

*3. Find the language of the following grammar.

(Homework 6)

$$G: S \rightarrow aA \mid bA \mid a \mid b$$

$$A \rightarrow \underline{aS \mid bS}$$

infinite

$$aA \Rightarrow aaS \Rightarrow aaaS$$

a, b,

$$\underline{aab}$$

infinite

$$L(G) = \{ w : w \in \{a, b\}^* \text{ and } |w| \text{ is odd} \}$$