Toki pona new number system

V 0.09alpha

20240309 Saturday

Vocabulary

The ideas for the choice of the names are indicated between square brackets [ ]

1	*wan*	⌐	*one*
2	*tu*	‖	*two*
3	*sin*	⌐!⌐	*three [3 lines]*
4	*lipu*	□	*four [4 sides]*
5	*luka*	⌒	*five*
6	*pipi*	‡	*six [6 elements]*
7	*len*	⊟	*seven [4 sides + 3 lines]*
8	*musi*	ଟ	*eight [two circles look a kind of 8]*
9	*suli*	∨	*nine [the "big" digit]*
10	*sewi*	⌐˙	*10 (base) followed by integer powers (1 is implicit): 2, 3, 4,... [raise]*

20	*tu sewi*	‖⌐	*two * ten*
30	*sin sewi*	⌐⌐	*three * ten*
100	*sewi tu*	⌐‖	10^2
300	*sin sewi tu*	⌐⌐ ‖	*three * ten^2*
1000	*sewi sin*	⌐⌐	10^3
+	*en*	+	*addition*
-	*weka*	✕	*negative [subtract]*
.	*sike*	◎	*separator for decimal part*

This system is intended as a way of **reading** decimal numbers written with the digits 0 to 9 and included in toki pona texts. It is not intended as a replacement of the current system.

Non-additive numbers

Numbers are *non-additive* by default

120 = *wan tu ala*

2024 = *tu ala tu lipu*

Numbers as powers of 10

1000 = 10^3 = *sewi sin*

10 000 = 10^4 = *sewi lipu*

...

$1\,000\,000\,000 = 10^9 = $ *sewi poka*

Composed numbers

The number to the left of *sewi* has multiplicative value.

The additive value of a number (sequence) is stated explicitly with *en*.

$4\,000\,000\,012 = 4*10^9 + 12 = $ *lipu sewi suli en wan tu*

Decimal numbers

3.14 = *sin sike wan lipu*

Numbers with negative exponents

$6.62 \times 10^{-34} = $ *ma sike pipi tu sewi weka sin lipu*

Dates

US system

May 12, 2024 = *tenpo mun luka tenpo suno wan tu tenpo sike tu ala tu lipu*

ISO 8601 system

2024-05-12 = *tenpo sike tu ala tu lipu tenpo mun luka tenpo suno wan tu*