

The `texvc` package*

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Abstract

This package provides all¹ LaTeX command available in MediaWiki. This includes several packages like `amsmath`, and adds some specific commands such as `\Reals`.

1 Provided Macros

1.1 Arrows

The first group of MediaWiki coustom command (`other_delimiters2`) defines short hand notations for some arrowws.

| | |
|--------------------|--|
| <code>\darr</code> | Short hand notation for arrow \downarrow . |
| <code>\dArr</code> | Short hand notation for arrow \Downarrow . |
| <code>\Darr</code> | Short hand notation for arrow \Downarrow . |
| <code>\lang</code> | Short hand notation for arrow \langle . |
| <code>\rang</code> | Short hand notation for arrow \rangle . |
| <code>\uarr</code> | Short hand notation for arrow \uparrow . |
| <code>\uArr</code> | Short hand notation for arrow \Uparrow . |
| <code>\Uarr</code> | Short hand notation for arrow \Uparrow . |

1.2 Literals

The second group of MediaWiki coustom commands (`other_litereals3`) defines short hand notations for some literals.

| | |
|-----------------|--|
| <code>\C</code> | Short hand notation for literal \mathbb{C} . |
| <code>\H</code> | Short hand notation for literal \mathbb{H} . |
| <code>\N</code> | Short hand notation for literal \mathbb{N} . |
| <code>\Q</code> | Short hand notation for literal \mathbb{Q} . |
| <code>\R</code> | Short hand notation for literal \mathbb{R} . |
| <code>\Z</code> | Short hand notation for literal \mathbb{Z} . |

| | |
|-------------------------|---|
| <code>\alef</code> | Short hand notation for literal \aleph . |
| <code>\alefsym</code> | Short hand notation for literal \aleph . |
| <code>\Alpha</code> | Short hand notation for literal A . |
| <code>\and</code> | Short hand notation for literal \wedge . |
| <code>\ang</code> | Short hand notation for literal \angle . |
| <code>\Beta</code> | Short hand notation for literal B . |
| <code>\bull</code> | Short hand notation for literal \bullet . |
| <code>\Chi</code> | Short hand notation for literal X . |
| <code>\clubs</code> | Short hand notation for literal \clubsuit . |
| <code>\cnums</code> | Short hand notation for literal \mathbb{C} . |
| <code>\Complex</code> | Short hand notation for literal \mathbb{C} . |
| <code>\Dagger</code> | Short hand notation for literal \dagger . |
| <code>\diamonds</code> | Short hand notation for literal \diamond . |
| <code>\Doteq</code> | Short hand notation for literal \doteq . |
| <code>\doublecap</code> | Short hand notation for literal \cap . |
| <code>\doublecup</code> | Short hand notation for literal \cup . |
| <code>\empty</code> | Short hand notation for literal \emptyset . |
| <code>\Epsilon</code> | Short hand notation for literal E . |
| <code>\Eta</code> | Short hand notation for literal H . |
| <code>\exist</code> | Short hand notation for literal \exists . |
| <code>\ge</code> | Short hand notation for literal \geq . |
| <code>\gggtr</code> | Short hand notation for literal \gggtr . |
| <code>\hAar</code> | Short hand notation for literal \Leftrightarrow . |
| <code>\harr</code> | Short hand notation for literal \leftrightarrow . |
| <code>\Harr</code> | Short hand notation for literal \Leftrightarrow . |
| <code>\hearts</code> | Short hand notation for literal \heartsuit . |
| <code>\image</code> | Short hand notation for literal \Im . |
| <code>\infin</code> | Short hand notation for literal ∞ . |
| <code>\Iota</code> | Short hand notation for literal I . |
| <code>\isin</code> | Short hand notation for literal \in . |
| <code>\Kappa</code> | Short hand notation for literal K . |
| <code>\larr</code> | Short hand notation for literal \leftarrow . |
| <code>\Larr</code> | Short hand notation for literal \Leftarrow . |
| <code>\lArr</code> | Short hand notation for literal \Leftarrow . |
| <code>\le</code> | Short hand notation for literal \leq . |
| <code>\lrarr</code> | Short hand notation for literal \leftrightarrow . |
| <code>\Lrarr</code> | Short hand notation for literal \Leftrightarrow . |
| <code>\lrArr</code> | Short hand notation for literal \Leftrightarrow . |
| <code>\Mu</code> | Short hand notation for literal M . |
| <code>\natnums</code> | Short hand notation for literal \mathbb{N} . |
| <code>\ne</code> | Short hand notation for literal \neq . |
| <code>\Nu</code> | Short hand notation for literal N . |
| <code>\O</code> | Short hand notation for literal \emptyset . |

