
Errata for DAM 1/e and 2/e

July 16, 2002

Notes:

1. This list is in three parts: Errors in the text itself, errors in the problem sets at the end of each section and errors in the Hints and Answers on pages A7 to A40.
2. entry1 \rightarrow entry2 means replace entry1 by entry2.
3. L means Line and a – after L means to count from the bottom of the page. Displays are usually (but not always) counted as one line. In problems the counting is from the top or bottom of the problem or problem part.
4. [...] designates a problem number.
5. Page numbers in **boldface** refer to errors which have been corrected in the second edition; in the Hints and Answers boldface for problem numbers and elsewhere refers to errors which have been corrected in the second edition.
6. Lengthy corrections (really, rewritings for the next edition) are not included here.

ERRORS IN TEXT (BUT EXCLUDING PROBLEM SETS AND HINTS AND ANSWERS)

Inside front cover, L-11: 193 \rightarrow 192

v, L10: me \rightarrow we

vi, L-4: to \rightarrow do

xiv, L-8: Different \rightarrow Difference

xvi, L7: Function \rightarrow Functions

xix, L-4: 207 \rightarrow 201

CHAPTER 0

9 L11: numbers \rightarrow number

9 L14-15: *nonnegative numbers* \rightarrow *nonnegative numbers* or *natural numbers*

9 L 22: the natural or counting numbers \rightarrow alas, sometimes also called the natural numbers

25 L-3: positive \rightarrow nonnegative

28 L17: nonzero \rightarrow positive

51, Fig. 0.12, L-1: $r = i \rightarrow r = 1$

53, L16: Delete ‘English’

CHAPTER 1

81 L10: Chapter 0 \rightarrow the Prologue

90 L-2: after true, \rightarrow true, and there is no **else** clause,

91 L5: delete this line with its **else** clause

91 L7: true, \rightarrow true, or there is an **else clause** and B_n is false,

91, Fig. 1.6: else \rightarrow **else**

- 95** L-6: Delete “single”
96 L-18: $a_n \rightarrow a_N$
99, Alg. 1.7, L4: \$s \rightarrow Money
105, Alg. 1.9, L-2: series \rightarrow sequence
106, Fig. 1.10: Delete last “**return**”
114 L-7: because. For \rightarrow because, for
114 L -1: Example 2 \rightarrow Example 1
120, Alg. Max2, L-1: *Max* \rightarrow Max
124 L-11: $< \rightarrow \leq$ (twice)
 L-10: $< \rightarrow \leq$
127, Alg. 1.12, L2: $w_1 \rightarrow w_i$
 L-2: $w_1 = w \rightarrow w_1 \geq w$
 L-1: $w_n \leq w \rightarrow w_{n-1} < w$

CHAPTER 2

- 139**, L-17: all ready \rightarrow already
149, Fig 2.7: Switch “(c)” and “(d)” labels
171 L-18: Example 5 \rightarrow Example 4
184, (1): Lower limit of second summation should be: $k = 1$
 Alg. 2.3: Delete “**endalg**”
186 L4: $> \rightarrow \geq$

CHAPTER 3

- 202** L-18: he \rightarrow the
203, Fig 3.4, top graph. v_5 should be black
204, Fig. 3.6: In (b) of caption delete “with a loop”
208 L-4: maximally \rightarrow maximal
216, L1: Delete ‘simple’
 L11: Add **endfor** under second **for**
223, matrix at bottom: Third row missing; should be: 0 1 0 0 0
229 L24: of (b) \rightarrow or (b)
230 L-11: Delete parenthetical remark
232, Alg. 3.4, L6: $E \rightarrow E'$
233 L-5: The “two shades of color” aren’t there in the first edition and they are red and grey in the second edition.
234 L19: $G_2 \rightarrow G_1$
261, Alg 3.10, L7: $v \rightarrow u$
268, Alg 3.11, L-2: Insert “*T*” after “Output”
273: Figure 3.33 printed upside down

CHAPTER 4

- 292** L2: 5.8 \rightarrow 5.9
311, Fig. 4.8: Colored arrows from 1 and 3 in L3 to 4 in L4 are missing
312, Thms. 1 and 2 Extended: Change to: Let n and k be integers. Then Eq. (1) is true whenever $n \geq 0$ and Eq. (2) is true whenever $n > 0$.

