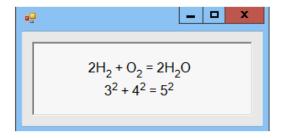
# Why this?

Superscripts are characters set above the normal line of type (e.g. 2<sup>nd</sup>) and Subscripts are characters set below (e.g. H<sub>2</sub>O). There are many reasons to use them in charts: Some organization's style guides demand that you use them for e.g. chemical and physical formulas or footnotes.



## What are Unicode Subscripts & Superscripts?

Unicode fonts have Subscripted and Superscripted versions of a certain number of characters (You should inquire: Why not for all characters?)

The most common Superscripts digits (1, 2, and 3) were in ISO-8859-1 and were therefore carried over into those positions in the Latin-1 range of Unicode. The rest were placed in a dedicated section of Unicode at U+2070 to U+209F. The two tables below show these characters. Each Superscripts or Subscripts character is preceded by a normal x to show the Subscripting/Superscripting.

The following table contains the actual supported Unicode characters:

Unicode characters																
	0	1	2	3	4	5	6	7	8	9	A	В	C	D	E	F
U+00Bx			X <sup>2</sup>	х3						X <sup>1</sup>						
U+207x	X <sup>0</sup>	Xi			X <sup>4</sup>	X <sup>5</sup>	<b>X</b> <sup>6</sup>	<b>X</b> <sup>7</sup>	X <sup>8</sup>	X <sup>9</sup>	X <sup>+</sup>	x <sup>-</sup>	X <sup>=</sup>	<b>X</b> (	<b>X</b> )	X <sup>n</sup>
U+208x	Xo	X1	X2	Х3	X4	X5	X6	<b>X</b> 7	X8	Х9	<b>X</b> +	X-	X=	X(	X)	
U+209x	Xa	Xe	Xo	X <sub>x</sub>	Xə	Xh	Xk	X <sub>1</sub>	Xm	Xn	Xp	$X_s$	Xt			

See Wikipedia (https://en.wikipedia.org/wiki/Unicode Subscripts and Superscripts) for more...

A better description is in German here:

https://de.wikipedia.org/wiki/Unicodeblock Hoch- und tiefgestellte Zeichen

## Letters, only available

#### Besides numbers, there are also Unicode **Superscripts** letters:

- Lowercase alphabet but without a q: abcdefghijklmnoprstuvwxyz
- Uppercase alphabet but without C, F, Q, S, X, Y, and Z: ABDEGHIJKLMNOPRTUVW
- Few letters from the Greek alphabet: α β γ δ ε θ ι φ φ χ

#### There are also Unicode **Subscripts** letters:

- Few letters from the lowercase alphabet: a e h i k l m n o p r s t u v x
- Few letters from the Greek alphabet: β γ Q φ χ

# Trademark and copyright symbols

It's possible to use Superscripts letters to form the trademark symbol (like so: company<sup> $\mathsf{TM}$ </sup>), but trademark symbol has its own Unicode symbol that we recommend to use instead, to make sure it looks the same as it does everywhere: **company<sup>\mathsf{TM}</sup>**. Here are other Unicode symbols that you can copy to your chart:

Symbol	Unicode character	Example
Trademark symbol	TM	Company™
Registered trademark symbol	®	Company®
Service mark symbol	SM	Gardener <sup>sм</sup>
Copyright symbol	©	© 2019 Estelle

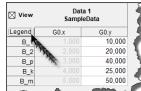
### Main Letters

Superscript: 0123456789 +-=() ni

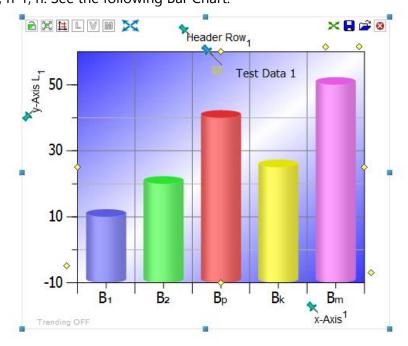
Subscript: 0123456789 +-=() aeoxə hklmnpst

## How to use them in SimplexNumerica?





A Business Chart plots the Legend from the GraphTable between the Tickmarks of an x-Axis, instead of the x-Data-Values, itself. Internally, the program is using the x-Values from 1, 2, ..., n-1, n. See the following Bar Chart:



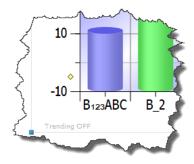
As you can see here, the Legendtext like B1 shows the number 1 in Subscripts form.

You can do that by the following characters at the end of a text string:

### A\_1 for Subscripts displays A<sub>1</sub> and B^2 for Superscripts displays B<sup>2</sup>

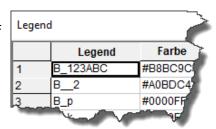
- → The character \_ sets the next letter of a string in Subscripts and ^ in Superscripts form.
- → But, if you like to use \_ then use it twice, like \_\_ and the same for ^ use ^^ instead.

Now, the confused thing with the Unicode letters are shown next:

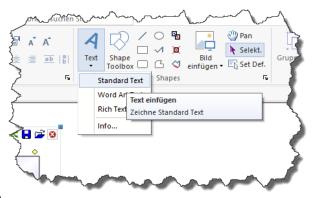


The legend was set like:
→But ABC are not part of
The Unicode Subscripts
letters.

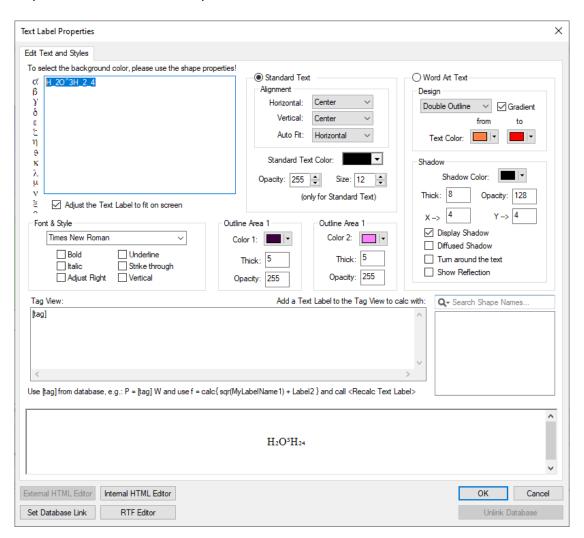
Is that not strange!



Ok, SimplexNumerica cannot influence this!



Here an example for a standard text shape



In front of each superscript/subscript character you have to set either \_ or ^.