

CS381 Homework Assignment Number 13 due Friday, Dec. 2, 2005

Please write your name and net id on the upper right corner of each page.

1. 9.3.7
2. For the classes of recursive sets and for the class of r. e. sets and for each of the operations union, concatenation, star, homomorphism and inverse homomorphism either prove closure or non closure.
3. Define an invalid computation of a Turing machine.
4. Construct a context-free grammar for the set of invalid computations of a Turing machine starting with a given input x .