

L^AT_EX 2_ε Cheat Sheet

Document classes

book Default is two-sided.
 report No \part divisions.
 article No \part or \chapter divisions.
 letter Letter (?).
 slides Large sans-serif font.

Used at the very beginning of a document:
`\documentclass{class}`. Use `\begin{document}` to start contents and `\end{document}` to end the document.

Common documentclass options

10pt/11pt/12pt Font size.
 letterpaper/a4paper Paper size.
 twocolumn Use two columns.
 twoside Set margins for two-sided.
 Landscape Landscape orientation. Must use dvips -t Landscape.
 draft Double-space lines.
 Usage: `\documentclass[opt,opf]{class}`.

Packages

fullpage Use 1 inch margins.
 anysize Set margins: `\marginsize{l}{r}{t}{b}`.
 multicol Use *n* columns: `\begin{multicols}{n}`.
 latexsym Use L^AT_EX symbol font.
 graphics Show image: `\includegraphics[width=w]{file}`.
 url Insert URL: `\url{http://...}`.
 Use before `\begin{document}`: Usage: `\usepackage{package}`

Title

`\author{text}` Author of document.
`\title{text}` Title of document.
`\date{text}` Date.
 These commands go before `\begin{document}`. The declaration `\maketitle` goes at the top of the document.

Miscellaneous

`\pagestyle{empty}` Empty header, footer and no page numbers.
`\tableofcontents` Add a table of contents here.

Document structure

`\part{title}` `\subsubsection{title}`
`\chapter{title}` `\paragraph{title}`
`\section{title}` `\subparagraph{title}`
`\subsection{title}`
 Use `\setcounter{secnumdepth}{x}` suppresses heading numbers of depth $> x$, where chapter has depth 0. Use a * as in `\section*{title}`, to not number a particular item—these items will also not appear in the table of contents.

Text environments

`\begin{comment}` Comment (not printed). Requires verbatim package.
`\begin{quote}` Indented quotation block.
`\begin{quotation}` Like quote with indented paragraphs.
`\begin{verse}` Quotation block for verse.

Lists

`\begin{enumerate}` Numbered list.
`\begin{itemize}` Bulleted list.
`\begin{description}` Description list.
`\item text` Add an item.
`\item[x] text` Use *x* instead of normal bullet or number. Required for descriptions.

References

`\label{marker}` Set a marker for cross-reference, often of the form `\label{sec:1item}`.
`\ref{marker}` Give section/body number of marker.
`\pageref{marker}` Give page number of marker.
`\footnote{text}` Print footnote at bottom of page.

Floating bodies

`\begin{table}[place]` Add numbered table.
`\begin{figure}[place]` Add numbered figure.
`\begin{equation}[place]` Add numbered equation.
`\caption{text}` Caption for the body. `t=top`, `b=bottom`, `p=separate page`, `i=place even if ugly`. Captions and label markers should be within the environment.

Text properties

Font face	Command	Declaration	Effect
	<code>\textrm{text}</code>	<code>\rmfamily text</code>	Roman family
	<code>\textsf{text}</code>	<code>\sffamily text</code>	Sans serif family
	<code>\texttt{text}</code>	<code>\ttfamily text</code>	Typewriter family
	<code>\textmd{text}</code>	<code>\mdseries text</code>	Medium series
	<code>\textbf{text}</code>	<code>\bfseries text</code>	Bold series
	<code>\textup{text}</code>	<code>\upshape text</code>	Upright shape
	<code>\textit{text}</code>	<code>\itshape text</code>	<i>Italic shape</i>
	<code>\textsl{text}</code>	<code>\slshape text</code>	<i>Slanted shape</i>
	<code>\textsc{text}</code>	<code>\scshape text</code>	SMALL CAPS SHAPE
	<code>\emph{text}</code>	<code>\em text</code>	<i>Emphasized</i>
	<code>\textnormal{text}</code>	<code>\normalfont text</code>	Document font
	<code>\underline{text}</code>		Underline

The command `(ttt)` form handles spacing better than the declaration `(ttt)` form.

