Project Matrix

Operations Grammar

Tokens:

* +
* -
* \*
* /
* (
* )
* Matrix

Transpose, Inverse, Exponents, Constant before the Parser

Handle unary operators before the Parser

Grammar:

* expression -> sign sum
* sum -> PLUSMINUS term sum
* sum -> EPSILON // Denotes end of sequence
* sign -> PLUSMINUS term // PLUSMINUS so the sign is attachable
* sign -> term
* term -> ~~factor~~ argument prod
* prod -> MULTIDIV ~~signf~~ argument prod
* prod -> EPSILON
* ~~signf -> PLUSMINUS factor~~
* ~~signf -> factor~~
* ~~factor -> argument factorprod~~
* ~~factorprod -> RAISED signf~~
* ~~factorprod -> EPSILON~~
* argument -> value
* argument -> PRODENBRACKET expression CLOSEBRACKET
* value -> matrix

expression

(sign sum)

sign (PLUSMINUS term sum)

sign PLUSMINUS term (EPSILON)

(factor prod) PLUSMINUS (factor prod) EPSILON

(argument factorprod) prod PLUSMINUS (argument factorprod) prod EPSILON

(value) (RAISED signf) prod PLUSMINUS (value) (EPSILON) prod EPSILON

(matrix) RAISED (PLUSMINUS factor) prod PLUSMINUS (matrix) EPSILON prod EPSILON

matrix RAISED PLUSMINUS (argument factorprod) prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS (PRODENBRACKET expression CLOSEBRACKET) factorprod prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET sign sum CLOSEBRACKET (EPSILON) prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET (term) (EPSILON) CLOSEBRACKET EPSILON prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET (factor prod) EPSILON CLOSEBRACKET EPSILON prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET (argument factorprod) prod EPSILON CLOSEBRACKET EPSILON prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET (value) (EPSILON) prod EPSILON CLOSEBRACKET EPSILON prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET (matrix) EPSILON prod EPSILON CLOSEBRACKET EPSILON prod PLUSMINUS matrix EPSILON prod EPSILON

matrix RAISED PLUSMINUS PRODENBRACKET matrix EPSILON (EPSILON) EPSILON CLOSEBRACKET EPSILON (EPSILON) PLUSMINUS matrix EPSILON (EPSILON) EPSILON

matrix ^ +(matrix \_ \_ \_) \_ \_ - matrix \_ \_ \_