

FORMULA SYNTAX

Normal Syntax **abaCal Syntax**
 $a^{s/4x}$ $a^{**}(s/(4*x))$

The order of operations is expressed in the following chart:

1. **exponents** and **roots**
2. **multiplication** and **division**
3. **addition** and **subtraction**

Expressions

Mathematical operations

Addition	+
Subtraction	-
Multiplication	*
Exponentiation	** or ^
Equality	=
Division	/
Right parenthesis)
Left parenthesis	(

Logical operations

IF condition	IF
ELSE condition	ELSE
END of IF condition	ENDIF
Intersection condition	AND
Union condition	OR
Imbrication of conditions) and (
Greater than	>
Greater or equal	>=
Less than	<
Less or equal	<=
Equal to	=
Not equal	!=

Functions

Functions

Minimum of a and b	MIN(a,b)
Maximum of a and b	MAX(a,b)
Absolute value of a	ABS(a)
Exponential e^a	EXP(a)
Logarithm of a with basis 10	LOG(a)
LN (Natural Logarithm of a)	LN(a)
Rounded a with b decimals	RND(a,b)

Functions cont.

Sine(α), α in degree or radian	SIN(a)
Cosine(α), α in degree or radian	COS(a)
Tangent(α), α in degree or radian	TAN(a)
Arcus Sine of x	ASIN(x)
Arcus Cosine of x	ACOS(x)
Arcus Tangent of x	ATAN(x)
Square root of a	SQRT(a)
Entire value of a	ENT(a)
Stops the calculation of the formula	EXIT

Call of another formula or rule

CALL(F,A)

Calls the formula F (F is a name of a formula in your personal library) and returns result A from formula F. As A you can put every resultfield contained in formula F. (See Tutorial)

Summation

SUM(i,b,c) {A}

Sums the expression A varying i from b to c. i is the index. b and c are integers.

Iteration

FOR(i, 1,n) {TOTAL = TOTAL+ Ca (i)}

Creates an iteration which varies i from 1 to n. i is the index. You can use temporary variables (e.g. CA) within the FOR iteration. (See Tutorial)

Multi-indexes tables

Access to multi-indexes tables

TAB(TableName)

TAB(TableName,A1,A2,A3,A4,A5,A6,A7,A8,A9,A10,A11,A12)

Components

Name of the table TableName

Expressions A1, A2, ...,A12

These are values of the indexes of the table. Those indexes are optional. If they're not defined, the system will take the value of the index at this moment of the calculation.