

The Nature of Computation

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Errata of 1st printing

1. p. 89, Note 3.2: the last sequence should be 100
2. p. 123, Problem 4.16 should read “Prove that INDEPENDENT SET and VERTEX COVER are in P for bipartite graphs, and therefore that CLIQUE is in P for graphs whose complement is bipartite.”
3. p. 123, in Problem 4.17 the running time should be $2^k \text{poly}(n)$ instead of $O(2^k n)$ to avoid worrying about the format of the input graph.
4. p. 174, “what loopholes might exist”
5. p. 189, “either other” should be “either order”
6. p. 383, “doesn’t tell us much”
7. p. 611, Fig. 12.24, labeled flow on the lower front right edge of the cube must be $1/6$ instead of $1/3$
8. p. 758, Exercise 14.11 refers to the equation for $q_\eta(\zeta)$ on the bottom of p. 757
9. p. 803, Problem 14.28 refers to Eq. (14.45) and the equation for $q_\eta(\zeta)$ on the bottom of p. 757
10. p. 805, title of Problem 14.36 should be “Karp and Sipser find independent sets”
11. p. 827, $\langle v | \Pi | v \rangle$ in the denominator should be $\sqrt{\langle v | \Pi | v \rangle}$ (twice)
12. p. 829, “mathematically level” should be “mathematical level”
13. p. 833, removed citation from epigraph
14. p. 836, “each consist”
15. p. 839, “no matter which state we measure it in” should be “no matter which basis we measure it in”

16. p. 896, the second term in the last equation should be $|-\rangle \otimes |\psi_{\text{asym}}\rangle$
17. p. 897, Problem 15.36, should be $D|\psi\rangle = \sum_j a'_j |j\rangle$, and $1/(2\sqrt{N})$ can be improved to $\sqrt{2/N}$ when N is large