**Exercício 1**

**(a)**

T = {num, -, /}

V = {expr}

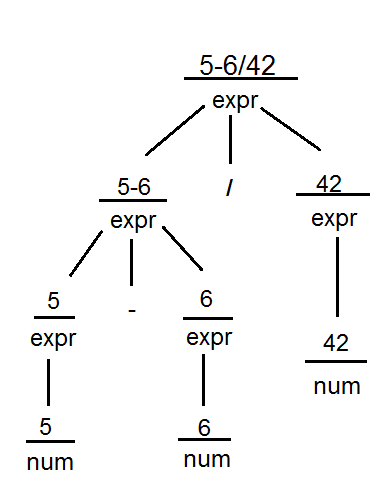
P = { expr -> expr - expr , expr-> expr/expr, expr->num }

S = expr

**(b)**

5/6-42

expr -> expr/expr-> num/expr-> num/expr-expr-> num/num-expr-> num/num-num



**Exercício 2**

**(a)**

T = {num, +, \*, ()}

V = {expr}

P = { expr -> expr + expr , expr-> expr\*expr, expr->(expr), expr->num }

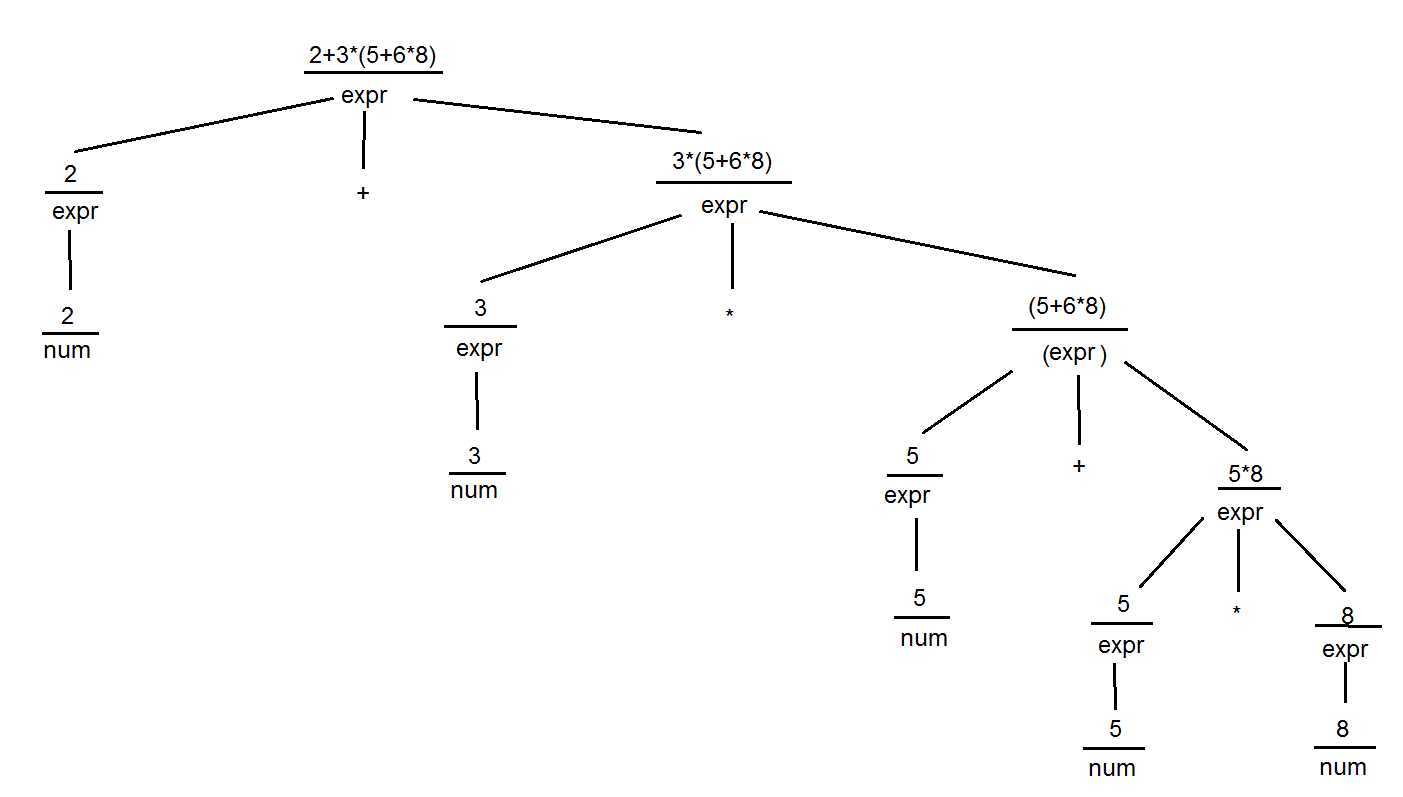
S = expr

**(b)**

2+3\*(5+6\*8)

expr -> expr+expr -> expr+expr\*expr-> expr+expr\*(expr) -> expr+expr\*(expr+expr) ->

expr+expr\*(expr+expr\*expr) -> num+expr\*(expr+expr\*expr) -> num+num\*(expr+expr\*expr) -> num+num\*(num+expr\*expr) -> num+num\*(num+num\*expr) -> num+num\*(num+num\*num)



**Exercício 3**

E -> E a E

E -> a

Exemplo com cadeia **aaa**

1. E -> EaE -> aaE-> aaa
2. E-> EaE -> Eaa -> aaa

É ambígua pois possui duas arvores sintáticas para a cadeia **aaa**