Errors in first printing of first edition
Discrete Mathematics by Jerrold W. Grossman
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Right front endpaper, lines $^-6$, $^-5$, $^-4$: missing print in some editions. These lines should start $\max(x_1, x_2, \ldots, x_n)$; $\min(x_1, x_2, \ldots, x_n)$; and $\text{length}(w)$.

Left rear endpaper, line $^-4$: wrong font. The P should be in italic font, not math italic.

Right rear endpaper, line 2: "295" should be "299".

Page v, line 7 of first paragraph: add comma after "modeling".

Page vii, line 23: delete "rm".

Page xviii: should be blank; remove the running head.

Page xix, line 4: "Logic 1" should be "Logic 3".

Page xx: should be blank; remove the running head.

Page xxii, lines 3, 12, 19, 23, 25: "(optional)" should be in italics, including the parentheses (five instances).

Page xxiii, lines 11, 12, 17: "(optional)" should be in italics, including the parentheses (three instances). Note how line 6 stays as it is though, since that whole line is in Roman font.

Page xxiv, line 2: lower case "pigeonhole".

Page xxiv, lines 12 and 18: "(optional)" should be in italics, including the parentheses (two instances).

Page xxiv, line 23: this "(optional)" should be in roman, not italic.

Page xxv, line $^-4$: "(optional)" should be in italics, including the parentheses.

Page xxvi, line 3: the hyphen in "maxflow-mincut" should be an n-dash.

Page xxvi, lines 4, 5, 6: These three entries should be in color (including the numbers).

Page 41, exercise 3: this needs to be revised, since a proof of Fermat's conjecture was completed in 1994.

Page 41, lines 8–9: there should be no line break here.

Page 41, lines 14–15: move these lines right to align correctly.

Page 43, exercise 43: this needs to be revised, since a proof of Fermat's conjecture was completed in 1994.

Page 57, lines 5–6, 8–9, 12–14, and 19–22: these lines need to move about 3mm to the right, so that everything lines up straight.

Page 69, Figures 1.2 and 1.3: these two figures have a faint rectangle drawn around them that should not be there.

Page 95, line $^-12$: "0 0" should be "00" (no thinspace between the two zeros).

Page 96, matrix at bottom of page: "1957" should be "1959".

Page 114, line 6: insert "that" after "way".

Page 121, exercise 13: "natural numbers" should be "sets of natural numbers".

Page 123, exercise 24f: the second $P(A)$ should be $P(B)$.

Page 134, Example 9 solution, line 1: "to to" should be "to".

Page 135, line 14: "Euler's constant" should be "the irrational number".

Page 139, line $^-8$: "m" should be in just plain math italic font, not bold math italic.

Page 144, exercise 29, line 3: "down" should be "up".

Page 147, line 19 (first math display): there is too much space surrounding the "$\in$"; it should just be the usual automatic thinspace around math operators.

Page 172, Figure 3.14: the figure is placed too low (it runs into the caption); move it up about 2mm.

Page 179, Figure 3.15: the figure is placed too high; move it down about 2mm.

Page 215, line 6: there is too much space between "1318" and the concluding period—close it up.

Page 225, exercise 37, line 8: "5 and 3" should be "3 and 2"

Page 244, exercise 28: this needs to be revised, since a proof of Fermat's conjecture was completed in 1994.

Page 249, line 3 of the procedure: "number" should be "word".

Page 269, line $^-6$ and following: this needs to be revised, since a proof of Fermat's conjecture was completed in 1994.

Page 320, Figures 5.1 and 5.2: these two figures should have the same coloring (and size, too, really), since they represent two positions of the same game. The ovals should probably be blue (30% color) in both cases.

Page 336, line $^-4$: the parentheses should be regular size, not enlarged.

Page 336, line $^-4$: there is not enough space surrounding the "<"; it should just be the usual automatic thinspace around math operators.

Page 361, line 18: paragraph needs usual indentation.

Page 369, last paragraph should be in roman font.

Page 394, exercise 34j: "flushes" should be "four-of-a-kinds, flushes".

Page 431, line $^-8$: "left" should be "right".

Page 440, exercise 25a: $C(2n-1, n-1)$ should read $nC(2n-1, n-1)$.

Page 449, lines $^-3$ and $^-2$: seven of the subscripts are too far removed from the P. Thus it appears $P_{\ 2}$, rather than P_2. There are four of these involving P_2 on line $^-3$, two involving P_2 on line $^-2$, and one involving P_3 on line $^-3$.

Page 454, line 16: display should end with a comma, not a period.

Page 487, line $^-12$ (math display): the parentheses should be of regular size, not enlarged.

Page 489, lines 4–7: this display extends too far to the right (into the margin). It doesn't need to, since if these four lines are shifted about 4mm to the left, then everything will be fine.

Page 531, caption for Figure 8.8: the caption extends a little too far to the right; break the line before 0 and transfer the 0, 3 to the second line of the caption.

Page 531, line 1: "Analogous to Theorem 2" should be "Analogous to Theorem 1".

Page 562, Figure for EXERCISE 23, part (c): the vertical line running up and down the middle of the figure should be removed. In fact, the correct art for this location is what currently appears (incorrectly) in the book on page 850, as the *answer* to Exercise 23(c).

Page 564, figure labeled EXERCISE 33 doesn't work: the black numbers are hidden by the blue lines. There have to be breaks in the blue lines so that the numbers can be seen.

Page 587, math display: there is too little vertical space below the display; increase it about 2mm and decrease the space about it accordingly.

Page 588: several of the pairs of graphs are missing their part labels: (a), (g), and (l).

Page 597, line 2: "Theorem 5" should be "Theorem 4".