*This document corresponds to texvc v1.1, dated 2018/03/04.

¹The command `\or` is only available if custom code is copied into your L^AT_EX-file. See page 7 for details.

| | |
|---------------------------|---|
| <code>\omicron</code> | Short hand notation for literal \circ . |
| <code>\Omicron</code> | Short hand notation for literal \mathcal{O} . |
| <code>\or</code> | Short hand notation for literal \vee . |
| <code>\part</code> | Short hand notation for literal ∂ . |
| <code>\plusmn</code> | Short hand notation for literal \pm . |
| <code>\rarr</code> | Short hand notation for literal \rightarrow . |
| <code>\Rarr</code> | Short hand notation for literal \Rightarrow . |
| <code>\rArr</code> | Short hand notation for literal \Rightarrow . |
| <code>\real</code> | Short hand notation for literal \Re . |
| <code>\reals</code> | Short hand notation for literal \mathbb{R} . |
| <code>\Reals</code> | Short hand notation for literal \mathbb{R} . |
| <code>\restriction</code> | Short hand notation for literal \upharpoonright . |
| <code>\Rho</code> | Short hand notation for literal \mathcal{P} . |
| <code>\sdot</code> | Short hand notation for literal \cdot . |
| <code>\sect</code> | Short hand notation for literal \S . |
| <code>\spades</code> | Short hand notation for literal \spadesuit . |
| <code>\sub</code> | Short hand notation for literal \subset . |
| <code>\sube</code> | Short hand notation for literal \subseteq . |
| <code>\supe</code> | Short hand notation for literal \supseteq . |
| <code>\Tau</code> | Short hand notation for literal \mathcal{T} . |
| <code>\thetasy</code> | Short hand notation for literal ϑ . |
| <code>\varcop</code> | Short hand notation for literal \wp . |
| <code>\weierp</code> | Short hand notation for literal \wp . |
| <code>\Zeta</code> | Short hand notation for literal \mathcal{Z} . |

2 Implementation

`\darr` This macro does the following replacement.

```
1 \newcommand{\darr}{\downarrow}
```

`\dArr` This macro does the following replacement.

```
2 \newcommand{\dArr}{\Downarrow}
```

`\Darr` This macro does the following replacement.

```
3 \newcommand{\Darr}{\Downarrow}
```

`\lang` This macro does the following replacement.

```
4 \newcommand{\lang}{\langle}
```

`\rang` This macro does the following replacement.

```
5 \newcommand{\rang}{\rangle}
```

`\uarr` This macro does the following replacement.

```
6 \newcommand{\uarr}{\uparrow}
```

`\uArr` This macro does the following replacement.
7 `\newcommand{\uArr}{\Uparrow}`

`\Uarr` This macro does the following replacement.
8 `\newcommand{\Uarr}{\Uparrow}`

`\C` This macro does the following replacement.
9 `\newcommand{\C}{\mathbb{C}}`

`\H` This macro does the following replacement.
10 `\renewcommand{\H}{\mathbb{H}}`

`\N` This macro does the following replacement.
11 `\newcommand{\N}{\mathbb{N}}`

`\Q` This macro does the following replacement.
12 `\newcommand{\Q}{\mathbb{Q}}`

`\R` This macro does the following replacement.
13 `\newcommand{\R}{\mathbb{R}}`

`\Z` This macro does the following replacement.
14 `\newcommand{\Z}{\mathbb{Z}}`

`\alef` This macro does the following replacement.
15 `\newcommand{\alef}{\aleph}`

