

# semtex: For stripped SemanT<sub>E</sub>X documents (v0.2)

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September 10, 2020

The package `semtex` is a small package that adds a collection of simple macros for parentheses and bullets. It exists for one purpose only: To be loaded by documents which were originally typeset using the package `SemanTEX`, but which have been stripped of `SemanTEX` markup using the package `stripsemtex`. Therefore, unless your document is one of those, simply **don't use this package**.

And even if your document *is* one of those, there is a good chance you will not have to load it after all. In most cases, you will be able to replace the macros it provides by macros from other packages.

## Bullet commands

The package provides the commands `\SemantexBullet` and `\SemantexDoubleBullet`. These commands print bullets which are smaller (and prettier, in my opinion) than the standard `\bullet` command from `LATEX`:

```
$ H^{\SemantexBullet} $,  
$ H^{\SemantexDoubleBullet} $  
(compare to $H^{\bullet}$)
```

$H^{\cdot}, H^{\bullet}$ (compare to $H^{\bullet}$ )
--

You can recreate them yourself as follows, rendering the package `semtex` unnecessary for this purpose:

```
\newcommand\SemantexBullet{%  
  \raisebox{-0.25ex}{\scalebox{1.2}{\cdot}}%  
}  
\newcommand\SemantexDoubleBullet{%  
  \SemantexBullet\SemantexBullet  
}
```

## Replacements for `\left` and `\right`

The package provides the commands `\SemantexLeft` and `\SemantexRight`. These work just like `\left... \right`, but fix some spacing issues around these:

```
\[  
  \SemantexLeft(  
    \frac{1}{2}  
  \SemantexRight]  
\]
```

$\left(\frac{1}{2}\right)$
----------------------------

They are completely equivalent to `\mleft` and `\mright` from the package `mleftright`, so it is safe to just load that package and replace the above commands by `\mleft... \mright` instead. Alternatively, you can recreate them yourself by

```

\newcommand\SemantexLeft{%
  \mathopen{}\mathclose\bgroup\left
}

\newcommand\SemantexRight{%
  \aftergroup\egroup\right
}

```

## Commands for scaled delimiters

First and foremost, the package provides the command

```

\SemantexParentheses{<normal|auto|*|other>}{<left parenthesis>}!\{
  {<right parenthesis>}{<content>}}

```

This one writes  $\langle content \rangle$  enclosed in the pair of parentheses and with the size given by the first argument. Here, `normal` means normal size parentheses, and `auto` and `*` mean auto-scaled parentheses using `\SemantexLeft...``\SemantexRight`. If another value is received, that value is used for the parenthesis size, so the intended values are `\big`, `\Big`, `\bigg`, `\Bigg`:

```

$\SemantexParentheses{normal}{{}{\{
  \}}{\frac{a}{b}}}$,
$\SemantexParentheses{auto}{{}[]{}{
  \frac{a}{b}}}$,
$\SemantexParentheses{\big}{{
  \langle\rangle}{\frac{a}{b}}}$,
$\SemantexParentheses{\Bigg}{{\{\{
  \}}{\frac{a}{b}}}$,

```

$$\left(\frac{a}{b}\right), \left[\frac{a}{b}\right], \left\langle\frac{a}{b}\right\rangle, \left\{\frac{a}{b}\right\},$$

The important property of this command is that inside the  $\langle content \rangle$ , you can access the delimiter size at any point using the command `\SemantexDelimiterSize`:

```

$\SemantexParentheses{\Bigg}{{\{\{\{
  \}}{\frac{a}{b}
  \SemantexDelimiterSize|
  \frac{u}{v}}
  \}}$

```

$$\left\{\frac{a}{b}\left|\frac{u}{v}\right.\right\}$$

Secondly, the package provides the command

```

\SemantexNoParentheses{<content>}

```

This command prints the content with no parentheses, but importantly, it also resets the command `\SemantexDelimiterSize` to `\{}`, i.e. blank. This makes the following work:

```

$\SemantexParentheses{\Bigg}{{\{\{\{
  \}}{\frac{a}{b}
  \SemantexDelimiterSize|
  \SemantexNoParentheses{
    a
    \SemantexDelimiterSize|
    b
  }
  \}}$

```

$$\left\{\frac{a}{b}\left|a\right|b\right\}$$