Page 650, Figure 9.13: the figure is too far to the left; move it about 5mm to the right.

Page 665, line $^-8$ (and extending below into line $^-7$): there is a big white space where printing should be.

Page 690, Table 9.1: remove the period following "9.1".

Page 701, Figure 9.33: the blue 1 in the extreme lower left is too high; it should be lowered about 2mm so that it looks as if it is labeling the circle with the 0 in it rather than labeling the vertical line (the similar thing at the bottom, middle of the picture is correctly done).

Page 733, figure for exercise 11: there needs to be the number 1 between the f and the g in this figure, giving the length of that line in the graph

Page 744, line 14: spacing is uneven. There need to be a little more space after the comma following "(21, 20)", and the line needs to extend its full length (the final comma on this line should be directly below the final comma on the line above).

Page 751, line 3: move "remove" a little to the left, so that it lines up exactly evenly with "**for**" on line 4.

Page 751, line 19: "labeleing" should be "labeling".

Page 751, line 32: insert the following line, indented to the same depth as line 20 ("**if** $L = \ldots$"): "erase all labels".

Page 781, reference 306: publication date should be 1984.

Page 782, reference 327: author names should be in alphabetical order (which would require repositioning this entry and changing all the numbers).

Page 784, answer for exercise 1.1.7(b): The symbol $\iff$ (is logically equivalent to) in the last column should be $\leftrightarrow$ (if and only if).

Page 788, answer for exercise 1.2.3(d): The plus sign should be a minus sign.

Page 789, answer for exercise 1.2.7(d): "Pam" should be "Pamela".

Page 797, answer for exercise 2.3.7(b): $\{0, 4\}$ should be $\{4\}$.

Page 797, answer for exercise 2.3.7(c): $\{3, 4, 5, \ldots\}$ should be $\{0, 4, 5, \ldots\}$.

Page 802, answer for exercise 3.2.31(c): should be the empty set

Page 804, answer for exercise 3.3.9(b): upper left corner vertex needs label 3.

Page 805, answer to exercise 3.3.25: the second part should be labeled (b), not (f).

Page 833, answer for exercise 6.2.7: should be \$1,500,000

Page 849, top figure (it's really part of the answer for exercise 8.1.35, part (b)): this art needs to be redrawn. All of its lines should be the same thickness; as it stands, some are too thin and some are too thick. All of them should be the same thickness as in the figure immediately following it, part (c).

Page 855, answer to exercise 8.3.27d: One picture is missing, namely a digraph with a pair of edges between the same pair of vertices, one in each direction.

Page 859, answer to exercise 8.5.9(b): The top middle vertex needs the label 3.

Page 850, figure for exercise 8.2.23(c): this figure does not belong here. The correct figure is shown in the solutions manuals. Note how the lines should be "pulled away" at each vertex of the hexagon.

Pages 889–908 (index entries):

Abstraction, levels of: xvi should be xv

Answers to exercises: xvii should be xvi

Computer science: xiv should be xiii

Continuous mathematics: xiv should be xiii

Dictionary: xvi should be xv

Discrete mathematics: xiv should be xiii

e (Euler's constant): entry should read "e (base of natural logarithm)"

Exercises: xvi should be xv

Exercises, answers: xvii should be xvi

Exercises, solutions: xvii should be xvi

Index: xvi should be xv

Justify: xvii should be xvi

Levels of abstraction: xvi should be xv

Mathematicians: xv should be xiv

Mathematics, continuous: xiv should be xiii

Mathematics, discrete: xiv should be xiii

Precision: xv should be xiv

References: xi should be xii

Solutions to exercises: xvii should be xvi

The following corrections are in the solutions manuals.

Exercise 1.2.7(d): "Pam" should be "Pamela".

Exercise 1.2.16(e): "y^2 should be "$y \cdot y$".

Exercise 1.3.7: The inequality signs are all backwards; each $>$ should be $<$.

Exercise 2.3.7(c): $\{0, 3, 4, 5, \ldots\}$ should be $\{0, 4, 5, \ldots\}$.

Exercise 3.1.11(a): At the time the manual was written, Prince William had no children. That is no longer true. One could let q be, for example, the explorer Sir Francis Drake.

Exercise 3.2.31(c): Replace solution with the following. "Since x mod 7 is always a number between 0 and 6, inclusive, x mod 7 can never equal 8. Therefore this inverse image is the empty set."

Exercise 3.3.7a: $y_1 \neq y_1$ should be $y_1 \neq y_2$.

Exercise 3.3.8: Replace the last part of the last sentence, starting with "subset" with the following: "... subset of $\{1, 2, 3\} \times \{1, 2, 3\}$, which has cardinality $3 \cdot 3 = 9$, there are $2^9 = 512$ relations."

Exercise 4.5.1(b): "1089" should be "1098".

Exercise 5.1.10(a): second sentence should read "If d is a digit and α is an unsigned integer other than 0, then αd is an unsigned integer."

Exercise 5.3.17b, line 2: "If" should be "It"

Exercise 6.1.7, last line of part c: should read $n^0 = 1$

Exercise 6.2.7: add a period after the calculation shown, and then the sentence "Therefore the maximum deposit is $15 \times \$100{,}000 = \$1{,}500{,}000$."

Exercise 6.3.1(b): "two f's" should be "two t's"

Exercise 6.3.5(b): "repetition" should be "repetitions".

Exercise 7.4.8(a): "d_0" should be "d_1".

Exercise 8.2.5b: "four times" should be "twice".

Exercise 8.2.8: "to obtain" in the next to last sentence should be "we obtain".

Exercise 8.3.27d: One possibility is overlooked, namely a digraph with a pair of edges between the same pair of vertices, one in each direction.