## The texvc package\*

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#### Abstract

This package provides all LaTeX command availible in MediaWiki. This includes several packages like amsmath, and adds some specific commands such as **\Reals**.

## 1 Introduction

### 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.

```
Short hand notation for literal \mathbb{C}.
        \C
                  Short hand notation for literal \mathbb{H}.
        \H
        \N
                  Short hand notation for literal \mathbb{N}.
                  Short hand notation for literal \mathbb{Q}.
        \Q
        \R
                  Short hand notation for literal \mathbb{R}.
                  Short hand notation for literal \mathbb{Z}.
        \Z
    \alef
                  Short hand notation for literal \aleph.
                  Short hand notation for literal \aleph.
\alefsym
```

<sup>\*</sup>This document corresponds to texvc v1.0, dated 2015/11/09.

```
Short hand notation for literal A.
    \Alpha
                   Short hand notation for literal \wedge.
       \and
                   Short hand notation for literal \angle.
       \ang
      \Beta
                   Short hand notation for literal B.
      \bull
                   Short hand notation for literal •.
       \Chi
                   Short hand notation for literal X.
                   Short hand notation for literal \clubsuit.
    \clubs
    \cnums
                   Short hand notation for literal \mathbb{C}.
                   Short hand notation for literal \mathbb{C}.
  \Complex
   \Dagger
                   Short hand notation for literal ‡.
                   Short hand notation for literal \diamondsuit.
 \diamonds
                   Short hand notation for literal \doteqdot.
    \Doteq
                   Short hand notation for literal \cap.
\doublecap
                   Short hand notation for literal \cup.
\doublecup
    \empty
                   Short hand notation for literal \emptyset.
  \Epsilon
                   Short hand notation for literal E.
                   Short hand notation for literal H.
       \Eta
                   Short hand notation for literal \exists.
    \exist
                   Short hand notation for literal >.
        \ge
    \gggtr
                   Short hand notation for literal \gg.
      \hAar
                   Short hand notation for literal \Leftrightarrow.
                   Short hand notation for literal \leftrightarrow.
      \harr
      \Harr
                   Short hand notation for literal \Leftrightarrow.
   \hearts
                   Short hand notation for literal \heartsuit.
                   Short hand notation for literal 3.
    \image
    \infin
                   Short hand notation for literal \infty.
                   Short hand notation for literal I.
     \Iota
     \isin
                   Short hand notation for literal \in.
    \Kappa
                   Short hand notation for literal K.
                   Short hand notation for literal \leftarrow.
     \larr
      \Larr
                   Short hand notation for literal \Leftarrow.
      \lArr
                   Short hand notation for literal \Leftarrow.
                   Short hand notation for literal <.
        \le
                   Short hand notation for literal \leftrightarrow.
    \lrarr
                   Short hand notation for literal \Leftrightarrow.
    \Lrarr
    \lrArr
                   Short hand notation for literal \Leftrightarrow.
        \Mu
                   Short hand notation for literal M.
                   Short hand notation for literal \mathbb{N}.
  \natnums
                   Short hand notation for literal \neq.
        \ne
                   Short hand notation for literal N.
        \Nu
                   Short hand notation for literal \emptyset.
         \0
                   Short hand notation for literal o.
  \omicron
  \Omicron
                   Short hand notation for literal O.
                   Short hand notation for literal \vee.
        \or
                   Short hand notation for literal \partial.
      \part
   \plusmn
                   Short hand notation for literal \pm.
```

```
Short hand notation for literal \rightarrow.
        \rarr
                     Short hand notation for literal \Rightarrow.
        \Rarr
                     Short hand notation for literal \Rightarrow.
        \rArr
        \real
                     Short hand notation for literal \Re.
       \reals
                     Short hand notation for literal \mathbb{R}.
                      Short hand notation for literal \mathbb{R}.
       \Reals
                     Short hand notation for literal \uparrow.
\restriction
                      Short hand notation for literal P.
         \Rho
        \sdot
                     Short hand notation for literal \cdot.
        \sect
                     Short hand notation for literal §.
                     Short hand notation for literal \spadesuit.
      \spades
                      Short hand notation for literal \subset.
         \sub
        \sube
                     Short hand notation for literal \subseteq.
                     Short hand notation for literal \supseteq.
        \supe
         \Tau
                     Short hand notation for literal T.
   \thetasym
                     Short hand notation for literal \vartheta.
                     Short hand notation for literal coppa.
   \varcoppa
                     Short hand notation for literal \wp.
      \weierp
                     Short hand notation for literal Z.
        \Zeta
```

