Numbers

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JWT is a number specialist!

Numbers can be provided as **fixed values** - or **literals** - in the format described in the table below or they can be retrieved by using **field codes.**

Fixed values

Numbers can be added to any expression as fixed values.

Input	Example
Valid **numerical** values	• **1** • **3.141592** • **.5** • **-400** • **-1.1** • **-.02**

Variable values (field values)

Numeric values of NUMBER data type fields can be inserted in any expression as number field codes using the following notation **`{... somenumberfield}`** - e.g **`{issue.votes}`**.

The most common use cases for calculating with numbers are in fact related to **dates and times**, since these **timestamps** are internally represented as **numbers**.

Mathematical functions

JWT is very powerful when it comes to numbers and calculations. It offers a wide range of mathematical functions to be used in a parser expression.

Besides the functions listed below, JWT offers the common arithmetical operators:

- $Number_1$ **+** $Number_2$: adding two nunbers
- $Number_1$ **-** $Number_2$: subtracting $Number_2$ from $Number_1$
- $Number_1$ ***** $Number_2$: multiplying two numbers
- $Number_1$ **/** $Number_2$: dividing $Number_1$ by $Number_2$

Available functions

Function	Short description	Output
abs()	Returns the **absolute** value of the input number.	NUMBER
acos()	Returns the **arccosine** value of the input number.	NUMBER
asin()	Returns the **arcsine** value of the input number.	NUMBER

atan()	Returns the **arctangent** value of the input number.	NUMBER
cbrt()	Returns the **cube root** of the input number.	NUMBER
ceil()	Returns the **next higher integer**.	NUMBER
cos()	Returns the **cosine** of the given number.	NUMBER
cosh()	Returns the **hyperbolic cosine** of the input number.	NUMBER
floor()	Returns the the **next lower integer.**	NUMBER
log10()	Returns the **base 10 logarithm** of the input number.	NUMBER
log()	Returns the **natural logarithm** of the input number.	NUMBER
max()	Returns the **larger of two** numeric values.	NUMBER
min()	Returns the **smaller of two** numeric values.	NUMBER
modulus()	Returns the **remainder after division** of the dividend by the divisor.	NUMBER
pow()	Returns the **exponentiation** of two numbers**.**	NUMBER
random()	Returns a **number** between **0 and 1.0**.	NUMBER
remainder()	Returns **dividend - divisor * n**, where **n** is the closest integer to **dividend/divisor**.	NUMBER
round()	Returns the **closest integer** to the input number.	NUMBER
sin()	Returns the **trigonometric sine** of angle **number** expressed in **radians**.	NUMBER
sinh()	Returns the **hyperbolic sine** of the input number.	NUMBER
sqrt()	Returns the **square root** of the input number.	NUMBER
tan()	Returns the **trigonometric tangent** of angle **number** expressed in **radians**.	NUMBER
tanh()	Returns the **hyperbolic tangent** of the input number.	NUMBER
toDegree()	Converts an **angle** measured in **radians** to an approximately equivalent angle measured in **degrees**.	NUMBER
toRadians()	Converts an **angle** measured in **degrees** to an approximately equivalent angle measured in **radians**.	NUMBER

If you still have questions, feel free to refer to our support team.