Parser Functions and Operators – Core

There are functions and operators associated with the parser, some of which require translating. These are:

A set, of mathematical functions, that utilize the mathematics library of javascript. (Math.\*)

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| Mathematical Functions | |
| Function’s name in the parser | Description |
| sin | Sine function |
| cos | Cosine function |
| tan | Tangent function |
| asin | Arcsine function |
| acos | Arccosine function |
| atan | Arctangent function |
| Sqrt | Square root |
| log | Logarithm |
| abs | Absolute Value (modulus) |
| ceil | Rounds up to the nearest greater integer (ex: 1.4 -> 2) |
| floor | Rounds up to the nearest smaller integer (ex: 1.6 -> 2) |
| round | Rounds up to the nearest integer (ex: 2.5 -> 3) |
| - | Negative number |
| exp | Exponential Function, returns |
|  |  |
| random | Returns a random number between 0 e 1 |
| fac | The factorial of a number |
| min | Returns the number with the lowest value |
| max | Returns the number with the highest value |
| pyt | Pythagorean Function  ( ) |
| pow | Exponentiation |
| atan2 | Arctangent function of x/y (ex: atan2(1,1) |

Next we have all the supported operators and their description:

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| Operators | |
| Operator’s name in the parser | Description |
| + | Sumation operator |
| - | Subtraction operator |
| \* | Multiplication operator |
| / | Division operator |
| % | Remainder |
| ^ | Exponentiation, from Math.pow |
| , | Performs append |
| || | Concatenate Strings ex:(“Hello” || “World”) |

Lastly the constants:

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| Constants | |
| Constant’s name in the parser | Description |
| E | Euler’s constant |
| PI | Pi constant |