\vartheta_4(u)$.
935 8.215 Replace this entry by [7, p. 33],

$$\mathrm{Ei}(z) = \frac{e^z}{z}\left[\sum_{k=0}^{n}\frac{k!}{z^k} + r_n(z)\right], \quad |r_n(z)| = O(|z|^{-n-1}),$$

$$[z \to \infty,\ |\arg(-z)| \le \pi - \delta;\ \delta > 0 \text{ small}].$$

$$|r_n(z)| \le (n+1)!|z|^{-n-1} \ [\mathrm{Re}\, z \le 0].$$

935 8.216 Presumably, for $O(n^0)$ read $O(1)$; for n large read $n \to \infty$.
937 8.234 1. Delete the comma in the upper limit of the integral.
939 8.252 5. For $4x2$ read $4x^2$.
939 8.254 Replace this entry by [7, p. 19],

$$\Phi(z) = 1 - \frac{e^{-z^2}}{\sqrt{\pi}z}\left[\sum_{k=0}^{n}(-1)^k\frac{(2k-1)!!}{(2z^2)^k} + O(|z|^{-2n-2})\right],$$

$$[z \to \infty,\ |\arg(-z)| \le \pi - \delta;\ \delta > 0 \text{ small}].$$

942 8.310 2. Delete "$\Gamma(z)$ satisfies the relation".
943 8.315 Add (For C see **8.310** 2.).; Delete "for z, not an integer".
944 line 2 Delete.
944 8.315 2. According to [8, p. 81–82], replace this entry by

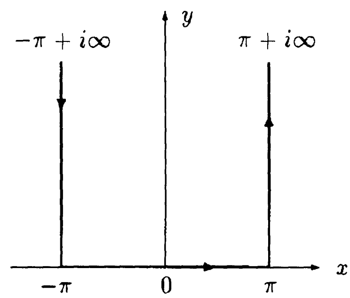
$$\int_{-}^{\infty}\frac{e^{bti}}{(a+it)^z}\,dt = \frac{2\pi e^{-ab}b^{z-1}}{\Gamma(z)}$$

$$\int_{-}^{}\frac{e^{-bti}}{(a+it)^z}\,dt = 0$$

$$[\mathrm{Re}\, a > 0,\ b \quad 0,\ \mathrm{Re}\, z > 0,\ |\arg(a+it)| < \tfrac{1}{2}\pi].$$

946 8.335 For n^{mx} read ı .
948 8.341 2. For ω read w in the upper limit of the integral.
949 8.344 For $\cos L^{2n-1}$ read $\cos^{2n-1}$.
949 8.350 2. For 0 read x in the lower limit of the integral.
950 8.352 3. Replace $\Gamma(0, x)$ by $-\mathrm{Ei}(-x)$.
952 8.36 There exist a number of important formulas for $\psi(z)$ and $\psi^{(n)}(x)$ which are not given. See [3, §§6.3–4].
953 8.363 8. Add $= (-1)^{n+1}n!\zeta(n+1, x)$.
956 8.372 1. For $[-x \in \mathbb{N}]$ read $[-x \notin \mathbb{N}]$.
956 8.372 2. Add $[-x \notin \mathbb{N}]$.
956 8.372 3. Add $[-x \notin \mathbb{N}]$. Add after this formula:

		$\beta(x)$ has simple poles at $x = -n$ with residue $(-1)^n$.
957	8.374	For $[-x \in \mathbb{N}]$ read $[-x \notin \mathbb{N}]$. Delete the line after this formula.
960	8.391	For $\frac{x^p}{p^2}F_1$ read $\frac{x^p}{p}{}_2F_1$.
961	8.405	Delete "for an arbitrary Bessel function $Z_\nu(z)$, that is," in the line after the formula.
961	line 11	For Bessel functions of imaginary argument read Modified Bessel functions.
961	8.411 1.	For [$n-$ a natural number] read $[n = 0, 1, 2, \ldots]$.
963	8.412 5.	Replace $\{\Gamma(\frac{1}{2}-\nu)\}^{-1} \neq 0$ by $\nu \neq \frac{1}{2}, \frac{3}{2}, \ldots$.
964	8.412 6.	Add the drawing.



