The texvc package*

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Abstract

This package provides all[1] LaTeX command availible 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 arrorws.

\darr Short hand notation for arrow $\downarrow$.
\dArr Short hand notation for arrow $\Downarrow$.
\Darr Short hand notation for arrow $\Downarrow$.
\lang Short hand notation for arrow $\langle$.
\rang Short hand notation for arrow $\rangle$.
\uarr Short hand notation for arrow $\uparrow$.
\uArr Short hand notation for arrow $\Uparrow$.
\Uarr 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.

\C Short hand notation for literal $\mathbb{C}$. *This command is deprecated.*
\H Short hand notation for literal $\mathbb{H}$. *This command is deprecated.*
\N Short hand notation for literal $\mathbb{N}$.
\Q Short hand notation for literal $\mathbb{Q}$.
\R Short hand notation for literal $\mathbb{R}$.
\Z Short hand notation for literal $\mathbb{Z}$.

`\alef`	Short hand notation for literal ℵ.
`\alefsym`	Short hand notation for literal ℵ.
`\Alpha`	Short hand notation for literal A.
`\and`	Short hand notation for literal ∧. *This command is deprecated.*
`\ang`	Short hand notation for literal ∠. *This command is deprecated.*
`\Beta`	Short hand notation for literal B.
`\bull`	Short hand notation for literal •.
`\Chi`	Short hand notation for literal X.
`\clubs`	Short hand notation for literal ♣.
`\cnums`	Short hand notation for literal ℂ.
`\Complex`	Short hand notation for literal ℂ.
`\Dagger`	Short hand notation for literal ‡.
`\diamonds`	Short hand notation for literal ♢.
`\Doteq`	Short hand notation for literal ≑ .
`\doublecap`	Short hand notation for literal ⋒.
`\doublecup`	Short hand notation for literal ⋓.
`\empty`	Short hand notation for literal ∅.
`\Epsilon`	Short hand notation for literal E.
`\Eta`	Short hand notation for literal H.
`\exist`	Short hand notation for literal ∃.
`\ge`	Short hand notation for literal ≥ .
`\gggtr`	Short hand notation for literal ⋙ .
`\hAar`	Short hand notation for literal ⇔ .
`\harr`	Short hand notation for literal ↔ .
`\Harr`	Short hand notation for literal ⇔ .
`\hearts`	Short hand notation for literal ♡.
`\image`	Short hand notation for literal ℑ.
`\infin`	Short hand notation for literal ∞.
`\Iota`	Short hand notation for literal I.
`\isin`	Short hand notation for literal ∈ .
`\Kappa`	Short hand notation for literal K.
`\larr`	Short hand notation for literal ← .
`\Larr`	Short hand notation for literal ⇐ .
`\lArr`	Short hand notation for literal ⇐ .
`\le`	Short hand notation for literal ≤ .
`\lrarr`	Short hand notation for literal ↔ .
`\Lrarr`	Short hand notation for literal ⇔ .
`\lrArr`	Short hand notation for literal ⇔ .
`\Mu`	Short hand notation for literal M.
`\natnums`	Short hand notation for literal ℕ.
`\ne`	Short hand notation for literal ≠ .
`\Nu`	Short hand notation for literal N.
`\O`	Short hand notation for literal ∅.

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

[1]The command `\or` is only availible if custom code is copied into your LaTeX-file. See page 7 for details.

`\omicron`	Short hand notation for literal o.
`\Omicron`	Short hand notation for literal O.
`\or`	Short hand notation for literal $\vee$. *This command is deprecated.*
`\part`	Short hand notation for literal ∂. *This command is deprecated.*
`\plusmn`	Short hand notation for literal $\pm$.
`\rarr`	Short hand notation for literal $\rightarrow$.
`\Rarr`	Short hand notation for literal $\Rightarrow$.
`\rArr`	Short hand notation for literal $\Rightarrow$.
`\real`	Short hand notation for literal $\Re$.
`\reals`	Short hand notation for literal $\mathbb{R}$.
`\Reals`	Short hand notation for literal $\mathbb{R}$.
`\restriction`	Short hand notation for literal $\restriction$.
`\Rho`	Short hand notation for literal P.
`\sdot`	Short hand notation for literal $\cdot$.
`\sect`	Short hand notation for literal §.
`\spades`	Short hand notation for literal ♠.
`\sub`	Short hand notation for literal $\subset$.
`\sube`	Short hand notation for literal $\subseteq$.
`\supe`	Short hand notation for literal $\supseteq$.
`\Tau`	Short hand notation for literal T.
`\thetasym`	Short hand notation for literal ϑ.
`\varcoppa`	Short hand notation for literal ϙ.
`\weierp`	Short hand notation for literal $\wp$.
`\Zeta`	Short hand notation for literal Z.

