

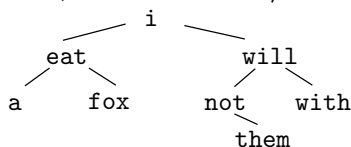
Errata for Essentials of Discrete Mathematics, 1/e, Hunter

This document contains a list of known errors found (by helpful reviewers) in *Essentials of Discrete Mathematics*, First Edition, by David J. Hunter. Thanks to all who have provided feedback. Please email dhunter@westmont.edu if you find further mistakes that should be listed here.

- Page 26, Exercise 21b:** Replace “the tautology from part (b)” with “the tautology from part (a).”
- Page 32, second sentence:** Replace “no predicate lies withing” with “no quantifier lies within.”
- Page 32:** The formula numbered 3 needs a closing parenthesis at the end.
- Page 59, Exercise 17:** Add the condition “with $x \neq 0$ ” to the end of the first sentence.
- Page 63, seventh line from bottom:** Replace “any two pairs of vertices” with “any two vertices.”
- Page 71, Exercise 3:** Replace the first sentence with the following: “A circuit is *simple* if it has no repeated edges. Draw a connected, undirected graph with seven vertices and no simple circuits.”
- Page 77, last sentence:** Replace “if the element is A ” with “if the element is in A .”
- Page 104, Example 2.42:** Add the condition “with $y \neq 0$ ” to the end of the first sentence and to the defining property of S . In the proof of transitivity, replace the last equation with $xq = yzq/w = ywp/w = yp$.
- Page 112, Exercise 27:** Define p by $p(k) = [k]$.
- Page 112, after Exercise 29:** Replace “Exercises 30–32” with “Exercises 30–36.”
- Page 113, Exercise 36:** The question should refer to Exercise 35 (not Exercise 32).
- Page 115, second to last sentence:** Replace “the only maximal element is 8” with “the maximal elements are 6 and 8.”
- Page 115, last sentence:** Replace “ $\{0, 1, 2\}$ ” with “ $\{1, 2, 3\}$.”
- Page 125, Exercise 20:** Swap the positions of 1000 and 1001 in the sequence.
- Page 129, third paragraph:** Replace “ $x_1 = y_1$ and $x_2 = y_2$ ” with “ $x_1 = x_2$ and $y_1 = y_2$.”
- Page 131, Definition 2.14:** Replace “any two pairs of vertices” with “any two vertices.”
- Page 160, Exercise 4:** Replace “ $n > 1$ ” with “ $n > 0$.”
- Page 172:** Replace “PHP Hypertext Protocol” with “PHP Hypertext Preprocessor.”
- Page 178, Theorem 3.2:** In the second line of the proof, replace “ $1 \cdot 2/3 = 1$ ” with “ $1 \cdot 2/2 = 1$.”
- Page 188, Exercise 8:** Replace “ $ns = (n - 1)s$ ” with “ $ns = (n - 1)ss$ ” in part **R** of Definition 2.
- Page 210, second line of Solution:** Replace “three” with “four.”
- Page 213, Exercise 14:** Replace “strings of length 4” with “strings of length 3.”
- Page 220, fifth line of Proof:** Replace “ $C(n - 1, j)$ ” with “ $C(n - 1, j')$.”
- Page 228, Example 4.26:** Replace “ $X = \{0, 1, 2, 3, 4, 5, 6\}$ ” with “ $X = \{1, 2, 3, 4, 5, 6\}$.”
- Page 229, Example 4.27, first line:** Replace k with n .
- Page 232, Corollary 4.3:** Replace “ $U = \lceil \frac{n}{r} \rceil$ ” with “ $|U| = \lceil \frac{n}{r} \rceil$.” In the proof, replace the displayed equation with “ $r(l - 1) = (\lceil n/r \rceil - 1)r < (n/r)r = n$.”
- Page 236, Exercise 13:** Replace “ $\{l_2, l_2\}$ ” with “ $\{l_1, l_2\}$.” In part (c), replace “point” with “points.”
- Page 239, Example 4.35:** Replace “Exercise 4.10” with “Example 4.10.”
- Page 270, Exercise 6:** Replace “Definition 4.6” with “Definition 4.8.”
- Page 343, Algorithm 5.22:** Replace “ $m \leftarrow (b - a)/2$ ” with “ $m \leftarrow (a + b)/2$.” Replace “while $b - a > \varepsilon$ do” with “while $b - a \geq \varepsilon$ do.”

Page 408, solution to 1.1/23: Statement p is logically equivalent to S .

Page 415, solution to 2.1/23:



Page 420, solution to 2.5/12: Swap a and b in the second-to-last Hasse diagram.

Page 420, solution to 2.5/20: For example, $1000 \triangleleft 1001$. (See errata above for page 125.)

Page 428, solution to 4.2/8b: Replace “1440” with “144.”

Page 428, solution to 4.2/8d: Replace “22” with “31.”

Page 429, solution to 4.4/1b: Replace “0.9844” with “0.4256.”

Page 429, solution to 4.4/2c: Replace “0.4256” with “0.9844.”

Page 429, solution to 4.4/5 is misnumbered. It should read “6. 4/16.”