

Problem Set 5

1. Book, 7.24 . [$\neq SAT$ is NP-complete]
2. Book, 7.25 . [$MAX-CUT$ is NP-complete]
3. Book, 8.15 . [$HAPPY-CAT \in P$]
4. Book, 8.10 . [go-moku is in PSPACE]
5. Book, 8.8 . [$EQ_{\text{REG}} \in PSPACE$]
(Hint: you'll need one or more of the theorems we've proved)
6. Book, 8.13 . [A_{LBA} is PSPACE-complete]
- 7* Book, 7.35 . [NP-complete DFA construction problem]

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