2 Deprecations

According to the decision of *Wikimedia Community User Group Math*[2] the following macros have been deprecated[3]:

1. `$`
2. `%`
3. `\and`
4. `\or`
5. `\part`
6. `\ang`
7. `\C`
8. `\H`

[2] `https://meta.wikimedia.org/w/index.php?oldid=19705444`
[3] See `https://phabricator.wikimedia.org/T197842` for the discussion.

9. `\bold`
10. `\Bbb`

The commands 1,2,4,9,10 have never been part of this package, but were availible from within Wikipedia.

3 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.

```
\newcommand{\Z}{\mathbb{Z}}
```

`\alef` This macro does the following replacement.

```
\newcommand{\alef}{\aleph}
```

`\alefsym` This macro does the following replacement.

```
\newcommand{\alefsym}{\aleph}
```

`\Alpha` This macro does the following replacement.

```
\newcommand{\Alpha}{\mathrm{A}}
```

`\and` This macro does the following replacement.

```
\renewcommand{\and}{\land}
```

`\ang` This macro does the following replacement.

```
\newcommand{\ang}{\angle}
```

`\Beta` This macro does the following replacement.

```
\newcommand{\Beta}{\mathrm{B}}
```

`\bull` This macro does the following replacement.

```
\newcommand{\bull}{\bullet}
```

`\Chi` This macro does the following replacement.

```
\newcommand{\Chi}{\mathrm{X}}
```

`\clubs` This macro does the following replacement.

```
\newcommand{\clubs}{\clubsuit}
```

`\cnums` This macro does the following replacement.

```
\newcommand{\cnums}{\mathbb{C}}
```

`\Complex` This macro does the following replacement.

```
\newcommand{\Complex}{\mathbb{C}}
```

`\Dagger` This macro does the following replacement.

```
\newcommand{\Dagger}{\ddagger}
```

`\diamonds` This macro does the following replacement.

```
\newcommand{\diamonds}{\diamondsuit}
```

`\Doteq` This macro does the following replacement.

```
\renewcommand{\Doteq}{\doteqdot}
```

`\doublecap` This macro does the following replacement.

```
\renewcommand{\doublecap}{\Cap}
```

\doublecup This macro does the following replacement.

```
\renewcommand{\doublecup}{\Cup}
```

\empty This macro does the following replacement.

```
\renewcommand{\empty}{\emptyset}
```

\Epsilon This macro does the following replacement.

```
\newcommand{\Epsilon}{\mathrm{E}}
```

\Eta This macro does the following replacement.

```
\newcommand{\Eta}{\mathrm{H}}
```

\exist This macro does the following replacement.

```
\newcommand{\exist}{\exists}
```

\ge This macro does the following replacement.

```
\renewcommand{\ge}{\geq}
```

\gggtr This macro does the following replacement.

```
\renewcommand{\gggtr}{\ggg}
```

\hAar This macro does the following replacement.

```
\newcommand{\hAar}{\Leftrightarrow}
```

\harr This macro does the following replacement.

```
\newcommand{\harr}{\leftrightarrow}
```

\Harr This macro does the following replacement.

```
\newcommand{\Harr}{\Leftrightarrow}
```

\hearts This macro does the following replacement.

```
\newcommand{\hearts}{\heartsuit}
```

\image This macro does the following replacement.

```
\newcommand{\image}{\Im}
```

\infin This macro does the following replacement.

```
\newcommand{\infin}{\infty}
```