- 322** L15: evaluation \rightarrow evaluate
 332 L3: [30] \rightarrow [31]
 L6: [23] \rightarrow [24]
 L7: [24] \rightarrow [25]
 337 L2 of Eq.(5): $|A \cap B| \rightarrow |A \cap C|$
 338 L-12: $\sum_{|S|=k} \rightarrow$ The sum of N 's with k distinct subscripts (actually, slightly different wording put in DAM2)

CHAPTER 5

- 373 L10: 8.8 \rightarrow 8.9
389 L-9: $ar^{n-1} \rightarrow ar^n$
392 L-9: $d(Bb_{n-1}) \rightarrow d(Bb_{n-2})$
394 L4: $r_n \rightarrow r^n$
 396, Eq. (12): $r_2 \rightarrow r_1$ (twice)
 403 L-8: equations \rightarrow equations in this section
404 L-5: $5n \rightarrow 2n$
 405 L-7: a solution \rightarrow a (nonzero) solution
409 L6: $\frac{1}{2} \rightarrow -\frac{1}{2}$
 L7: $\frac{1}{2} \rightarrow -\frac{1}{2}$
 L8: $1/2 \rightarrow -1/2$
413 L-12: 1 $\rightarrow n$
 L-10: 1 $\rightarrow n$
 422, Alg. 5.2, L4: **to 0 step -1** \rightarrow **downto 0**
 426, Eq. (4): $n-1 \rightarrow n$ (twice)

CHAPTER 6

- 440** L25: Section \rightarrow Sections
445 L9: Pr(1) \rightarrow Pr(2)
 Pr(2) \rightarrow Pr(3)
467 L16: $\frac{7}{36} \rightarrow \frac{6}{36}$
470 L10: answer \rightarrow answers
 500 L-6: (7) \rightarrow (8) and (8) \rightarrow (9)

CHAPTER 7

- 528** L-5: 0.7 \rightarrow 0.5
 548 L2: Insert 'for' after 'Table' and put parentheses around $R \implies S$ and around the entire hypothesis (right parenthesis before last \implies). [See Eq. (14), p. 547.]
 581 L6: $*j \rightarrow *3$
 586 L11: from $P(n-1) \rightarrow$ from $P(n-1)$
587 L15: (q) \rightarrow (9)
602 L1: 7.3 \rightarrow 7.4
 L-6: **F** \rightarrow F
 L-4: **output** \rightarrow **print**
 L-3: **output** \rightarrow **print**

CHAPTER 8

651 L-2: like the \rightarrow like the second for-loop of the
 701, Alg. 8.4, L3: to \rightarrow **to**

CHAPTER 9

742 L6-7: first two parts \rightarrow second part

749 L-10: Definition 1 \rightarrow Definition 2

754 L-1: (9) \rightarrow (10)

775 L5: $s_k \rightarrow s^k$

781 L-5: $a_{2km} \rightarrow a_{2mk}$

782 L5: $a_{332} \rightarrow a_{323}$

788 Fig 9.6. The curve should not change to concave up as shown. The correct inflection point is at $x = \pi$, at the end of what is drawn.

789 L22: Delete second instance of “of an approximation”

791 Alg. 9.3, L4: $+b_k \rightarrow -b_k$

EPILOGUE

805 L14: SPANTREE \rightarrow SPANTREE

810, Fig. E.4b: $L1 \rightarrow L$

811 L8: filled trees \rightarrow filled decision trees

L9: filled tree \rightarrow filled decision tree

817 L-7: 820 \rightarrow 818

821 L-5: Procedures \rightarrow procedures

APPENDICES (except Hints and Answers)

A5, L2: 247 \rightarrow 249

INDEX

I1, Col 1, L-12: back \rightarrow front

I5, Col 2: External path length: 813[15] \rightarrow 814[15]

