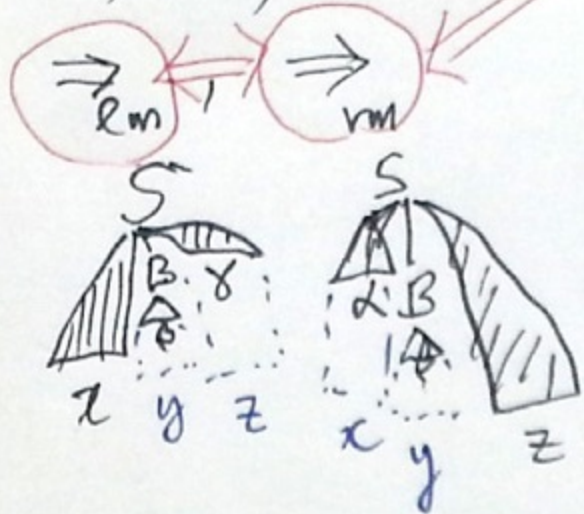


M 1370 10/28 (it) Parse tree - revisited.

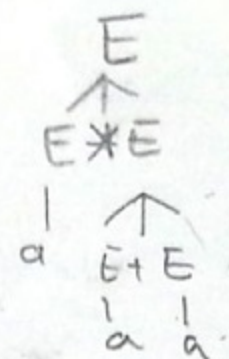
partitions \Leftrightarrow equiv. relation \Leftrightarrow states in DFA
 (\equiv) " classes

Derivation sequence vs parse tree in cfg.

$\Rightarrow, \Rightarrow^i, \Rightarrow^*$



$(E) \Gamma_1: E \rightarrow E+E | E * E | (E)$



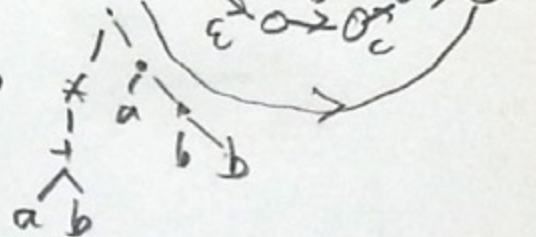
$E \Rightarrow E * E \Rightarrow \dots \Rightarrow a * a + a$
 \Rightarrow^*

* Project #2 RE \rightarrow m-DFA

RE \rightarrow AST - E-NFA - DFA - m-DFA

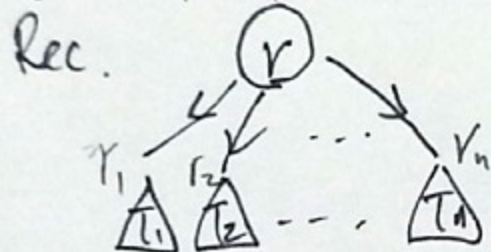
(lex, yacc)

$(a+b)^*abb$



rooted tree $T = (V, E, r) \dots$

Basis. \square



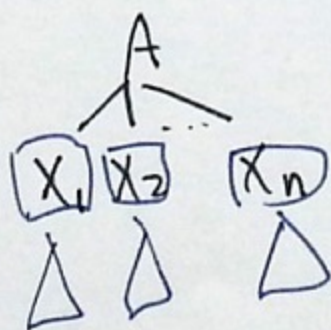
Rec. Def. of Parse tree (Top-down Construction) $cfg \Gamma = (N, \Sigma, P, S)$

Basis

\square

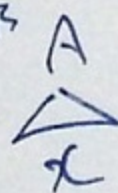
Rec.

E

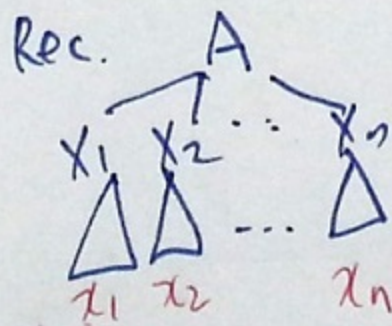


Thm 5.12

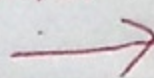
Basis



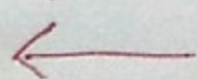
Rec.



