- During this quiz it is prohibited to:
  - 1. exchange information with any other person in any way, including by talking or exchanging papers or books;
  - 2. use any electronic aid, including calculators;
  - 3. use any books or notes;
  - 4. leave the classroom before you complete and turn in your quiz.

I have read and understand all of the instructions above. On my honor, I pledge that I have not violated the provisions of the NJIT Academic Honor Code.

Signature and Date

1. Prove that if L is a context-free language, then L' is not necessarily context-free. For this problem, if you use a theorem from the book, you do not need to give the theorem number, but you do need to provide enough information so that it is clear which theorem you are using. For example, you might say something like, "By the theorem that says  $S^{**} = S^*$ , it follows that ...."