

Let's write an LL(1) parser for the following grammar for Prefix notation

$E \rightarrow n \mid A$   
 $A \rightarrow (B)$   
 $B \rightarrow +EE$   
 $B \rightarrow *EE$

(Don't type the spaces!!)

What are the sets First(A), First(B) and First(E)?

*A must start with a '(', B starts with either + or \*, and E starts with a '(' or n*

What are the sets Follows(A), Follows(B) and Follows(E)?

*A is followed by '\$' or '(' or ')' or a number n*

*B is followed by a ')'*

*And since E reduces to a single number, which is followed by \$, or what follows A, we have '\$' or '(' or ')' or a number n.*

Select Input, enter the First and Follow sets and build the parse table.

The screenshot shows the JFLAP software interface. The 'Editor' tab is active, displaying the grammar rules:

E	→	n
E	→	A
A	→	(B)
B	→	+EE
B	→	*EE

The 'Build LL(1) Parse' tab is also active, showing the completed parse table. The message 'Parse table complete. Press "parse" to use it.' is displayed above the table.

		FIRST	FOLLOW
A		{(}	{\$, (, n}
B		{*, +}	{)}
E		{(, n}	{\$, (, n}

  

	(	)	*	+	n	\$
A	(B)					
B			*EE	+EE		
E	A				n	