Homework 9 – Due Wednesday, April 9, 2008 before the lecture

Please refer to the general information handout for the full homework policy and options.

Page limit  You can submit at most 1 page per problem, even if the problem has multiple parts. If you submit a longer solution for some problem, only the first page will be graded. This homework contains 3 problems, worth 10 points each.

Reminder  Collaboration is permitted, but you must write the solutions by yourself without assistance, and be ready to explain them orally to the instructor if asked. You must also identify your collaborators. Getting solutions from outside sources such as the Web or students not enrolled in the class is strictly forbidden.

Exercises  Please practice on exercises and solved problems in chapter 8.

Problems

1.  (PSPACE is closed under union, complement, star) Book, 8.4
   (b) Recall that complexity class coNP = {A| \overline{A} \in NP}. Prove that coNP \subseteq PSPACE.

2.  (EQ\text{REX} \in \text{PSACE}) Book, 8.8.