969	8.432 6.	For $z2$ read z^2.
969	8.432 7.	For $-\frac{\pi}{2}$ read $-\frac{x}{2}$; for $\vert\arg z =$ read $\vert\arg z\vert =$.
970	8.442 1.	Delete the two lines after the formula (except WA 174(1)).
970	8.442 2.	In the arguments of F, for $-\nu$, $-k$; $\mu - 1$; read $-\nu - k$; $\mu + 1$;.
971	line 5	For Kn read K_n.
976	8.455 1.	Add $[x > n]$ in third line.
979	8.471	Add: Z denotes J, N, $H^{(1)}$, $H^{(2)}$ or any linear combination of these functions, the coefficients in which are independent of z and ν.
979	8.472	ditto.
980	8.476 10.	For $\overline{H_\nu^{(2)}}(z)$ read $\overline{H_\nu^{(2)}(z)}$.
981	8.485	Read $\sin \nu\pi$ in the denominator.
982	8.486 7.	For $l_n(z)$ read $I_n(z)$.
982	8.486 8.	For $l_1(z)$ read $I_1(z)$.
982	8.486 1. – 3.	Delete the restrictions, they are meaningless.
983	8.486 4., 5.	ditto.
986	8.496 1.	Presumably, for $\overline{Z}_2(2i\sqrt{z})$ read $\overline{Z_2(2i\sqrt{z})}$.
987	8.496 2.	Presumably, for $\overline{Z}_{\frac{5}{6}}(\frac{5}{3}iz^{\frac{3}{5}})$ read $\overline{Z_{\frac{5}{6}}(\frac{5}{3}iz^{\frac{3}{5}})}$.
987	8.496 3.	Presumably, for $\overline{Z}_{10}(2iz^{-\frac{1}{2}})$ read $\overline{Z_{10}(2iz^{-\frac{1}{2}})}$.
1013	8.671 4.	Presumably, for $\pi V a$ read $\pi\sqrt{a}$.
1014	8.701	There is confusion on notation. In the previous edition [6, p. 999], the symbols $P_\nu^\mu(z)$, $Q_\nu^\mu(z)$ on line

5 were said to denote single-valued and regular solutions of 8.700 1. for $|z| < 1$, whereas the symbols $\mathrm{P}_\nu^\mu(z)$, $\mathrm{Q}_\nu^\mu(z)$ on line 8 were said to be used for such solutions with $\operatorname{Re} z > 1$. However, the formulas in 7.1–7.2 of [6] give the impression that the contrary is true. In this volume, the same symbols $P_\nu^\nu(z)$, $Q_\nu^\mu(z)$ are presented on both lines 4 and 6, thus making the lines 4 to 7 unintelligible. The (probably) unnecessary distinction between P, Q and P, Q remains in other places, in particular in 7.1–7.2, but no detailed check has been made whether these notations are consistent within any definition.

1032	8.811	For equation read representation.
1045	8.913 2.	For simple read closed.
1065	9.100	Add "also called Gaussian hypergeometric function."
1071	9.137	For functions read formulas.
1073	9.153 4.	For $F(1+m', -m$ read $F(1+m'-m$.
1075	line $l-12$	For "the pair, unity" read one.
1080	9.180 1.–4.	Delete "Region of convergence" before the formula; place the restrictions (in [ ]) on the line of the formula.
1083	9.183 3.	For $(-y)^\beta$ read $(-y)^{-\beta}$ in second line [11, No. 7.2.4.39].
1088	9.227	For $\pi - \alpha < o$ read $\pi - \alpha < \pi$.
1095	9.255 3.	For $z2$ read z^2.
1096	9.301	For $b_1, \ldots, b_2$ read $b_1, \ldots, b_q$.
1096	line $l-1$	Delete the comma after $p < q$.
1097	9.303–4	Delete *).
1099	9.34 7.	For $(a, b : c : -x)$ read $(a, b; c; -x)$.
1100	9.5	Mixing the Riemann zeta function $\zeta(z)$ and the generalized zeta function $\zeta(z, q)$ in this section is unfortunate. In particular, it is unusual to extend the name of Riemann to $\zeta(z, q)$. This function has little in common with $\zeta(z)$ other than $\zeta(z) = \zeta(z, 1)$ and $(2^z - 1)\zeta(z) = \zeta(z, \frac{1}{2})$.
1102	9.523 1.	Replace this formula by $$\zeta(z) = \prod_p \frac{1}{1-p^{-z}} \qquad [\operatorname{Re} z > 1].$$
1102	9.523 2.	Add $[\operatorname{Re} z > 1]$.
1102	9.523 3.	For Δ read Λ in the formula and in the line after it; add $[\operatorname{Re} z > 1]$ in the formula, delete it in the line.
1103	9.537	The separate entries 9.537 and 9.561, 9.562 on p. 1105 are confusing. They should be combined to read
	9.537 1.	$\xi(z) = \pi^{-\frac{1}{2}z}(z-1)\Gamma(\frac{1}{2}z+1)\zeta(z) = \xi(1-z)$.
	9.537 2.	$\Xi(t) = \xi\left(\frac{1}{2} + it\right) = \Xi(-t)$.

