An Introduction to Proof via Inquiry-Based Learning
Errata

Dana C. Ernst

April 7, 2023

All errors listed below have been corrected in the version of the book that has been compiled from the current source. Page numbers below reference the print version of the textbook published by AMS/MAA Press.

If you think you have found any errors not already listed here, please submit an issue on GitHub or send me an email at dana.ernst@nau.edu.

- Page 54, Theorem 4.2: It would be nice if Item (ii) began "for all $k \geq 1$". This is an instance of an implicit universal quantifier for a conditional statement. In this case, the implicit universe of discourse in the set of natural numbers. However, including "for all $k \geq 1$," leads to a nice parallelism with Theorem 4.9. [Ben Ford]

- Page 56, Theorem 4.9: Item (ii) should start with "for all $k \geq a$,". [Ben Ford]

- Page 57, Skeleton Proof 4.10: In Item (ii), it should say "For all $k \geq a$, if $P(k)$ is true, then $P(k+1)$ is true." as opposed to "For all $k \in \mathbb{Z} \ldots$" [Ben Ford]

- Page 60, Problem 4.33: In Item (i), the final string is missing a leading one. It should be "011101 → 111101". [Ben Ford]

- Page 63, line 1: Missing the word "the" between "into" and "structure". [Dana C. Ernst]

- Page 82, line −1: "counterexample" should be replaced with "contradiction". [Dana C. Ernst]

- Page 105, Corollary 7.74: As stated the corollary is incorrect. However, including the hypothesis "$a \in \mathrm{rel}(a)$ for all $a \in A$" makes the statement true. However, I think it is incorrect to refer to this result as a "Corollary", so it has been renamed "Theorem". As a result, the reference to the result in Example 7.80 and the paragraph prior to Theorem 7.81 have been updated. [Blake Farman]

- Page 106, Example 7.80 and paragraph prior to Theorem 7.81: "Corollary 7.74" replaced with "Theorem 7.74."

- Page 158, line 1: Missing the word "look" between "you" and "at". [Roy St. Laurent]