Errata for

Introduction to Analysis
with Complex Numbers
Irena Swanson

Irena Swanson
Purdue University
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- page 26, Exercise 1.4.1, part i): The two statements are logically equivalent.

- page 29, Exercise 1.5.5: insert "positive" before "integers".

- page 51, Proof in Example 2.1.6: The first two occurrences of "$C \subseteq A$" should instead be "$C \setminus A$".

- page 64, Exercise 2.3.10, ii): Replace the question mark with a period.

- page 122: Replace the first sentence of the second paragraph on the page with "As in Example 2.3.10, we can prove that the relation $\sim$ is an **equivalence relation** on $\mathbb{N}_0 \times \mathbb{N}_0$ with $\mathbb{N}_0$ as defined in this chapter."

- page 128, first line of Section 3.6: add "an" before "order".

- page 132, Theorem 3.6.7: The correct definition of order is: $[(a,b)] < [(c,d)]$ exactly when
$$(ad < bc \text{ and } bd > 0) \quad \text{or} \quad (ad > bc \text{ and } bd < 0).$$

- page 174, end of line 5: replace subscript c with subscript $c \in S$.

- page 190, Exercise 4.1.10: the domain of the function should be $\mathbb{R} \setminus \{0\}$, and so that exercise should read: Find a function $f : \mathbb{R} \setminus \{0\} \to \mathbb{R}$ be given by $f(x) = \frac{x}{|x|}$. Prove that $\lim_{x \to 0^+} f(x) = 1$ and that $\lim_{x \to 0^-} f(x) = -1$.

- page 206, Exercise 4.4.8, line 2: The x should be chosen from $A \setminus \{a\}$.

- page 207, Exercise 4.4.12: Remove the sentence "Let $f : [a, b] \to \mathbb{R}$ be a continuous function."

- page 217, Theorem 5.1.3 (10): The function f needs to be assumed continuous, not just at a. And then the conclusion is that f^n is continuous (not just at a). It is possible to not invoke the natural logarithm function as an example of a function that is not composable with itself; namely, we can use $f(x) = 1/(x - 2)$.

- page 219, Exercise 5.1.5: insert "smallest positive" before "angle".

- page 222, last line on the page: switch "minimum" and "maximum".

- page 267, Exercise 6.5.7 vi): Delete "Note that this usage is not fruitful."

- page 371, Exercise 9.2.2: The labels of the subparts should be i), ii), iii), iv) for consistency.