Col 3: Add: Front end recursion, 109[8]

I6, Col 1, L16-17: 693 [52] \rightarrow 692 [44]

I7, Col 3: Internal path length: 713[15] \rightarrow 814[15]

I9, Col2, L-14: 13 \rightarrow 9

I10, Col 1: Add: Path, simple, 206

I11, Col 2: Under “Recursion” add: front end 109[8], tail end 109[8]

Col 2, L-10: **2** \rightarrow **3**

I12, Col 2: Add: Simple path, 206

I13, Col 1, L24: monotone \rightarrow monotonic

L-13: 777 \rightarrow 767

L-5: 55 \rightarrow 50

113, Col 2: Add: Tail-end recursion, 109[8]

Inside back cover, Section 5, L-2: Permutations \rightarrow Permutations
 Inside back cover, Section 8, L1: Add: Left null space \mathcal{N}_{A^T} 675 [20]

ERRORS IN PROBLEM SETS

CHAPTER 0

- 20, [12d]: you will get a \rightarrow your graph will include a
 36 [9j,k]: “ n an integer” refers to these parts also.
36 [10] L3-4: equality \rightarrow inequality
 47 [2c] $x^4 \rightarrow x^3$
 47 [4b]: $i|3$ or $i|5 \rightarrow 3|i$ or $5|i$
 48 [6]: Schwartz \rightarrow Schwarz
 48 [18] L6,7: All unions except the first should be small symbol as on page 11;
 48 [11b]: $i * j$ just means ij .
 [18] L6,7: all intersections except first should be small symbol as on page 12.
65 [11f]: it \rightarrow its
 65 [12] L-1: n \rightarrow n.
 66 [3] L2: smallest \rightarrow smallest positive

CHAPTER 1

- 88 [5] L-1: 7 \rightarrow 2
98 [16] L3: “X,” \rightarrow “X”,
99 [29] L-3: Delete “see Section 1.5”
 109 [3] L2: smallest \rightarrow smallest nonnegative [slightly different changes made in DAM2]
 [3a] L1: $mn \rightarrow mn$ if $m, n > 0$
 L3: 3 \rightarrow 4b
 119 [10]: “prod” needs to be a parameter of procedure MR’ in order to be passed from the main algorithm down to subcalls.
120 [16] L1: the following attempt \rightarrow MAX3, an attempt
121 [20]: Replace “else return” with “return” flush left with the line above it.
 136 [8c] L4-5: get an upper bound on the worst \rightarrow determine the average
 L-1: 99 \rightarrow N
 [10a] L2: $w_i \rightarrow w_1$

CHAPTER 2

- 152** [3] L2: $> \rightarrow \geq$
160 [2]: $n > 1 \rightarrow n > 2$
 At end of first sentence add: assuming the case $n = 2$
 In second sentence delete “initial”.
 160 [12]: odd positive integer \rightarrow odd integer ≥ 3
 161 [20]: In recurrence, $n > 0 \rightarrow n \geq 2$

- 161 [23] L1-2: positive integer $\leq n \rightarrow$ integer from 2 to n
 177 [14] L-3: $P \rightarrow N$
 177 [16]: Replace first part of third sentence by: If you want to attempt a proof of $P(n)$ by induction, with inductive step $P(n) \implies P(n+1)$, explain how to use ...
 183 [4] L-2: Put parentheses around $n+1$
 190 [2]: Add after second sentence: Also color the platform under the largest ring differently from that ring, color the second platform differently from the first platform and the third platform the same as the first.
 L6: ring \rightarrow ring or platform
 Replace the last two sentences by: Prove that these rules force a unique sequence of moves that result in a winning game.

