Homework #7 *due May 20,2025 before recitation*

Question 1

A *CFG* is called *right linear* if ***all*** productions are of the form $A \rightarrow a\ B$ or $A \rightarrow e$ and called *left linear* if ***all*** productions are of the form $A \rightarrow B\ a$ or $A \rightarrow e$ where $A, B \in V$ and $a \in T$ and e is the empty string.

Show that both *right linear* and *left linear* grammars generate *regular languages*. Specify finite state machines corresponding respectively to right and left linear grammars.

Main Text: Exercise 7.1.3, 7.1.4, 7.2.1 (b), (c), 7.4.3(b), (c)