

Errata for 3rd Edition

Many errors were fixed in preparation of the 3rd edition, but thanks in part to the careful reading by students and instructors, more have been revealed. I'm releasing occasional fixes to the html, pdf and print versions. These updates should not change the pagination in any major way.

If you use the html version, it will only contain errors listed in the first section below (and any undiscovered errors: please email me about them).

If you use a pdf or paperback version, check the copyright page for the printing date, which will tell you how far down this document you need to look for errors.

Page numbers match print and tablet pdf edition.

Errors not yet corrected

None so far.

Errors corrected for 5th printing: 1/7/21

In case you have a copy of the book printed prior to 1/7/21 (check copyright page), you will find the following errors that have since been corrected. Minor typos are not included below, unless they might cause confusion.

- Example 0.4.5: In the statement of part 3, and the solutions to parts 2 and 3, the functions are incorrectly called (f) instead of (g) or (h) to match the statement. Every function in part 2 should be (g) and every function in part 3 should be (h).
- Exercise 2.2.10: The first sequence should have y_1 , not y_2 in it. So it should read "...such that a, x_1, y_1, b is part of an arithmetic sequence...".
- Exercise 2.2.15: The second example of an acceptable license plate should be 123321 (or some other 6-digit plate with only numerals, instead of the 5 digits that are currently there). The following errors have not yet been corrected in the print/pdf versions (but are likely fixed online).
- Proof of Theorem 4.3.4: In Case 1, the function is bounded above by a horizontal asymptote at $k = 6$, not $f=6$.
- Example 5.1.1: The sequence as displayed is missing a 0 between the 1 and the $1/7$.
- Example 5.1.5: The solution includes the number 28, but it should be 26 (in three places).
- Example 5.2.7: In solving the congruence, the first line should be $8y \equiv 637 \pmod{5}$.

Errors corrected for 4th printing: 12/29/19

In case you have a copy of the book printed prior to 12/29/19 (check copyright page), you will find the following errors that have since been corrected. Minor typos are not included below, unless they might cause confusion.

- Exercise 0.3.1's solution (page 338) is wrong (although the WeBWorK problem works correctly). The solutions are $\{1, 3, 4, 6, 9, 10\}$, $\{1\}$, $\{4, 9\}$, and $\{3, 6, 10\}$.
- Exercise 0.3.2b is wrong. The set should be $\{n \in \mathbb{N} : n^2 - 5 \in \mathbb{N}\}$. As stated currently, the smallest element in the set is $\sqrt{5}$.
- Exercise 1.5.3-c (page 108): The question should be "How many 6-letter words can you make using the 5 vowels *in alphabetical order*"
- Exercise 2.1.1-a solution (page 357): subtracting 1 gives the familiar *square* numbers.
- Example 2.4.6 (page 173): The final answer should have 5^n , not 3^n in the formula (which makes it consistent with what is said above).

Errors corrected for 3rd printing: 6/15/19

Books printed prior to 6/15/19 (check copyright page) contain the following errors that have since been corrected.

- Exercise 1.7.2 (page 129): some of these could be made clearer. For (i), the apples are identical. For (j), assume each kid is allowed to choose one of the 4 varieties. For (l) the numbers are distinct. For (s), the teams are labeled (or have names). For (t), we are looking for *integer* solutions.
- Exercise 2.1.17-c (page 146): the p in $n = l + p$ should be a k , to make this consistent with the statement of the problem.
- Isomorphic Graphs definition (page 236): for f to be a bijection, we need $\{a, b\}$ to be an edge *if and only if* $\{f(a), f(b)\}$ is an edge.
- Page 238, second paragraph: "subgroup" should be "subgraph".
- Lemma 4.1.5 (page 240): The equation following this lemma is incorrect. It should be $\sum_{v \in V} d(v) = 2e$.
- Exercise 4.1.15 (page 246): The graphs must have at least two vertices for this to make sense.
- Page 269, Investigate!: To be a graph, it must be that E conflicts with C, and F conflicts with C and D, in addition to those listed.

Errors corrected for 2nd printing: 3/24/19

Books printed prior to 3/24/19 (check copyright page) contain the following errors that have since been corrected.

- Example 0.4.1-3 (page 39): the table used $g(x)$ instead of $h(x)$.
- Example 1.3.5-2 solution (page 85): The answer is 2162160, but in the explanation, this number was incorrectly written 2192190 in two places.
- Example 2.1.4 solution (page 141): The sequence of triangular numbers was missing 10 between 6 and 15.
- Page 149, second paragraph after Example 2.2.1: The recursive definition for a geometric sequence had a_n on both sides. It should be $a_n = a_{n-1} \cdot r$.