

Corrections to From Real to Complex Analysis

m/n means page m, line n

- v/ -5: simple-connectedness (missing hyphen)
- vi/ 11,13,-8: simply-connected (missing hyphen)
- vi/ -10: insert a comma after '(the space of all complex numbers)'
- 2/13: replace ':= ' by '=' twice
- 16/15: replace x_n by $x_{m(n)}$
- 17/ 13: replace $\mathbf{R}\{0\}$ by $\mathbf{R}\setminus\{0\}$
- 39/3: replace 'The' by 'Setting aside the trivial case when a is a non-negative integer, the'
- 43/15: replace ' $\mathcal{R}_{loc}(J)$ ' by ' $\{f \in \mathcal{R}_{loc}(J) : \text{dom } f = J\}$ '
- 46/-4: replace $\lim_{v \rightarrow \infty}$ by $\lim_{v \rightarrow b-}$
- 50/-1: the words in bold should remain in bold but not be in italics
- 52/16: replace M-test by M -test
- 52/-12: replace ' $m, n > N$ ' by ' $m, n \in \mathbf{N}$ with $m > n \geq N$ '
- 53/ 7: replace 1 by -1
- 54/4: replace 'theorem)' by 'theorem)'
- 58/13: replace 'To conclude this section we observe that in Theorem 1.7.12,' by 'Reflecting upon Theorem 1.7.12, we observe that'
- 58/-4: replace $\min(g_1, \dots, g_n)$ by $\min\{g_1, \dots, g_n\}$
- 59/6,7,9,10 (twice),11,13: replace $\max(\dots)$ by $\max\{\dots\}$
- 71/ -8: replace the lines from 'metric space' to the end of (viii) by the following: 'metric space, termed a (metric) **subspace** of (X, d) : it is common to use the symbol d again for the inherited metric d_Y . Example 2.1.2 (vii) provides illustrations. By convention, if no metric is specified and Y is referred to as a subspace of X , then it is assumed to be endowed with the metric inherited from X . In particular, if no metric is specified and Y is a metric subspace of \mathbf{R}^n , then Y is assumed to be endowed with the Euclidean metric inherited from \mathbf{R}^n (note the distinction between a metric subspace and a linear subspace).'
- 72/-12: replace $+\infty$ by ∞
- 75/1: replace 'point of X ' by 'point of a metric space (X, d) '
- 75/-2: replace ' $=^c$ ' by ' $=^c$ '; insert a space after the final $=$
- 77/-11: replace 'of A .' by 'of A ; when convenient to do so, it may be denoted by $\text{diam } A$.'
- 77/-10: continue this line by adding 'In a natural extension of the definition we take the empty set to be bounded.'
- 80/14: replace $\mathbf{R}^2 \setminus \{0, 0\}$ by $\mathbf{R}^2 \setminus \{(0, 0)\}$
- 80/ -10: insert a space between U and 'is'
- 83/10: after 'note that' replace U by $f(U)$
- 96/4: after ε insert 'if $n \geq N$ '
- 97/14: replace d by d_∞
- 98/6: replace $C(I) \times C(I)$ by $C^1(I) \times C^1(I)$
- 99/ -8,-7,-6: replace X by S (four times in all)
- 104/4: replace 'continuous function' by 'continuous, real-valued function'

104/ 10: replace I by $[0, 2]$
 104/ 11: replace ' $0 < h < 1$ ' by ' h is sufficiently small and positive'
 104/ 15: replace ε by $\varepsilon/2$
 104/ -7: replace $(2j - 1)$ by $2(j - 1)$
 105/16: replace $U \cap^c \{x\}$ by $U \cap^c \{x\}$
 106/5: replace $=^c$ by $=^c$
 106/ 13: replace 0 by o
 113/8,10: replace '**of** S ' by '**of** S '
 130/4: replace 'For each' by 'With the understanding that T^0 stands for the identity map of $C(I)$ to itself, for each'
 137/ 7: insert X after 'metric spaces'

 140/ 4: replace $(A \cup B)^c$ by $^c(A \cup B)$
 146/1: replace 2.4.22 by 2.4.23
 156/ 6: replace (ii) by (iii) at the beginning of the line
 159/ -5: delete the brackets
 160/17: insert '(real or complex)' before 'linear space'
 179/-5: replace $iv_1(x'', x_k)$ by $iv_1(x'', y_k)$
 195: insert the following new line immediately after Definition 3.4.17: Note that given $\alpha \in \mathbf{R}$, the restrictions to $\mathcal{D}(\alpha)$ of the α -branches of the argument and the logarithm of Definition 3.4.12 are branches in the sense of Definition 3.4.17.
 199/-7: delete 'for all'
 203/11: insert ' $, r > 0,$ ' immediately before 'and'
 204/-9: replace Exercise 8 by 'Show that the additive group \mathbf{Z} is isomorphic with the fundamental groups $\pi(\mathbf{C} \setminus \{0\})$ and $\pi(S^1)$: path-connectedness permits the omission of reference to a base point.'
 226/-12: replace ' $f^{-1}\{z_0\}$ ' by ' $f^{-1}(z_0)$ '
 230/8: replace $\max(M, 1)$ by $\max\{M, 1\}$
 236/2: after 'freely homotopic' insert 'in G '
 240/ 2: a final bracket) is missing
 248/-9: delete 'use of Theorem 3.6.20 shows that'
 248/-8: delete ' $= n(f \circ \gamma, 0)$ '
 249/7: on the right-hand side replace $\text{ind}_\gamma(0)$ by $\text{ind}_\gamma(a)$
 265/10: replace $n(\gamma, 2i)$ by $n(\gamma, -2i)$
 269/ -4: unfortunate break at the end of the line
 277/-16: replace $.$ by $;$
 277/-10: replace B by $B = B(0, 1)$
 278/20: insert 'free' before 'homotopy'
 287/17: replace ' 0 to r ' by ' 0 to $-r$ '
 287/18: replace r by $-r$
 287/19: replace $+\gamma(t)$ by $-\gamma(t)$
 306/10: replace \mathcal{R} by \mathbf{R}
 306/ 13: replace \mathbf{R} by \mathcal{R}
 308/-10: insert dx after $\}$

312/ 4: replace $\sum_{n=1}^k \nu_k$ by $\sum_{k=1}^n \pm 1$
 314/3: replace $\left(\sum_1^n |y_k|^{p'}\right)^{1/p'}$ by $(\sum_1^n |y_k|^p)^{1/p}$
 314/-6: replace $\min(\varepsilon_1, \varepsilon_2)$ by $\min\{\varepsilon_1, \varepsilon_2\}$
 327/reference 1: replace 523 by 532
 327/ reference 11: replace '670-679' by '970-979'
 329: insert 'Arc, 206' in the appropriate line

From Real to Complex Analysis

Dyer, R.H.; Edmunds, D.E.

2014, X, 332 p. 13 illus., Softcover

ISBN: 978-3-319-06208-2