`\alefsym` This macro does the following replacement.
16 `\newcommand{\alefsym}{\aleph}`

`\Alpha` This macro does the following replacement.
17 `\newcommand{\Alpha}{\mathrm{A}}`

`\and` This macro does the following replacement.
18 `\renewcommand{\and}{\land}`

`\ang` This macro does the following replacement.
19 `\newcommand{\ang}{\angle}`

`\Beta` This macro does the following replacement.
20 `\newcommand{\Beta}{\mathrm{B}}`

`\bull` This macro does the following replacement.
21 `\newcommand{\bull}{\bullet}`

`\Chi` This macro does the following replacement.
22 `\newcommand{\Chi}{\mathrm{X}}`

| | |
|-------------------------|--|
| <code>\clubs</code> | This macro does the following replacement. 23 <code>\newcommand{\clubs}{\clubsuit}</code> |
| <code>\cnms</code> | This macro does the following replacement. 24 <code>\newcommand{\cnms}{\mathbb{C}}</code> |
| <code>\Complex</code> | This macro does the following replacement. 25 <code>\newcommand{\Complex}{\mathbb{C}}</code> |
| <code>\Dagger</code> | This macro does the following replacement. 26 <code>\newcommand{\Dagger}{\ddagger}</code> |
| <code>\diamonds</code> | This macro does the following replacement. 27 <code>\newcommand{\diamonds}{\diamondsuit}</code> |
| <code>\Doteq</code> | This macro does the following replacement. 28 <code>\renewcommand{\Doteq}{\doteqdot}</code> |
| <code>\doublecap</code> | This macro does the following replacement. 29 <code>\renewcommand{\doublecap}{\Cap}</code> |
| <code>\doublecup</code> | This macro does the following replacement. 30 <code>\renewcommand{\doublecup}{\Cup}</code> |
| <code>\empty</code> | This macro does the following replacement. 31 <code>\renewcommand{\empty}{\emptyset}</code> |
| <code>\Epsilon</code> | This macro does the following replacement. 32 <code>\newcommand{\Epsilon}{\mathrm{E}}</code> |
| <code>\Eta</code> | This macro does the following replacement. 33 <code>\newcommand{\Eta}{\mathrm{H}}</code> |
| <code>\exist</code> | This macro does the following replacement. 34 <code>\newcommand{\exist}{\exists}</code> |
| <code>\ge</code> | This macro does the following replacement. 35 <code>\renewcommand{\ge}{\geq}</code> |
| <code>\gggtr</code> | This macro does the following replacement. 36 <code>\renewcommand{\gggtr}{\ggg}</code> |
| <code>\hAar</code> | This macro does the following replacement. 37 <code>\newcommand{\hAar}{\Leftrightarrow}</code> |
| <code>\harr</code> | This macro does the following replacement. 38 <code>\newcommand{\harr}{\Leftrightarrow}</code> |

`\Harr` This macro does the following replacement.
39 `\newcommand{\Harr}{\Leftrightarrow}`

`\hearts` This macro does the following replacement.
40 `\newcommand{\hearts}{\heartsuit}`

`\image` This macro does the following replacement.
41 `\newcommand{\image}{\Im}`

`\infin` This macro does the following replacement.
42 `\newcommand{\infin}{\infty}`

`\Iota` This macro does the following replacement.
43 `\newcommand{\Iota}{\mathrm{I}}`

`\isin` This macro does the following replacement.
44 `\newcommand{\isin}{\in}`

`\Kappa` This macro does the following replacement.
45 `\newcommand{\Kappa}{\mathrm{K}}`

`\larr` This macro does the following replacement.
46 `\newcommand{\larr}{\leftarrow}`

`\Larr` This macro does the following replacement.
47 `\newcommand{\Larr}{\Leftarrow}`

`\lArr` This macro does the following replacement.
48 `\newcommand{\lArr}{\Leftarrow}`

`\le` This macro does the following replacement.
49 `\renewcommand{\le}{\leq}`

`\lrarr` This macro does the following replacement.
50 `\newcommand{\lrarr}{\Leftrightarrow}`

`\Lrarr` This macro does the following replacement.
51 `\newcommand{\Lrarr}{\Leftrightarrow}`

