

FALL 2001: COT 5420: Theory of Computation I

Review Homework: Due Sep 6, in class

Homework assignments include three kinds of problems. Turn in the solutions for problems marked **R** (regular) or **Ex** (exercises). Only those marked **R** will be graded. Problems marked **EC** may be solved for extra credit; for these, only fully correct solutions will get credit.

Collaboration Policy

Solving a theoretical problem is a creative process. When presented with a new problem, it is your task to “take it apart” and reach your own understanding. This is a painstaking and time-consuming process. Getting help from others destroys this process. However, discussing with others after you have spent some time with a problem can help the process and bring other aspects of the problem to light. You may discuss homework problems with other students in your class, after you have given it sufficient thought. However, when the time comes to write up your solution, it must be your own work, and it must be in your own words. Acquiring or copying solutions from other people or from the internet is not acceptable. You may talk to me about any of the problems (after you have spent some amount of time on them). These restrictions do not apply to the *Extra Credit* problems. I encourage you to work together on those problems; however, your solutions must mention whom you worked with. If your solution for the extra credit problem was obtained from some other source, MENTION YOUR SOURCE.

Any violations of my rules will be dealt with severely. The information will be put in your department and university folders for future reference. Remember that allowing someone to copy your solution will also be considered as a violation.

Pay careful attention to the final written solution. Reread your written solutions. Before presenting a proof, give a brief summary of the **basic idea** behind your proof. A well-written solution shows clarity of thought and is likely to receive better grades.

Problems

1. (**Ex**) Problems 0.2
2. (**Ex**) Problems 0.3
2. (**Ex**) Problems 0.6
3. (**Ex**) Problems 0.7
4. (**Ex**) Problems 0.10
5. (**Ex**) Problems 0.11
6. (**Ex**) Prove that the set of all primes is infinite.