## Problem Set 6

- 1. Book, 8.22 . [ADD and PAL-ADD are in L]
- 2. Book, 8.27 . [STRONGLY-CONNECTED is NL-complete]
- 3. Book, 9.19 .  $[USAT \in \mathbf{P}^{SAT}]$
- 4. Book, 9.17 . [P contains a language not decidable by a 2DFA]
- 5. Book, 10.21 .  $[EQ_{\mathsf{BP}} \text{ is coNP-complete}]$
- 6. Book, 10.20 . [RP  $\cap$  coRP = ZPP]
- 7.\* Book, 10.19 . [if NP  $\subseteq$  BPP then NP = RP]

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