CHAPTER 3

- 201 [9a]: Then \rightarrow Than
 212 [8]: Delete parentheses around first Hint sentence.
 226 [15], L2: vertices \rightarrow distinct vertices
 238 [5b] L2: ... 11. \rightarrow ... 11 starting at vertex 0.
 239 [14a] L1: Given \rightarrow Give
 239 [16] L4 digraph \rightarrow connected digraph
 249 [17] L4: **for**-loop \rightarrow **for**-loop inside the **repeat** loop
 255 [2] L3: $u = v \pmod 3$ or $u = v \pmod 5 \rightarrow u \equiv v \pmod 3$ or $u \equiv v \pmod 5$
 278 [6] L2: Delete "starting at node v_1 "
 279 [17] 3: tree \rightarrow free tree
 [17a]: four \rightarrow five
 282 [6d] L-1: are not in any component \rightarrow may not be in any strongly connected component
 283 [13] L8: Delete "nontrivial"
 L9: are not counted \rightarrow do count
 284 [21] L1: graph \rightarrow digraph
 L2: cycle \rightarrow directed cycle
 [23] Fig. (ii): Add weights 3 on both diagonal edges
 L4 of Alg: $v_0 \rightarrow \{v_0\}$
 285 [24]: Follow the first red square by 'Step 1:' and the second red square by 'Step 2:' and in Line 3 of (iii) replace 'i)' by 'Step 1'.
 287 [40] L5: calculation \rightarrow usual linear representation
 L6: amounts \rightarrow (without parentheses) amounts
 [42]: [31], Section 3.8 \rightarrow [31, Section 3.8]

CHAPTER 4

- 294 [11]: "11" should be in color
 315 [13] L2: are \rightarrow is
 324 [24] L3: $\frac{x}{y} \rightarrow \frac{y}{x}$
 332 [6] L3-5: You can ... Do \rightarrow So analyze
 333 [17]: [5] \rightarrow [16]
 342 [22] L-4: $\in \rightarrow \subset$
 344 end of first paragraph. Actually, its $1/(n+1)$ of the way between 1 (best) and $N-n+1$ (worst). But best to state it more simply as $N+1/overn+1$. The $1/100$ in the next line becomes approximate.
 Easiest proof, which can perhaps be added to the problems:

$$\begin{aligned}
\text{Av rank} &= \frac{1}{ChNn} \sum_{r=1}^{N-n+1} r \binom{N-r}{n-1} \\
&= \frac{1}{ChNn} \sum_{r=1}^{N-n+1} Chr1 \binom{N-r}{n-1} \\
&= \frac{1}{ChNn} \binom{N+1}{n+1}
\end{aligned}$$

by a VanderMonde type convolution, but instead of changing how many items are picked from the first k , pick where the k th element appears.

- 363 [18] L1: Generalized \rightarrow Extended
 L2: Delete "using the Product Rule"

CHAPTER 5

- 377 [6c]: (6) \rightarrow (7)
 379 [28] L2: $\in \rightarrow \subset$
 [30b] L3: (7) \rightarrow (5)
385 [8b]: .1 \rightarrow .11
386 [20a] L-1: $r_1 \rightarrow r_0$
 [22] L1: $F_n \rightarrow F_i$ (twice)
 nth \rightarrow ith
 [23] L6: $P_0 \rightarrow P = P_0$
390 [17] L2: 1 \rightarrow 2
 402 [15] L2: $v_1 \rightarrow v_0$
 [20] L2: (10) and (11) \rightarrow (11) and (12)
402 [17] L-1: in front \rightarrow to the left
 402 [19] L2 should be Example 8
 403 [27b] L2: $|b| < |a| + |c| \rightarrow |b/a| < 1 + (c/a)$ and $|b/a| < 2$
403 [29] L-3: to \rightarrow **to**
 407 [11] L1: polynomial \rightarrow monic polynomial (leading coefficient 1)
407 [22]: roots \rightarrow zeros
 414 [12] L1: [18] \rightarrow [23]
 [14] L2: $f(x) \rightarrow f(k)$
 420 [22]: "22" should be red; "a" should be black.
 [23] L3: [17] \rightarrow [23], [18] \rightarrow [24]
 432 [32] L1: $n \geq 0 \rightarrow n \geq 1$
 434 [6a] l-2: of \rightarrow or
 435 [9] L1: constants \rightarrow integers
 436 [20]: $k \rightarrow c$ throughout problem except where it is the upper limit of a summation.
 437 [24]: for any node with two children \rightarrow at each internal (non-leaf) node
 [24] L2-5: down ... child. \rightarrow left from that node is one edge longer than the longest path going right. For instance, if a node has one child, it must be a left child and a leaf.
 [26] L3: 1 $\rightarrow p^n$
 L4: 0 for $n > 0 \rightarrow q^n$ for $n \geq 0$
 [28] L2: 1 $\rightarrow -1$ (twice)

