# Dictating LATEX using Mathfly

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## 1 Introduction

All of these commands can be modified or added to by editing "config/latex.toml" or using the voice command "configure latex".

## 2 Document classes

Prefixed by "document class", these commands produce for example "\documentclass{article}"

article article beamer beamer book book letter letter proceedings proc report report

# 3 Packages

Prefixed by "use package", these commands produce for example "\usepackage{geometry}". The second column represents additional arguments.

AMS math		AMS math
bib latex	[style=authoryear]	biblatex
colour		color
geometry		geometry
hyper ref		hyperref
graphic X		graphicx
math tools		mathtools
multi col		multicol
X color		xcolor
wrap figure		wrapfig

## 4 Environments

Prefixed by "begin", these commands produce for example "\begin{abstract}

 $\end{abstract}$ ".

The third column represents additional arguments.

abstract	abstract	
add margin	addmargin	
center	center	
columns	columns	
description	description	
document	document	
(enumerate — numbered list)	enumerate	
equation	equation	
figure	figure	[h!]
flush left	flushleft	

flush right flushright frame frame (list — itemise) itemize mini page minipage multi (cols — columns) multicols {2} quotation quotation quote quote table [h!] table long table { | | | | longtable tabular tabular  $\{llll\}$ title page titlepage verbatim verbatim verse verse wrap figure wrapfigure

## 5 Commands

All of these commands are prefixed with "insert".

### 5.1 With arguments

These commands finish in a set of curly brackets, ready for an argument, for example "\author {}"

author author

[add] bib resource addbibresource

caption caption
chapter chapter
frame title frametitle
footnote footnote text footnoteetxt[]
graphics path
caption
caption
chapter
frametitle
frametitle
footnote
footnote
footnotetext[]

[include] graphics includegraphics[width=1\textwidth]

label label

new command newcommand{}[]

paragraph parencite part part reference part

renew command renewcommand

subparagraph sub paragraph (section — heading) section sub (section — heading) subsection sub sub (section — heading) subsubsection text cite textcite [text] bold textbf [text] italics textit [text] slanted textsl title title use theme usetheme

#### 5.2 No arguments

For example "\linebreak".

centering centering  $column\{0.5 \setminus textwidth\}$ column footnote mark footnotemark[] horizontal line hline line break linebreak item item make title maketitle new page newpage no indent noindent page break pagebreak print bibliography printbibliography table of contents tableofcontents text backslash textbackslash text width textwidth vertical line vline

## 6 Greek letters

Prefixed by "greek".

 $\begin{array}{lll} \text{alpha} & \alpha \\ \text{beater} & \beta \\ \text{gamma} & \gamma & \Gamma \\ \text{delta} & \delta & \Delta \\ \text{epsilon} & \varepsilon \\ \text{zita} & \zeta \end{array}$ 

eater theta Θ iota  $\iota$ kappa lambda  $\lambda$ Λ  ${\rm mu}$  $\mu$ new ξ Ξ zee Π pie rowρ  $\sum$ sigma $\sigma$ tau Υ upsilon phi Φ  $\operatorname{chi}$ sigh  $\Psi$  $\Omega$ omega  $\omega$ 

# 7 Mathematical symbols

Prefixed with "symbol".

square root	$\sqrt{a}$
[generic] root	$\sqrt[n]{a}$
integral	$\int$
double integral	Ĵſ
triple integral	ĴĴĴ
infinity	$\infty$
times	×
divide	÷
intersection	$\cap$
union	$\cup$
stop	•
sum	$\sum$
product	Π
(direct sum — oh plus)	$\oplus$
(large direct sum — large oh plus)	$\oplus$
plus or minus	$\pm$
partial	$\partial$
fraction	$\frac{a}{b}$

binomial	$\binom{a}{b}$
sine	sin
cosine	cos
tangent	tan
secant	sec
cosecant	csc
cotangent	$\cot$
arc sine	arcsin
arc cosine	arccos
arc tan	arctan
hyperbolic sine	$\sinh$
hyperbolic cosine	$\cosh$
hyperbolic cotangent	$\coth$
hyperbolic tangent	tanh
argument	arg
modulus	$\operatorname{mod}$
degree	$\deg$
determinant	det
dimension	$\dim$
exp	$\exp$
GCD	$\operatorname{gcd}$
cat hom	hom
kernel	ker
infimum	inf
supremum	sup
$\operatorname{limit}$	lim
liminf	lim inf
(natural (log — logarithm) — log natural)	ln
logarithm	$\log$
max	max
min	min
probability	Pr
[is] not equal [to]	$\neq$
[is] greater [than] [or] equal [to]	$\geq$
[is] less [than] [or] equal [to]	$\leq$
[is] approximately [equal] [to]	$\approx$
proportional [to]	$\propto$
preference less [than]	$\prec$
preference less equals	<b>≠≥!<!--</b--> ≈ × Υ Υ .&gt; .!</b>
preference greater [than]	$\succ$
preference greater equals	≽
6	

subset	$\subset$
superset	$\supset$
strict subset	$\bigcirc \   \downarrow \   \bigcirc \   \land$
strict superset	Ź
member	$\in$
(land—logic and)	$\wedge$
logic or	$\vee$
primer	1
logic not	$\neg$
for all	$\forall$
there exists	∃"
real numbers	$\mathbb{R}$
complex numbers	$\mathbb{C}$
integer numbers	$\mathbb{Z}$
rational numbers	$\mathbb{Q}$
natural numbers	$\mathbb{N}$
left arrow	$\leftarrow$
right arrow	$\rightarrow$
up arrow	$\uparrow$
down arrow	$\downarrow$
left right arrow	$\leftrightarrow$
left	(
right	)
parens	()
dot dot dot	
diagonal dots	٠.,
horizontal dots	
vertical dots	÷