

Calculating *Follow* for the grammar:

**Expr**  $\rightarrow$  **Term Expr'**

**Expr'**  $\rightarrow$  **+ Term Expr' | - Term Expr' |  $\epsilon$**

**Term**  $\rightarrow$  **Factor Term'**

**Term'**  $\rightarrow$  **\* Factor Term' | / Factor Term' |  $\epsilon$**

**Factor**  $\rightarrow$  **(Expr) | num | id**

First set:

	<b>Expr</b>	<b>Expr'</b>	<b>Term</b>	<b>Term'</b>	<b>Factor</b>
First	(, id, num	+, -, $\epsilon$	(, id, num	*, /, $\epsilon$	(, id, num

Algorithm for constructing Follow:

1. Put **eof** in Follow(S), where S is the start symbol
2. If there is a production  $A \rightarrow \alpha B \beta$ , then everything in First( $\beta$ ) except for  $\epsilon$  is placed in Follow(B)
3. If there is a production  $A \rightarrow \alpha B$ , then everything in Follow(A) is in Follow(B)
4. If there is a production  $A \rightarrow \alpha B \beta$  where First( $\beta$ ) contains  $\epsilon$ , i.e.  $\beta \Rightarrow^* \epsilon$ , then everything in Follow(A) is in Follow(B)

Follow set:

<b>Rule</b>	<b>Expr</b>	<b>Expr'</b>	<b>Term</b>	<b>Term'</b>	<b>Factor</b>
1	eof				
2	)		+, -		*, /
3		eof, )		+, -	
4			eof, )		eof, ), +, -
3				eof, )	