

Wednesday, February 13

Name _____

Email _____

6.s081 Spring 2019

Miniquiz #5

5 Minutes

Eliminate left-recursion from these grammars.

1. The following grammar is left-associative. Provide a new grammar that specifies the same language, but is right-associative.

$$S \rightarrow a$$
$$S \rightarrow S \text{ '}' a$$

2. The following grammar is ambiguous.

$$Int = [0-9]$$
$$E \rightarrow Int$$
$$E \rightarrow E \text{ '+' } E$$

a) Show two different parse trees for the string $1 + 2 + 3$.

b) Provide a new unambiguous grammar that still defines the same language