Font size

Font size	Command	Declaration	Effect
	<code>\tiny</code>	<code>\tiny</code>	<i>tiny</i>
	<code>\scriptsize</code>	<code>\scriptsize</code>	<i>scriptsize</i>
	<code>\footnotesize</code>	<code>\footnotesize</code>	<i>footnotesize</i>
	<code>\small</code>	<code>\small</code>	<i>small</i>
	<code>\normalsize</code>	<code>\normalsize</code>	<i>normalsize</i>
	<code>\large</code>	<code>\large</code>	<i>large</i>
	<code>\huge</code>	<code>\huge</code>	<i>huge</i>

These are declarations and should be used in the form `\small ...`, or without braces to affect the entire document.

Verbatim text

`\begin{verbatim}` Verbatim environment.
`\begin{verbatim*}` Spaces are shown as `_`.
`\verb|text|` Text between the delimiting characters (in this case `|`) is verbatim.

Justification

Environment	Declaration
<code>\begin{center}</code>	<code>\centering</code>
<code>\begin{flushleft}</code>	<code>\raggedright</code>
<code>\begin{flushright}</code>	<code>\raggedleft</code>

Miscellaneous

`\linespread{x}` changes the line spacing by the multiplier *x*.

Text-mode symbols

Symbols

Symbol	Command	Symbol	Command
&	<code>\&</code>	⋯	<code>\ldots</code>
\$	<code>\\$</code>	¶	<code>\textbar</code>
%	<code>\%</code>	#	<code>\#</code>
		§	<code>\S</code>

Accents

Symbol	Command	Symbol	Command	Symbol	Command	Symbol	Command
ó	<code>\'o</code>	ô	<code>\'o</code>	õ	<code>\'o</code>	ö	<code>\'o</code>
ò	<code>\'o</code>	ó	<code>\'o</code>	ô	<code>\'o</code>	õ	<code>\'o</code>
ç	<code>\'c</code>	ç	<code>\'c</code>	ö	<code>\'t o</code>	œ	<code>\oe</code>
œ	<code>\'ae</code>	Æ	<code>\AE</code>	Å	<code>\AA</code>	Å	<code>\AA</code>
ø	<code>\'o</code>	∅	<code>\O</code>	Ł	<code>\L</code>	ł	<code>\l</code>
ı	<code>\'i</code>	ı	<code>\'i</code>	¿	<code>\?</code>		

Delimiters

Symbol	Command	Symbol	Command
{	<code>\{</code>	[<code>\l</code>
}	<code>\}</code>]	<code>\r</code>
>	<code>\></code>	>	<code>\textgreater</code>

Dashes

Name	Source	Example	Usage
hyphen	-	X-ray	In words.
en-dash	--	1-5	Between numbers.
em-dash	---	Yes—or no?	Punctuation.

Line and page breaks

`\` Begin new line without new paragraph.
`**` Prohibit pagebreak after linebreak.
`\kill` Don't print current line.
`\pagebreak` Start new page.
`\noindent` Do not indent current line.

Miscellaneous

`\today` February 25, 2014.
`\$vsim$` Prints `~` instead of `\~{}`, which makes `~` Space, disallow linebreak (`W.J.~Clinton`).
`\@.` Indicate that the `.` ends a sentence when following an uppercase letter.
`\hspace{l}` Horizontal space of length *l* (Ex: `l = 20pt`).
`\vspace{l}` Vertical space of length *l*.
`\rule{w}{h}` Line of width *w* and height *h*.

Tabular environments

tabbing environment

`\=` Set tab stop. `\>` Go to tab stop.
 Tab stops can be set on "invisible" lines with `\kill` at the end of the line. Normally `\` is used to separate lines.

