

Print Family (i.e., Last) Name: _____

Print Given (i.e., First) Name: _____

Write all answers in the space provided.

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 $(st)^R = t^R s^R$ for any strings s and t .

2. Let L be the language Palindrome defined over $\Sigma = \{a, b\}$.

(a) Give a recursive definition for L .

(b) Give a counterexample showing that $L^* \neq L$ when L is Palindrome. Be sure to explain your answer.