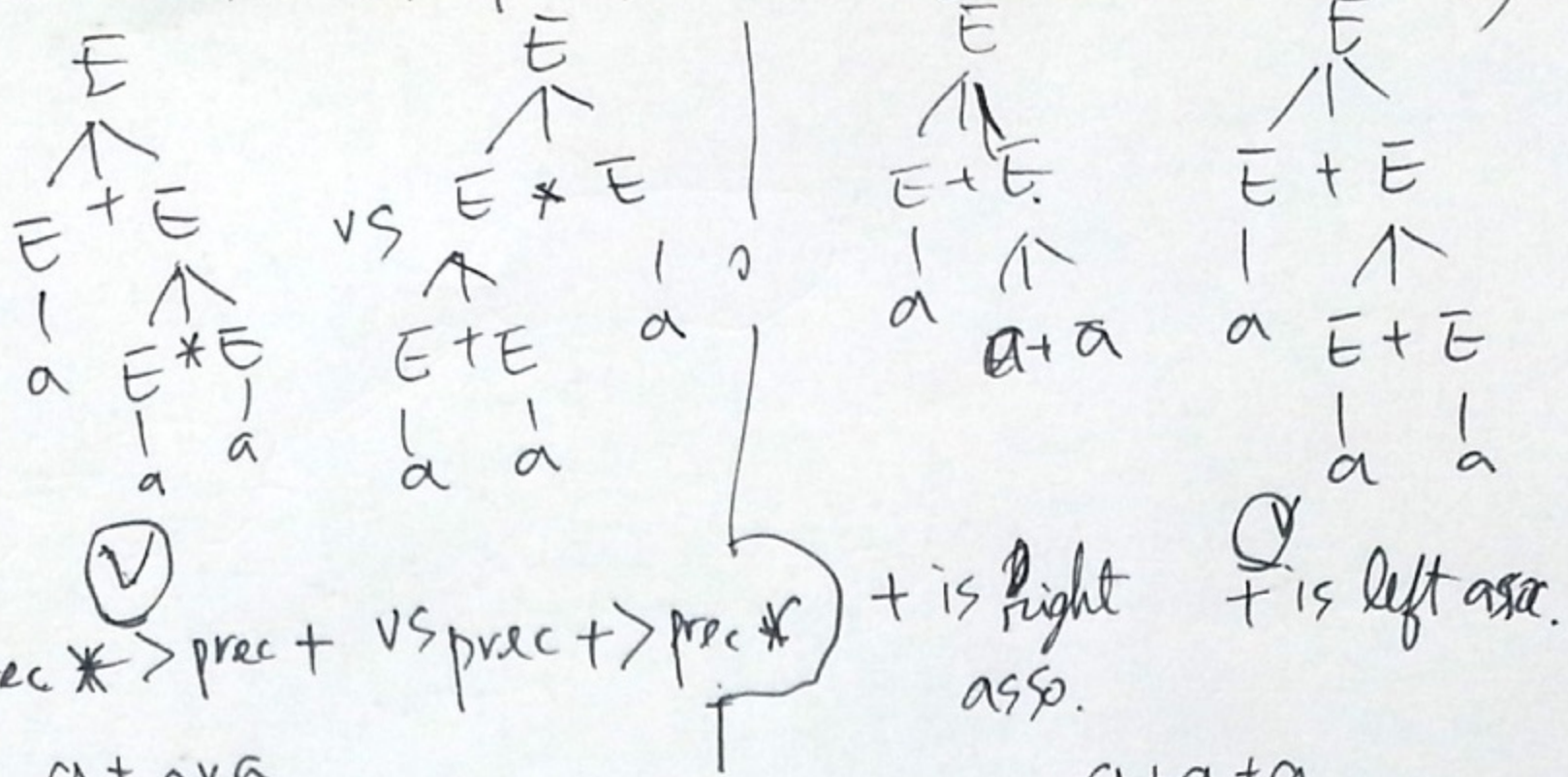
Thm 5.14



Thm 5.16

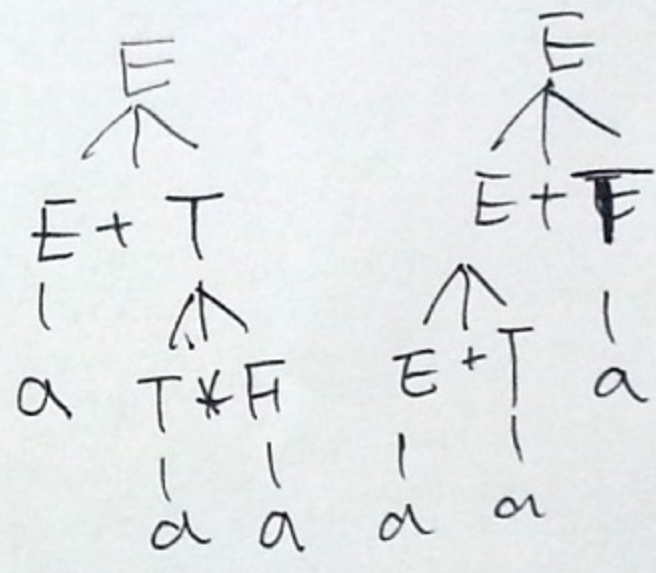


G1: $E \rightarrow E + E \mid E * E \mid a \mid (E)$ - Ambiguous (애매한 문법)



G2: Nonterminal $\frac{0}{2}$ 문제

$E \rightarrow E + T \mid T * F \mid a \mid (E)$
 $T \rightarrow T * F \mid a \mid (E)$
 $F \rightarrow a \mid (E)$



G3: $E \rightarrow E + T \mid T$
 $T \rightarrow T * F \mid F$
 $F \rightarrow a \mid (E)$

unit production