CHAPTER 6

477 [13d], L2: 10% \rightarrow $.1n$
 L4: $10 \pm 1 \rightarrow 10 \pm .1n$

477 [14]: Change all occurrences of l to λ

478 [29] L3: 6 \rightarrow 7

492 [25] L1: Section \rightarrow Sections

493 [48] L2: $c\sigma_X \rightarrow |c|\sigma_X$

503 There is no equation (8) in this section, so equation (9) on this page and (10), (11) are numbered one higher than they should be.

504 [2a] L3: Should read: $\Pr(X_i=a, X_j=b) = \Pr(X_i=a)\Pr(X_j=b)$ for $a = 0, 1, b = 0, 1$.

505 [5] L4: **exit** \rightarrow do nothing

L4,5: $< \rightarrow \leq$ (on each line)

problem number is missing from [11]

516 [30] L3: $p \rightarrow P$ (twice)

519 [6] L2: symmetric \rightarrow symmetric around 0

CHAPTER 7

558 [5e]: Solution needs proof by contradiction so [5e] should appear after [6].

579 [7c]: Delete hint

[8]: Add at end: and fact that if $a + b = 1$ and $ab = 0$, a and b are complements of each other.

[10]: Karnaugh maps \rightarrow DNF

579 [8] L3: (viii) \rightarrow (vii) and (viii)

606 [1d] L2-5: Replace with: *Hint*: Use fact that truth table for expression with P, Q and \iff must have 0, 2 or 4 T values.

607 [6] L3: [4] \rightarrow [1] and [4]

[9] L1: [13], Section 7.6 \rightarrow [13, Section 7.6]

[9]: Subscripts on quantifiers in diagram should be full size letters.

CHAPTER 8

622 [8]: Both matrix brackets should be extended.

639 [22] L1: 8.2 \rightarrow 8.1

665 [23] L1: be \rightarrow be invertible and

675 [22] L1: $\{\mathbf{v}_1 \rightarrow S = \{\mathbf{v}_1$

691 [24] L3: 8 \rightarrow 9

[30] L6: $v \rightarrow \mathbf{v}$

705 [14] L2: 12 \rightarrow 13

716 [2]: round \rightarrow toss

[4] L-4, -3: Show ... probability \rightarrow Show that the long-range probabilities asserted there

L-2: is \rightarrow are

717 [13c]: Add down arrows on two vertical edges

719 [2] L4: *form* \rightarrow *form (except perhaps for different numbers of zero rows)*

720 [25] L4: $\{v\} \rightarrow \{\mathbf{v}\}$

CHAPTER 9

735 [2d,e]: $i \rightarrow n$ (once in each part)

735 [3] L2: $] [\rightarrow]/[$

744 [1a]: $6^3 \rightarrow 6n^3$

- 755 [4]: $a_n \rightarrow a_{n+k}$
 $a_{n-1} \rightarrow a_{n+k-1}$
756 [6] L-2: $a_{n-k} \rightarrow a_{n+k}$
 770 [7] L3: item \rightarrow term
 771 [14c] L1: n from 0 to $N \rightarrow a$ from $n+1$ to N
772 [26]: $i = 1 \rightarrow k = 1$
 772 [25d]: Change limits to: $n = k$ to N
794 [9]: $j \neq k$ missing under \sum
 [12a]: Add: Start with $x_1 = x_2 = 0$.
 [13] L6: (i) \rightarrow (a)

