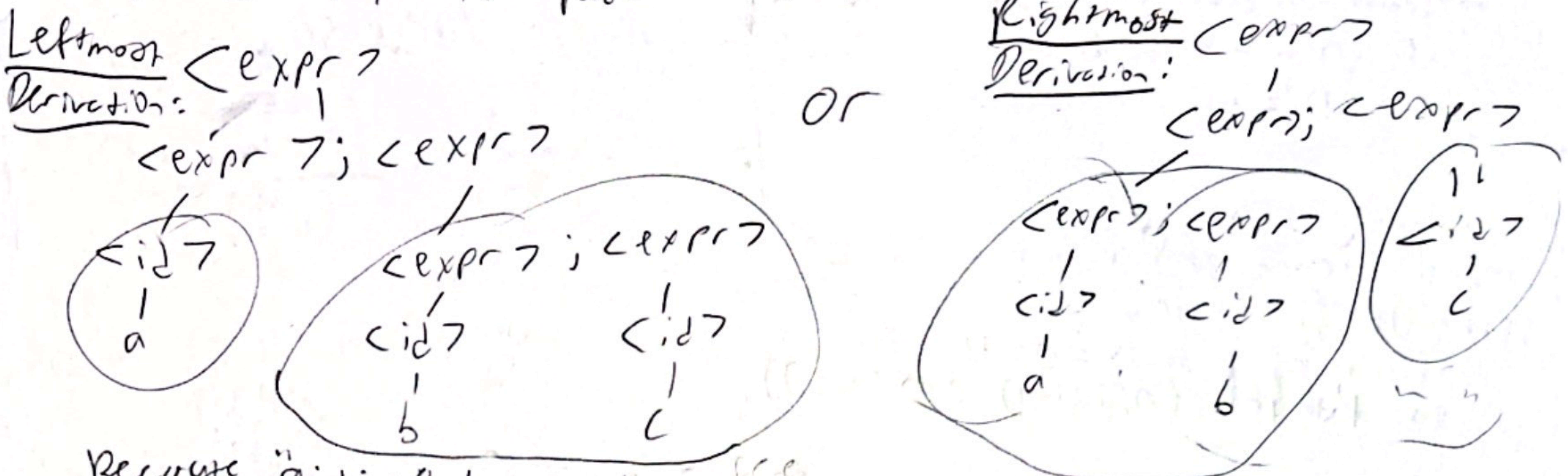
CS320 Assign 6 Written

1. Say we try to parse a;b;c



Because "a;b;c" has two distinct parse trees, the grammar is ambiguous

2. Modified grammar

```
<id>::= a|b|c|...|z
<dig>::=0|1|2|...|9
<symb>::= <id>|<dig>|()
<term>::= let <id> =<expr>|in <expr>
<beg-end>::= begin <expr> end
<exprs>   ::= <symb>;<expr>
             | <term-in>;<expr>
             | <beg-end>;<expr>
<expr>::= <symb>
        | <term-in>
        | <beg-end>
        | <exprs>
```

3. The previously-demonstrated ambiguity arose because the <expr>;<expr> grammar was associative. Note that other grammars (like <symb>, <term>, and <beg-end>) are just sugar in this grammar. These are not associative. By switching the <expr>;<expr> grammar to the <exprs> grammar, the derivation tree becomes right-associative