Simple example

Justus Sagemüller

April 12, 2013

1 Hello

This is a simple example using the HaTeX library and some math stuff.

$$4^{\left(2^3\right)^2} - 10000 \cdot 10000 \cdot (10000 \cdot 10000) \cdot (10000 \cdot 10000 \cdot 10000)$$

is 340282366910938463463374607431768211456.
For $x = 19$ and $\tau = 2 \cdot \pi$,

$$2 + 7 \cdot (6 - \tau) - e^{5 - \sqrt{x^2 + \frac{4}{\pi}}}$$

is approximately $1.7702 \cdot 10^{-2}$.

$$\sum_{n \in \{1,2,3,4\}} \frac{5}{2} - n$$

is 0.0.

$$\arcsin\left(\sin\left(\arccos\left(\cos\left(\arctan\left(\tan\ 0\right)\right)\right)\right)\right)$$

is 0,

$$\operatorname{arcsinh}\left(\sinh\left(\operatorname{arccosh}\left(\frac{\cosh\left(\operatorname{arctanh}(\tanh\ 0)\right)}{2}\right)\right)\right)$$

is not.(Test passed.)
A simple equations chain:

$$\begin{aligned} 10^{18} &= 10^9 \cdot 10^9 \\ &= 10^{3^2} \cdot 10^5 \cdot 10^4 \\ &= 1000000000000000000 \end{aligned}$$

(Test passed.)
Another equations chain, this time using floats:

$$\begin{aligned} 10^{-18} &= 10^{-9} \cdot 10^{-9} \\ &= 10^{-\left(3^2\right)} \cdot 10^{-5} \cdot 10^{-4} \\ &= \frac{1}{1000000000000000000} \end{aligned}$$

reads, as evaluated expressions,

$$\begin{aligned} 1 \cdot 10^{-18} &= 1 \cdot 10^{-18} \\ &= 1 \cdot 10^{-18} \\ &= 1 \cdot 10^{-18} \end{aligned}$$

(Test passed.)