EPILOGUE

- 812 [1-2]: The solutions in the manual are for a more subtle radix sort that starts with the *least* significant digit (and saves a lot of storage). [no change in DAM2]
 [5] L1: [23], Section 3.7 \rightarrow [23, Section 3.7]
 [7]: SPANTREE \rightarrow SPANTREE
814 [16]: Delete "Eq." twice
 [21] L2: binary \rightarrow decision
 [25] L2: binary \rightarrow decision
 [26] L2: best \rightarrow worst
829 [1b] L1: from \rightarrow for
 [2] L3: SSTOH \rightarrow STOH
830 [3] L4: pole \rightarrow pole (others can move either way)
 L7: set \rightarrow minimum set
 L8: number \rightarrow minimum number
832 [9] L1: [7] of Section 1.6 \rightarrow [7, Section 1.6]
 [10] L3: $O(f) \rightarrow O(f_n)$
 [10] L2: $g_n \rightarrow 0 < g_n$
 832 [11] L5: *set* \rightarrow set
 833 [11d] L1: b) \rightarrow a)
 834 [15d] L2: consecutive \rightarrow constructive

ERRORS IN HINTS AND ANSWERS (References are by page number and section number)

A7

- 0.1 [3c]: integers \rightarrow integers > 2
 [10a]: Delete \bar{r} and put bar over R which follows it.
 [16]: $m - n \rightarrow m + n$

A8

- 0.4 [10e]: $= \rightarrow +$
 [40]: limit is $-\infty \rightarrow \lim_{x \rightarrow \infty} \log_b x = -\infty$
 0.5 [5e]: $-11 \rightarrow -8$
 [19]: $\cap \rightarrow \wedge$ (twice)

0.Supp [10]: Replace by: $n2^{n-1}$; correct but less helpful: $\sum_{k=1}^n kn!/[(n-k)!k!]$

A9

1.3 [27]: $Sm \rightarrow S m$
 [28d]: $2 \text{ in } m \rightarrow 2 \text{ equal to or less than } m$
 $i \rightarrow k = 2^i$
 $x^{m-2} \rightarrow x^{m-k}$
 less than $m - 2^i \rightarrow \text{in } m - k$

A10

1.5 [3]: $INT \rightarrow \text{INT}$
 [7]: **return** \rightarrow **return** x, y
 [8]: After **8.** add **a)**
 [8] L2: $t(j) \rightarrow T(j)$
 [8] L2: Under “max” add: $i \rightarrow j$

A11

1.5 [17b] L2,3: $dim \rightarrow d|m$ (once on each line)
 1.6 [16]: $2) \rightarrow 2)$.

A12

1.Supp [3b]: **return** \rightarrow **return** a_i, a_{i-1}, \dots, a_0

A13

2.3 [3]: $a_i \rightarrow s_i; a_j \rightarrow s_j$
 [21]: $2(n-2) \rightarrow 2^{n-2}$

A14

2.Supp [11a]: Delete \sim in summation index
 [11c]: 2^{m+1} terms $\rightarrow 2^m$ terms

A15

3.1 [3]: $10 \rightarrow 12$
 3.2 [1b]: First $\{v, y\}$ should be $\{u, y\}$
 [3b]: Count should be 4 for 2 edges; 10 for 3 edges.
 [24]: Delete “ $b >$ ”
 3.3 [18] garbled last sentence should say differs only if some vertex has no nonnull path returning to it.
 3.3 [21]: except for zeros on the diagonal \rightarrow (even on the diagonal)
 [23]: exit implies leaving the loop, which is wrong. Replace answer by:
 After “for $i = 1$ to n ”, skip inner loop if row i is all zeros; after “for $j = 1$ to n ”, if column j is all zeros, skip body of inner loop.