## 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}{\uarrow}
- \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}}
  - \clubs This macro does the following replacement.
    23 \newcommand{\clubs}{\clubsuit}
  - \cnums This macro does the following replacement.
    24 \newcommand{\cnums}{\mathbb{C}}

- \Complex This macro does the following replacement.
  25 \newcommand{\Complex}{\mathbb{C}}
- \Dagger This macro does the following replacement.
  26 \newcommand{\Dagger}{\ddagger}
- \diamonds This macro does the following replacement.
  27 \newcommand{\diamonds}{\diamondsuit}
  - \Doteq This macro does the following replacement.
    28 \renewcommand{\Doteq}{\doteqdot}
- \doublecap This macro does the following replacement.
  29 \renewcommand{\doublecap}{\Cap}
- \doublecup This macro does the following replacement.
  30 \renewcommand{\doublecup}{\Cup}
  - \empty This macro does the following replacement.
    31 \renewcommand{\empty}{\emptyset}
  - \Epsilon This macro does the following replacement.
    32 \newcommand{\Epsilon}{\mathrm{E}}
    - \Eta This macro does the following replacement.
      33 \newcommand{\Eta}{\mathrm{H}}
    - \exist This macro does the following replacement.
      34 \newcommand{\exist}{\exists}
      - \ge This macro does the following replacement.
        35 \renewcommand{\ge}{\geq}
    - \gggtr This macro does the following replacement.
      36 \renewcommand{\gggtr}{\ggg}
    - \hAar This macro does the following replacement.
      37 \newcommand{\hAar}{\Leftrightarrow}
    - \harr This macro does the following replacement.
      38 \newcommand{\harr}{\leftrightarrow}
    - \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}
- \lambda This macro does the following replacement.
  48 \newcommand{\lambda lArr}{\Leftarrow}
  - \le This macro does the following replacement.
    49 \renewcommand{\le}{\leq}
- \lambda This macro does the following replacement.
  50 \newcommand{\lrarr}{\leftrightarrow}
- \Lrarr This macro does the following replacement.
  51 \newcommand{\Lrarr}{\Leftrightarrow}
- \lambda 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{0}}
- \Omicron This macro does the following replacement.
  59 \newcommand{\Omicron}{\mathrm{0}}
- \orMediaWiki This macro does the following replacement.
  60 \newcommand{\orMediaWiki}{\lor}
  - \part This macro does the following replacement.
    61 \renewcommand{\part}{\partial}
  - \plusmn This macro does the following replacement.
    62 \newcommand{\plusmn}{\pm}
    - \rarr This macro does the following replacement.
      63 \newcommand{\rarr}{\rightarrow}
    - \Rarr This macro does the following replacement.
      64 \newcommand{\Rarr}{\Rightarrow}
    - \rArr This macro does the following replacement.
      65 \newcommand{\rArr}{\Rightarrow}
    - \real This macro does the following replacement.
      66 \newcommand{\real}{\Re}
  - \reals This macro does the following replacement.
    67 \newcommand{\reals}{\mathbb{R}}
  - \Reals This macro does the following replacement.
    68 \newcommand{\Reals}{\mathbb{R}}
- \restriction This macro does the following replacement.
  69 \renewcommand{\restriction}{\upharpoonright}
  - \Rho This macro does the following replacement.
    70 \newcommand{\Rho}{\mathrm{P}}
  - \sdot This macro does the following replacement.
    71 \newcommand{\sdot}{\cdot}
  - \sect This macro does the following replacement.
    72 \newcommand{\sect}{\S}

\spades This macro does the following replacement.
73 \newcommand{\spades}{\spadesuit}

\sub This macro does the following replacement.
74 \newcommand{\sub}{\subset}

\sube This macro does the following replacement.
75 \newcommand{\sube}{\subseteq}

\supe This macro does the following replacement.
76 \newcommand{\supe}{\supseteq}

\Tau This macro does the following replacement.
77 \newcommand{\Tau}{\mathrm{T}}

\thetasym This macro does the following replacement.
78 \newcommand{\thetasym}{\vartheta}

\varcoppa This macro does the following replacement.
79 \newcommand{\varcoppa}{\mbox{\\coppa}}

\weierp This macro does the following replacement.
80 \newcommand{\weierp}{\wp}