\Iota This macro does the following replacement.

```
\newcommand{\Iota}{\mathrm{I}}
```

\isin This macro does the following replacement.

```
\newcommand{\isin}{\in}
```

\Kappa This macro does the following replacement.

```
\newcommand{\Kappa}{\mathrm{K}}
```

`\larr` This macro does the following replacement.

```
\newcommand{\larr}{\leftarrow}
```

`\Larr` This macro does the following replacement.

```
\newcommand{\Larr}{\Leftarrow}
```

`\lArr` This macro does the following replacement.

```
\newcommand{\lArr}{\Leftarrow}
```

`\le` This macro does the following replacement.

```
\renewcommand{\le}{\leq}
```

`\lrarr` This macro does the following replacement.

```
\newcommand{\lrarr}{\leftrightarrow}
```

`\Lrarr` This macro does the following replacement.

```
\newcommand{\Lrarr}{\Leftrightarrow}
```

`\lrArr` This macro does the following replacement.

```
\newcommand{\lrArr}{\Leftrightarrow}
```

`\Mu` This macro does the following replacement.

```
\newcommand{\Mu}{\mathrm{M}}
```

`\natnums` This macro does the following replacement.

```
\newcommand{\natnums}{\mathbb{N}}
```

`\ne` This macro does the following replacement.

```
\renewcommand{\ne}{\neq}
```

`\Nu` This macro does the following replacement.

```
\newcommand{\Nu}{\mathrm{N}}
```

`\O` This macro does the following replacement.

```
\renewcommand{\O}{\emptyset}
```

`\omicron` This macro does the following replacement.

```
\newcommand{\omicron}{\mathrm{o}}
```

`\Omicron` This macro does the following replacement.

```
\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 footnotesymol, which relies on the availibilty 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 pacakge. 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.

```
%\let\@oldor\or
%\def\or{\ifmmode\lor\else\expandafter\@oldor\fi}
```

\part This macro does the following replacement.

```
\renewcommand{\part}{\partial}
```

\plusmn This macro does the following replacement.

```
\newcommand{\plusmn}{\pm}
```

\rarr This macro does the following replacement.

```
\newcommand{\rarr}{\rightarrow}
```

\Rarr This macro does the following replacement.

```
\newcommand{\Rarr}{\Rightarrow}
```

\rArr This macro does the following replacement.

```
\newcommand{\rArr}{\Rightarrow}
```

\real This macro does the following replacement.

```
\newcommand{\real}{\Re}
```

\reals This macro does the following replacement.

```
\newcommand{\reals}{\mathbb{R}}
```

\Reals This macro does the following replacement.

```
\newcommand{\Reals}{\mathbb{R}}
```

\restriction This macro does the following replacement.

```
\renewcommand{\restriction}{\upharpoonright}
```

\Rho This macro does the following replacement.

```
\newcommand{\Rho}{\mathrm{P}}
```

\sdot This macro does the following replacement.

```
\newcommand{\sdot}{\cdot}
```

\sect This macro does the following replacement.

```
\newcommand{\sect}{\S}
```

\spades This macro does the following replacement.

```
\newcommand{\spades}{\spadesuit}
```

\sub This macro does the following replacement.

```
\newcommand{\sub}{\subset}
```

`\sube` This macro does the following replacement.

```
76 \newcommand{\sube}{\subseteq}
```

`\supe` This macro does the following replacement.

```
77 \newcommand{\supe}{\supseteq}
```

`\Tau` This macro does the following replacement.

```
78 \newcommand{\Tau}{\mathrm{T}}
```

`\thetasym` This macro does the following replacement.

```
79 \newcommand{\thetasym}{\vartheta}
```

`\varcoppa` This macro does the following replacement.

```
80 \newcommand{\varcoppa}{\mbox{\coppa}}
```

`\weierp` This macro does the following replacement.

```
81 \newcommand{\weierp}{\wp}
```

`\Zeta` This macro does the following replacement.

```
82 \newcommand{\Zeta}{\mathrm{Z}}
```

Change History

v1.0

General: Initial version 1

v1.1

General: Fix bug with varcoppa, document usage of or 1

v1.2

General: Document deprecations . 1

Index

Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.