WTMath Package (dev)

Watson

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Abstract

WT Series collects macros which author frequently use to create LaTeX documents. WTMath package is a part of this WT Series which contains a lot of macros for mathematics. LaTeX 2ε on any kind of TeX engine is supported. Moreover amsmath, xkeyval package is required.

1 System Requirements

System requirements of WTMath are shown bellow:

- TeX engine: any engine
- TeX format: LaTeX 2ε
- Document class: any class
- Required package: amsmath, xkeyval

2 Loading the WTMath Package

To use WTMath package, load `wtmath.sty` file with `\usepackage` command in preamble. No package option is available.

```
\usepackage{wtmath}
```

3 Basic commands

WTMath package defines some basic commands at the time you load it. It also redefine part of amsmath commands and extends their functions.

3.1 Commands for mathematics

The package defines following commands for mathematics as default. These commands can be used only in math mode unless otherwise noted.

`\func{`⟨*function name*⟩`}` This command print function name.

`\eqsep` Put space between equations.

`\then` Output symbol "⇒".

`\st` Output string “such that”. Spaces are put arround it.

`\tand` Output string “and”. Spaces are put arround it.

`\tor` Output string “or”. Spaces are put arround it.

`\defeq` Output symbol “:=” which means define equation.

`\defiff` Output symbol “$\overset{\text{def}}{\iff}$” which means define equivalence.

`\qed` Output halmos letter which means define equation. This command can be used in both inner and outer math mode. Note that there are not equational number if use this command in math mode.

3.2 Overwrite amsmath commands

Following commands, which are defined in amsmath package, redefined if you load WTMath package.

`\bar{`⟨*commands*⟩`}` Put overline on ⟨*commands*⟩. For example, `\bar{A\times B}` outputs $\overline{A \times B}$.

3.3 Commands for macros

4 Loading libraries

5 Details of each libraries