

Problem Set 4 – revised version

1. Book, 7.12 . [$MODEXP \in P$]
2. Book, 7.14 . [P is closed under star]
3. Book, 7.17 . [if $P = NP$ then nearly all in P are NP-complete]
4. Book, 7.26 . [$PUZZLE$ is NP-complete]
5. Book, 7.32 . [U is NP-complete]
NOTE: The book has a typo on this problem. It should say “NTM M ” instead of “TM M ”.
6. Book, 7.37 . [if $P = NP$ then can factor in polynomial time]
- 7.* Book, 7.49 . [resolution and $2SAT$]

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