

**ERRATA FOR REAL AND COMPLEX ANALYSIS, BY C.
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- (1) (p. 4) The Dedekind Completeness Property, sixth line down. Change “(viii)” to “h.”
- (2) (p. 39, Exercise 35d) The complex polarization identity should read $\langle z, w \rangle = \frac{1}{4} (|z + w|^2 - |z - w|^2) + \frac{i}{4} (|z + iw|^2 - |z - iw|^2)$.
- (3) (p. 65, proof of Theorem 4.4) In the sentence, “Therefore, $b \equiv \inf B$ exists, and $a_n \leq t$ for all n ,” t should be b .
- (4) (p. 117, Exercise 3.47) Instead of the phrase “and the same conclusion still holds,” the exercise should read “all but the conclusion that $\sum x_j \leq \sum y_j$ holds.”
- (5) (p. 129, Exercise 18) Replace “(Yes. Find a quick proof.)” with “(No. Find a simple counterexample.)”
- (6) (p. 132, Exercise 49) Layout error. The exercise reads:
Exercise. *Suppose $0 < x_1 < y_1$, and that $x_{n+1} = \sqrt{x_n y_n}$ and $y_{n+1} = \frac{1}{2}(x_n + y_n)$ for $n \in \mathbb{N}$.*
a) *Show that $0 < x_n < y_n$ for all n .* b) *Show that $x_n < x_{n+1}$ for all n .*
c) *Show that $y_{n+1} < y_n$ for all n .* d) *Show that $\lim x_n = \lim y_n = L$.*
- (7) (p. 186, Example 1.12) “a previous exercise” should read “the following exercise”
- (8) (p. 190, Exercise 5.42) $f(\overline{A}) \supset \overline{f(A)}$ should read $f(\overline{A}) \supsetneq \overline{f(A)}$
- (9) (p. 358, Exercise 7.24) The definition of $f(\theta)$ should be $\sin \theta - \frac{2\theta}{\pi}$.
- (10) (p. 362, Exercise 7.30) This is a repeat of the earlier Exercise 7.24.
- (11) (p. 406, Exercise 8.33) “Prove the above theorem” should read “Prove the above proposition.”
- (12) (p. 439, Exercise 8.63) This should say that “if $u : D^2 \rightarrow \mathbb{R}$ is harmonic, each point $x \in D^2$ has a neighborhood N_x on which $u = \operatorname{Re}(f)$ for some differentiable complex function f on N_x .”
- (13) (p.465, Exercise 9.11) This should read “Part a),” not “Part 1.”
- (14) (p 465, proof of Theorem 1.13) In the sentence beginning “This implies that,” in the sum $b_j = -\frac{1}{a_0} \sum_{k=0}^j a_k b_{j-k}$, the indexing should start at $k = 1$.