`\lrArr` This macro does the following replacement.
52 `\newcommand{\lrArr}{\Leftrightarrow}`

`\Mu` This macro does the following replacement.
53 `\newcommand{\Mu}{\mathrm{M}}`

`\natnums` This macro does the following replacement.
54 `\newcommand{\natnums}{\mathbb{N}}`

`\ne` This macro does the following replacement.
55 `\renewcommand{\ne}{\neq}`

`\Nu` This macro does the following replacement.
56 `\newcommand{\Nu}{\mathrm{N}}`

`\O` This macro does the following replacement.
57 `\renewcommand{\O}{\emptyset}`

`\omicron` This macro does the following replacement.
58 `\newcommand{\omicron}{\mathrm{o}}`

`\Omicron` This macro does the following replacement.
59 `\newcommand{\Omicron}{\mathrm{O}}`

`\or` This is a problematic macro, since it redefines the plain \TeX macro `\or`. For instance, the `\thanks` command uses a custom function to determine the footnotesymbol, which relies on the availability of the `\or` command in math mode. Thus, the macro has to be defined after `\maketitle` was executed. However, there might be more commands that use `\or` used in mathmode. Thus we don't overwrite `\or` in this package. To enable the overwriting copy the code below to an appropriate position in your \LaTeX -file. However, it might be easier to manually replace `\or` with `\lor` which is all what the macro above does.
60 `%\let\oldor\or`
61 `%\def\or{\ifmmode\lor\else\expandafter\oldor\fi}`

`\part` This macro does the following replacement.
62 `\renewcommand{\part}{\partial}`

`\plusmn` This macro does the following replacement.
63 `\newcommand{\plusmn}{\pm}`

`\rarr` This macro does the following replacement.
64 `\newcommand{\rarr}{\rightarrow}`

`\Rarr` This macro does the following replacement.
65 `\newcommand{\Rarr}{\Rrightarrow}`

`\rArr` This macro does the following replacement.
66 `\newcommand{\rArr}{\Rrightarrow}`

`\real` This macro does the following replacement.
67 `\newcommand{\real}{\Re}`

`\reals` This macro does the following replacement.
68 `\newcommand{\reals}{\mathbb{R}}`

| | |
|---------------------------|--|
| <code>\Reals</code> | This macro does the following replacement. 69 <code>\newcommand{\Reals}{\mathbb{R}}</code> |
| <code>\restriction</code> | This macro does the following replacement. 70 <code>\renewcommand{\restriction}{\upharpoonright}</code> |
| <code>\Rho</code> | This macro does the following replacement. 71 <code>\newcommand{\Rho}{\mathrm{P}}</code> |
| <code>\sdot</code> | This macro does the following replacement. 72 <code>\newcommand{\sdot}{\cdot}</code> |
| <code>\sect</code> | This macro does the following replacement. 73 <code>\newcommand{\sect}{\S}</code> |
| <code>\spades</code> | This macro does the following replacement. 74 <code>\newcommand{\spades}{\spadesuit}</code> |
| <code>\sub</code> | This macro does the following replacement. 75 <code>\newcommand{\sub}{\subset}</code> |
| <code>\sube</code> | This macro does the following replacement. 76 <code>\newcommand{\sube}{\subseteq}</code> |
| <code>\supe</code> | This macro does the following replacement. 77 <code>\newcommand{\supe}{\supseteq}</code> |
| <code>\Tau</code> | This macro does the following replacement. 78 <code>\newcommand{\Tau}{\mathrm{T}}</code> |
| <code>\thetasym</code> | This macro does the following replacement. 79 <code>\newcommand{\thetasym}{\vartheta}</code> |
| <code>\varcoppa</code> | This macro does the following replacement. 80 <code>\newcommand{\varcoppa}{\mbox{\coppa}}</code> |
| <code>\weierp</code> | This macro does the following replacement. 81 <code>\newcommand{\weierp}{\wp}</code> |
| <code>\Zeta</code> | This macro does the following replacement. 82 <code>\newcommand{\Zeta}{\mathrm{Z}}</code> |