

Tuesday, February 13

Consider the following grammar:

$Start \rightarrow E$

$E \rightarrow E \text{ AddOp } T \mid T$

$T \rightarrow T \text{ MulOp } F \mid F$

$F \rightarrow \text{Lbr } E \text{ Rbr } \mid \text{ID}$

$\text{AddOp} ::= + \mid -$

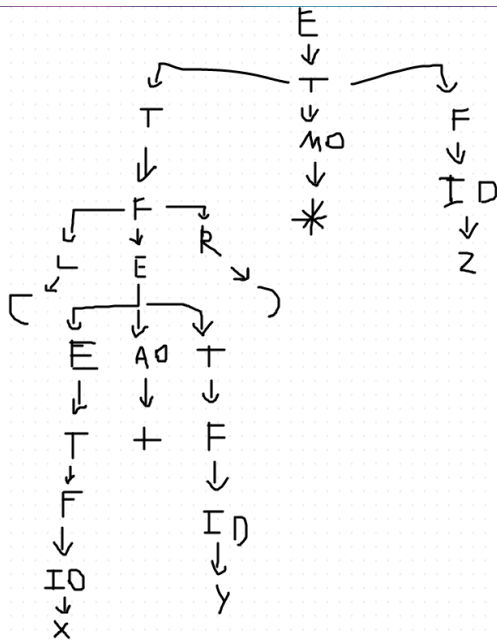
$\text{MulOp} ::= * \mid \div$

$\text{Lbr} ::= ($

$\text{Rbr} ::=)$

$\text{ID} ::= a \mid b \mid \dots \mid z$

1. Give the parse tree for the string $(x + y) * z$



2. Is the grammar provided ambiguous? Why or why not?

No, since there is only one possible parse tree.