		Delete the line after 9.537.
1103	9.541 1.	For $\zeta(z, q)$ read $\zeta(z)$.
1103	9.541 2., 3.	For $0 \le \operatorname{Re} z \le 1$ read $0 < \operatorname{Re} z < 1$.
1103	9.541 3.	It would be interesting to insert a remark that the first 1,500,000,001 zeros lying in $0 < \operatorname{Im} z < 545,439,823.215$ are known [13] to have $\operatorname{Re} z = \frac{1}{2}$.
1105	9.56	Delete the whole section (see p. 1103, 9.537 above).
1106	9.617	For $B_{2n}(-1)^{n-1}$ read $B_{2n} = (-1)^{n-1}$; for $\prod_{p=2}^{\infty}$ read $\prod_p$.
1109	9.64	For $\nu(\mathrm{S}x)$ read $\nu(\mathrm{x})$.
1110	9.71	This table of the Bernoulli numbers should be rearranged properly.
1111	line $l-6$	Insert $= \sum_{k=0}^{\infty} \frac{(-1)^k}{(2k+1)^2}$ before the numerical value.
1112	9.742 1.	Add $S_n^{(0)} = \delta_{0n}$; $S_n^{(1)} = (-1)^{n-1}(n-1)!$; $S_n^{(n)} = 1$.
1112	9.743 1.	Add $\mathfrak{S}_n^{(0)} = \delta_{0n}$; $\mathfrak{S}_n^{(1)} = \mathfrak{S}_n^{(n)} = 1$.
1113	9.744	In the headline of the table, for s read S; in the column for $S_9^{(m)}$: for 118121 read 118124.
1127	line $l-2$	For $2\operatorname{Im} z$ read $2i\operatorname{Im} z$.
1128	line 2	For $\bar{1}$ read 1.
1136	13.123–5	For **A**† read $\mathbf{A}^{\dagger}$ (5 times).
1138	13.214	For $x \neq 0$ read $\mathbf{x} \neq \mathbf{0}$ (twice); for $Q(x)$ read $Q(\mathbf{x})$.
1139	13.41	For e^{Az} read $e^{\mathbf{A}z}$ (twice).
1140	13.411 1.	For e^{Iz} read $e^{\mathbf{I}z}$.
1141	14.12	For "when the following results" read "then the following statements".
1177	17.12 1.	For $F(s) + G(s)$ read $aF(s) + bG(s)$.
1178	17.12 3.	For $d\zeta$ read $d\xi$.
1178	17.13 3.	For x^{ν}, $\nu > -1$ read x^{ν}, $\operatorname{Re}\nu > -1$.
1178	17.13 4.	For $(\frac{\sqrt{\pi}}{2})(\frac{3}{2})(\frac{5}{2})\cdots(\frac{n-1}{2})$ read $\Gamma(n + \frac{1}{2})$.
1179	17.12 39.	Here and in other cases, e.g., p. 1188, 17.33.18, p. 1191, 17.34.13, only the simplest special case is taken from the source. There, the result for $x^n \sin ax$ is given.
1181	17.13 80.	For $bv\operatorname{Re} a\vert$ read $\vert\operatorname{Re} a\vert$.
1182	17.13 101.	Replace the right-hand side by $s^{-1}(s+a^2)^{-\frac{1}{2}}[(s+a^2)^{-\frac{1}{2}} - a]$.
1182	17.13 103.	Move the restriction on $\operatorname{Re}\nu$ to the left column. (Also in other formulas on this page.)
1182	17.13 111.	For $x^{-(\nu+1)}$ read $x^{\nu+1}$.
1184	17.23 2.	For $\vert x\vert$ read x.
1184	17.23 4.	Replace $\delta(x-a)$, a real by $\delta(ax+b)$ $a, b \in \mathbb{R}$, $a \neq 0$; replace $e^{-a\xi}$ by $e^{-b\xi/a}$.
1184	17.23 6.	The Fourier transform of $1/\vert x\vert$ leads to a divergent integral. Delete.

