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Quiz 1
CSE 131

Name _____

Signature _____

Spring 2009

Student ID _____

Compilation/Compiler Overview, Names/Scopes/Bindings

1. Given the following CUP grammar snippet (assuming all other Lexing and terminals are correct):

```
Stmt ::=   Des AssignOp Des T_SEMI {: System.out.println("1"); :}
;

Des  ::=   T_STAR {: System.out.println("2"); :} Des {: System.out.println("3"); :}
|         T_PLUSPLUS {: System.out.println("4"); :} Des {: System.out.println("5"); :}
|         Des2 {: System.out.println("6"); :}
;

Des2 ::=   Des2 {: System.out.println("7"); :} T_PLUSPLUS {: System.out.println("8"); :}
|         Des3 {: System.out.println("9"); :}
;

Des3 ::=   T_ID {: System.out.println("10"); :}
;

AssignOp ::= T_ASSIGN {: System.out.println("11"); :}
;
```

What is the output when parsing the follow statement (you should have 14 lines/numbers in your output):

```
x = ++*ptr++;
```

Output

Which operator in which production has higher precedence in the above grammar:
the T_STAR in Des production or the T_PLUSPLUS in Des2 production?