A16

- 3.4 [2a]: 125638762341 \rightarrow 125623678341
 3.5 [17]: digraph \rightarrow graph
 3.7 [6]: Bipartite \rightarrow BIPARTITE
 [7]: Bipartite \rightarrow BIPARTITE

A17

- 3.8 [18]: Delete " $N_n H_n$ or"
 [30]: 13 \rightarrow 16

A18

- 3.Supp [21a]: No, \rightarrow No
 [37]: of degree \rightarrow of degree 1 as degree
 4.2 [3]: 400 \rightarrow 23
 4.4 [9]: $P(8, 5) \rightarrow C(8, 5)P(8, 5)$

A19

- 4.4: Answer to **15** is really answer to **17**; answer to **16** is really answer to **18**;
 answer to **20** is really answer to **15**.
 Insert answer to **21**: $2^{\binom{n}{2}}, 3^{\binom{n}{2}}$
 4.6 [3]: $(1 + 2)^3 \rightarrow (1 + 2)^N$

A20

- 4.8 [20]: $(9 - k)^m \rightarrow (10 - k)^{m-1}$
 [25]: 57 \rightarrow 51
 4.9 [5]: go before \rightarrow be **for**
 down to \rightarrow **downto**
 [36c]: $(n - k)! \rightarrow k!$

A21

- 5.3 [8]: 1.52 \rightarrow 1.62
 [9]: $P_n \rightarrow P_N$
 [11]: Exponent n should be N
 [16]: Exponent m should be n

A22

- 5.4 [13]: $a_2^n \rightarrow a_n^2$
 5.5 [8, 24]: Delete \bar{r} wherever it appears and put a bar over the character after it.
 [24]: [9] \rightarrow [8]
 5.6 [9b]: $n \rightarrow n + 1$
 5.7 [2c]: $9/2 \rightarrow 2 \cdot 3^n$

A24

6.3 [21]: Put second answer (2/3) at beginning.

A25

6.3 [29c]: $l_{64} \rightarrow l_{65}$
 $l_{65} \rightarrow l_{66}$
 [44b,c]: Answer to b) should be answer to c) and vice versa.
 6.4 [11]: .090 \rightarrow .091
 [13c]: .382 \rightarrow .383
 [34] L3: $((\rightarrow ($
 $k/36 \rightarrow n/36$

A26

6.5 [9c] L3: $(222,148,111,48)/529 \rightarrow (114,76,57,24)/271$
 $-85/529 \rightarrow -43/271$
 [35]: Insert “=1” after each X_i and X_j .
 [41]: $X(e) = x \rightarrow X = x$
 [49]: Delete \bar{r} wherever it appears and put a bar over the character after it.
 [49]: Last $-$ should be $+$.
 [51]: Delete material up to the semicolon; on L2: $X_1 \rightarrow X_i$
 6.6 [4a]: Add at beginning: best 2, worst $2n - 2$, average
 [4b]: Add at beginning: best $n - 1$, worst $2n - 3$, average
 [19]: $R = 3 \cap Y = 1 \rightarrow R = 3 \cap Y = 0$
 [21b]: Should be: $E(R) = (n - k + 1)/2$ so $E(J) = E(R) + E(Y) - (n + 1)/2$
 [25] L3: iterations \rightarrow tests

A27

6.7 [5]: Subscripts should be 1, 2, 3.
 [19a,b]: $q'p \rightarrow qp'$ (three times)
 [24]: Delete \bar{r} wherever it appears and put a bar over the character after it.
 [29a]: by $q^{2n} \rightarrow$ by p^{2n}
 [34a]: exchange G and G' throughout
 [37a]: $P - a \rightarrow p_a$
 [37c]: $p_{0,m,n} \rightarrow p_{0,m,n}$

A28,

6.sup [1a] L3: the \rightarrow then
 [3]: Replace the second sentence by: The most direct (but not very efficient) translation of this formula into an algorithm is a double loop with $P \leftarrow P * < p_n$ inside the inner loop and then $S \leftarrow S + 5000 * P$ in the outer loop.
 [5] L3: $x \rightarrow c$ [No, correct as is]
 [9] L1: $= p^2 \rightarrow = p$
 7.2 [9f]: $\iff \rightarrow \implies$

