

Today: Review.

Next class: Review.

1. List the members of your group below. Underline your name.
2. Convert the following grammar to Chomsky Normal Form. Show enough intermediate steps to illustrate that the textbook's method is being used.

$$S \rightarrow AA \mid AABA$$

$$A \rightarrow aB \mid bA \mid ab$$

$$B \rightarrow AAA \mid ABA \mid b \mid \epsilon$$

3. Prove or disprove: The language of the grammar of Question 2 is regular.

4. Using the tabular representation used in class, depict the operation of the CYK algorithm on the input string `aabaabaaaa` and the final (Chomsky normal form) grammar of Question 2.

5. ★ Prove or disprove: The set of Turing recognizable sets is Turing recognizable.