

# Sample document

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## 1 LAlignAnd

$\&=$	$a = b$	ok
	$c = d$	
$=\&$	$a = b$	ng
	$c = d$	
$=\{\}\&$	$a = b$	ok
	$c = d$	

## 2 LColonEqq

$x := y$	$x := y$	ng
$x \backslash \text{coloneqq} y$	$x := y$	ok
$x ::= y$	$x ::= y$	ng
$x \backslash \text{Coloneqq} y$	$x ::= y$	ok

## 3 LColonForMapping

$A : B$	$A : B$	ok
$A \backslash \text{colon} B$	$A : B$	ng
$f(x) : \backslash \text{mathbb{R}} \backslash \text{to} \backslash \text{mathbb{R}}$	$f(x) : \mathbb{R} \rightarrow \mathbb{R}$	ng
$f(x) \backslash \text{colon} \backslash \text{mathbb{R}} \backslash \text{to} \backslash \text{mathbb{R}}$	$f(x) : \mathbb{R} \rightarrow \mathbb{R}$	ok

— We detect all of : in the following. —

Here is the example of colon we detect.

- $X : Y \rightarrow Z$ ,
- $X : Y \mapsto Z.$ ,
- $X : \mathbb{R}^{n^2+2n+1} \rightarrow \mathbb{R}$

and

$X : (Y \text{ at new line in tex file}) \rightarrow (Z \text{ at new line in tex file}).$

— We do NOT detect any of : in the following. —

Here is the example of ‘:’ undetected:

- $X : Y \rightarrow Z$ , the correct use of colon.
- $A : B : C = 1 : 2 : 3$ , the colon for ratio.
- $A : B = 1 : 2$  and  $\alpha \rightarrow \beta$ , separated by dollar sign.
- $f : (\text{some very very very very very long long long long words}) \rightarrow \mathbb{R}$ , the false negative.

## 4 LLCref

**Theorem 1.** *This is a sample theorem.*

Use Thm. 1 with cref instead of Theorem 1 with ref.

## 5 LLDoubleQuotation

Use “XXX” instead of “XXX” or ”XXX”.

## 6 LLENDash

- Erdos-Renyi (random graph, Erdős–Rényi)
- Einstein-Podolsky-Rosen (quantum physics, Einstein–Podolsky–Rosen)
- Fruchterman-Reingold (graph drawing, Fruchterman–Reingold)
- Gauss-Legendre (numerical integration, Gauss–Legendre)
- Gibbs-Helmholtz (thermodynamics, Gibbs–Helmholtz)
- Karush-Kuhn-Tucker (optimization, Karush–Kuhn–Tucker)

Exception: Fritz-John (optimization, name of a person)

False Positive: Wrong-Example

## 7 LLNonASCII

! " # \$ % & ' ( ) \* + , - . /

日本語の文章は、upLaTeX でフツウに書けます。

(You can write Japanese sentences as usual with upLaTeX.)

## 8 LLSI

Example: 10 KB, 3.5MiB, 500 GB.

Some Awesome Command.This is not ExaByte..

This 1EB is one ExaByte.

## 9 LLT

$$X^T \quad X^\top \quad X^\intercal$$

## 10 LLTitle

### 10.1 non title case words

#### 10.1.1 This Is a Correct Title

SubParagraph: Test With Ref 1

## 11 LLUserDefined

I want to use a instead of  $a$  for superscript.

$$f^a(X) \quad f^{\mathfrak{a}}(X)$$