- [11]: $P \vee \neg P \implies P \rightarrow P \wedge \neg P \wedge P$
 [17b]: $((\rightarrow ($
 [21]: $, \rightarrow$ **to** (three places)
 Insert semi-colons after “ $Q \leftarrow F$ ”, “ $Q \leftarrow \neg Q$ ” and “**print** P, Q, R ”
 [23]: tautology \rightarrow tautology;

A29

- 7.4 [7]: $n \geq 0 \rightarrow \{n \geq 0\}$
 [7]: $i \leftarrow -2 \rightarrow i \leftarrow i - 2$
 $OS : 2|n \rightarrow OS : \{2|n$
 7.5 [1]: $=$ and $\cdot \rightarrow +$ and \cdot
 [5]: Delete “eight”
 [11b]: $so \rightarrow$ and last two terms give 2×1 region which simplifies to $p\bar{r}$, so
 [17a]: Replace by: Expression already in DNF
 [17c]: Fourth term: $pqr \rightarrow \bar{p}qr$
 [23]: (xi) \rightarrow (xii)
 7.6 [5d]: $y^2 = x \rightarrow y > 0 \wedge y^2 = x$
 [7a]: Change to: $(\exists m : m \geq 0)(\forall n : n \geq 0)[n \geq m]$

A30

- 7.Supp [1a]: $\implies Q \rightarrow \implies Q)$
 [1d]: Replace with:
 Since \iff is associative, ignore parentheses; since $\neg P$ is false when P is true and any expression with just T’s and \iff ’s is true, can’t explain \neg ; for \vee, \wedge, \implies show by induction that an expression with P, Q and \iff has 0, 2 or 4 T’s in truth table; but truth tables for \vee, \wedge, \implies each have an odd number of T’s.
 [9]: Replace $\neg(\neg B \implies \neg A)$ with $A \wedge \neg B$; replace result with
 $(\exists i)[((\exists j) P_j \wedge (\forall k) Q_{ik}) \wedge (R_i \wedge \neg S)]$

Chapter 8: Delete all boldface d ’s and make the letter after d boldface.

A31

- 8.2 [27a]: $+2n \rightarrow -2n$

A32

- 8.6 [1]: in a pivot position \rightarrow on the main diagonal in the final matrix
 [9a]: Third row should be: $-2 \ 0 \ 2$

A34

- 8.8 [39]: is row-switched to receive \rightarrow receives

A35

- 8.10 [2]: is305 \rightarrow is 305

A36

- 8.Supp [13b] $+a \rightarrow -A$
 [35]: Replace by: Let c be the entry in A with the largest absolute value. If A is $n \times n$, apply MAX-EIGEN to $A + n|c|I$.

A37

- 9.2 [29b]: Subscript n^2 should be n ; exponent n should be n^2
 9.3 [15a,b] L2: $\text{Ord}(\log_2 n)^{\log_2 n} \rightarrow \text{Ord}[(\log_2 n)^{\log_2 n}]$
 9.4 [15]: **a) \rightarrow b)**
 9.5 [2b]: Add at end: "to 1"

A38

- 9.6 [10a,c]: $c_o \rightarrow c_0$ (once in each part)
 9.7 [7b]: Four \rightarrow Three
 $k > 2 \rightarrow k > 1$

A39

- 9.Supp [5]: Theorem 3 \rightarrow Theorem 4
 [6b]: $1 \leq k < n \rightarrow 1 \leq k \leq n$
 [7c]: c) \rightarrow c) (i)
 E.1 [1]: than 12 \rightarrow than 15
 [11a]: Replace with:
 Minimum number of comparisons for list and its reversal occurs when one requires $m - 2$ passes and the other 1 pass; total comparisons for two lists is $m(m + 1)/2 - 2$; average is $m(m + 1)/4 - 1 = O(m^2)$.
 E.2 [5]: lead \rightarrow leaf
 [7]: [23] of Section 3.7 \rightarrow [23, Section 3.7]

A40

- E.3 [3]: $p + 1 \rightarrow j + 1$

— end —