Theory of Computation

Exercise 8: (Context-free grammar part 1)

1. Prove that the following grammar is ambiguous.

$$S \rightarrow S + S \mid S - S \mid S * S \mid S/S \mid c$$

2. Find CFG for the language L.

$$L = \{ a^i b^j : i \leq j \}$$

วัฒชัย เตชะลือ 65015137
Sec.53

*3. Find the language of the following grammar. (Homework 6)

$$G: S \rightarrow aA \mid bA \mid a \mid b$$
$$A \rightarrow aS \mid bS$$

ตอบ: L = { w | w ∈ {a, b}* and the number of a's in w is even }