1184	17.23 8.	For $\operatorname{Re} a$ read $a \in \mathbb{R}$.
1184	17.23 10.	Delete $\xi > 0$.
1185	17.23 15.	For $i(\pi/2)^{\frac{1}{2}} e^{-\xi a}$ read $i \operatorname{sgn} \xi (\pi/2)^{\frac{1}{2}} e^{-a\lvert\xi\rvert}$.
1185	17.23 23.	For $(2/\pi^3)$ read $(2\pi^3)$.
1185	17.23 24.	For $x^\nu \operatorname{sgn} x$, $\nu < -1$ but not integral read $x^n \operatorname{sgn} x$, $n = 1, 2, \dots$; for $(-i\xi)^{-(1+\nu)}\nu!$ read $n!(-i\xi)^{-n-1}$. ([12, p. 506])
1185	17.23 25.	Replace the formula in the right-hand column by $(2/\pi)^{\frac{1}{2}}\Gamma(\nu+1)\lvert\xi\rvert^{-\nu-1}\cos[\pi(\nu+1)/2]$. ([12, p. 506])
1185	17.23 26.	For (2π) read $(2/\pi)$.
1188	17.33	In all the headings of this table (pp. 1188–1190), insert $\xi > 0$ after $F_s(\xi)$; delete $\xi > 0$ elsewhere in the table.
1188	17.33 11.	According to [9, No. 2.5.9.11]: For $(x^2 + a^2)^{\nu - \frac{3}{2}}$ read $(x^2 + a^2)^{-\nu-\frac{3}{2}}$; replace the right-hand side by $$\frac{\xi^{\nu+1}}{\sqrt{2}(2a)^\nu \Gamma(\nu + \frac{3}{2})} K_\nu(a\xi).$$
1188	17.33 13.	For $(2\pi)^{-\frac{1}{2}}$ read $\sqrt{\pi/8}$.
1189	17.33 33.	For $(2\pi)^{-\frac{1}{2}}$ read $(2\pi)^{\frac{1}{2}}$; for $\sinh(a\xi)$ read $\sinh(a\xi)/\xi$.
1190	17.33 40.	For $K_0(ab)$ read $K_0(ab)/b$.
1190	17.34	In all the headings of this table (pp. 1190–1193), insert $\xi > 0$ after $F_c(\xi)$; delete $\xi > 0$ elsewhere in the table.
1191	17.34 6.	For $0 < \nu < 1$ read $0 < \operatorname{Re} \nu < 1$.
1191	17.34 14.	For $\operatorname{Re} \nu > a$ read $\operatorname{Re} \nu > 0$.
1191	17.34 16.	For $\lvert a\rvert^{-1}$ read a^{-1}.
1192	17.34 21.	For $\xi > 2a$ read $\xi < 2a$.
1192	17.34 22.	For $\alpha > 0$, $\operatorname{Re} \beta > 0$ read $a > 0$, $\operatorname{Re} b > 0$.
1192	17.34 24.	For $(x^2 + a^2)^{\frac{1}{2}}$ read $(x^2 + a^2)^{-\frac{1}{2}}$.
1193	17.34 33.	For $(e^{-b\xi} - e^{-a\xi})$ read $(e^{-b\xi} - e^{-a\xi})/\xi$.
1195	17.43 8.–11.	Presumably, $H(1-x)$ is the Heaviside step function.
1197	17.43 27.	For $\Gamma(s)$ read $(1 - 2^{2-s})\Gamma(s)$; for $\operatorname{Re} s > 2$ read $\operatorname{Re} s > 0$.
1198	BU	There exists an English edition; see [5]. Also p. 1202, line $l - 7$ and p. 1203, line 18.
1202	line 2	For Losch read Lösch.
1202	line 3	For Neilsen read Nielsen.

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1. H. E. Fettis, Table Erratum **601**, Math. Comp. **41** (1983), 780–782.
2. G. Solt, Table Erratum **607**, Math. Comp. **47** (1986), 768.
3. M. Abramowitz and I. A. Stegun, eds., *Handbook of mathematical functions with formulas, graphs, and mathematical tables*, 9th printing with corrections, Dover, New York, 1972.
4. D. Bierens de Haan, *Nouvelle tables d'intégrales définies*, Hafner, New York, 1957.
5. H. Buchholz, *The confluent hypergeometric function*, Springer-Verlag, Berlin, 1969.
6. I. S. Gradshteyn and I. M. Ryzhik, *Table of integrals, series, and products*, Corrected and enlarged edition (A. Jeffrey, ed.), Academic Press, New York, 1980.
7. N. N. Lebedev, *Special functions and their application*, Prentice-Hall, Englewood Cliffs, NJ, 1965.
8. F. Lösch and F. Schoblik, *Die Fakultät (Gammafunktion) und verwandte Funktionen*, Teubner, Leipzig, 1951.
9. A. P. Prudnikov, Yu. A. Brychkov, and O. I. Marichev, *Integrals and series*, Vol. 1, *Elementary functions*, Gordon and Breach, New York, 1986.
10. ——, *Integrals and series*, Vol. 2, *Special functions*, Gordon and Breach, New York, 1986.
11. ——, *Integrals and series*, Vol. 3, *More special functions*, Gordon and Breach, New York, 1990.
12. I. N. Sneddon, *The use of integral transforms*, McGraw-Hill, New York, 1972.
13. J. van de Lune, H. J. J. te Riele, and D. T. Winter, *On the zeros of the Riemann zeta function in the critical strip*. IV, Math. Comp. **46** (1986), 667–681.
14. H. van Haeringen and L. P. Kok, Corrigenda, Extended version of Table Erratum **589**, Math. Comp. **39** (1982), 747–757.