

CSC301 Assignment #2

Due Tuesday 9/26 in Sakai.

NOTE: we are having problems reading word files, therefore, please submit your work either as a PDF or a JPG file. No other formats will be accepted.

Problem 3.1 a

Given the grammar G6:

G6:

```
<exp>* ::= <exp> + <mulexp> | <mulexp>  
<mulexp> ::= <mulexp> * <rootexp> | <rootexp>  
<rootexp> ::= ( <exp> ) | a | b | c
```

Add subtraction and division operators (- and /) with the customary precedence and associativity to the grammar.

Problem 3.3 b

Show that the following grammar is ambiguous:

```
<person>* ::= <woman> | <man>  
<woman> ::= wilma | betty | <empty>  
<man> ::= fred | barney | <empty>
```

Problem 3.4 b

Give an unambiguous grammar for the same language generated by the grammar in problem 3.3 b.