

Name: _____

d) (5 points) **What is associativity of the operator # in the grammar in part a)? (check one)

Right associative _____,

Left associative _____

Both left and right associative _____

e) (10 points) **Give evidence supporting your answer to c.

Because of the rule $E \rightarrow B$ For example $a\#a\#a$ can
be parsed as $(a\#a)\#a$ or $a\#(a\#a)$ as well

f) (5 points) Suppose we wanted to add operator % an unary operator, with lower precedence than #. Add parentheses to the following expression to show how it would be evaluated, given these precedences.

% (a # b)

f) (15 points)** Modify the original grammar so it is not ambiguous, making the fewest changes to rules, possible.

$S ::= B$

$B ::= B\#E \mid B\odot E \mid E$

$E ::= a \mid b$