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Tutoriel \LaTeX

Author: CatMono

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Contents

Chapter 1	Document Structure	1
Chapter 2	Typesetting and Formatting	2
2.1	Text Formatting	2
Chapter 3	Mathematical Formulas and Environments	3
3.1	Multi-line and complex math environments	3
Chapter 4	Figures and Tables	4
Chapter 5	Citations and Indexing	5
Chapter 6	Packages and Customization	6
Chapter 7	Templates	7
Chapter 8	Appendices	8

Chapter 1 Document Structure

Chapter 2 Typesetting and Formatting

2.1 Text Formatting

Font Size

`tiny` < `scriptsize` < `footnotesize` < `small` < `normalsize` < `large` < `Large` < `LARGE` < `huge` < `Huge`

Note

1. Use these commands directly in the **main text, tables, or formulas** to change the font size.
2. Each command affects the text that follows it, until another font size command is encountered or the environment ends.
3. `\normal size` is the default font size and can be used to restore the normal size.

Chapter 3 Mathematical Formulas and Environments

3.1 Multi-line and complex math environments

Math mode in \LaTeX is divided into inline math mode (such as \dots , $\left(\dots\right)$, suitable for inserting short formulas within the text) and display math mode (such as \dots , $\left[\dots\right]$, \displaystyle or environments like `equation`, used for independently centered and longer or more important formulas). It is recommended to use $\left(\dots\right)$ and $\left[\dots\right]$, and not to use \dots .

A few common environments for multi-line and complex formulas are listed below.

—	Environment	Alignment	Usage	Remark
Standalone	<code>align</code>	✓	Multiline equation alignment	Each line numbered independently
	<code>gather</code>		Centered arrangement of multiline equations	
	<code>multline</code>		Long equations, line breaks	First line left-aligned, last line right-aligned
	<code>equation</code>		Multi-line alignment for a single formula	Overall numbering
Sub	<code>aligned</code>	✓	Local alignment (inside another math env)	Used in <code>equation</code> , <code>align</code> , <code>gather</code>
	<code>cases</code>	✓	Piecewise functions	One & each case
	<code>split</code>	✓	Split a long equation	Used within <code>equation</code>

Note

- `equation*`, `align*`, `gather*`, `multline*` are used for unnumbered equations.
- Since `equation`, `split`, and `aligned` are used for multi-line alignment of a single equation, and `cases` is for an entire piecewise function, **none of them support page breaks**.
- All of these environments come from the `amsmath` package; environments such as `eqnarray` and `array` are not recommended for use.
- Sub-environments must be used within the standalone environments.

Chapter 4 Figures and Tables

Chapter 5 Citations and Indexing

Chapter 6 Packages and Customization

Chapter 7 Templates

Chapter 8 Appendices

Bibliography

[1] 作者, Title1, Journal1, Year1. *This is an example of a reference.*

[2] Author2, Title2, Journal2, Year2. *This is another example of a reference.*