

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.

Packages

fullpage Use 1 inch margins.

anysize Set margins: $\mbox{\mbox{marginsize}}\{l\}\{r\}\{t\}\{b\}$. multicol Use n columns: $\mbox{\mbox{begin}\{multicols}\{n\}$.

latexsym Use LATEX symbol font.

Tatexsym Ose E-1EX symbol lont.

 $\label{eq:continuous_section} \mbox{graphicx Show image: $$ \label{eq:continuous_section} $$ \mbox{graphics[width=x] $$} .$

url Insert URL: $\url{http://...}$.

Use before \begin{document}. Usage: \usepackage{package}

Title

\author{text} Author of document.

 $\texttt{\title}{text}$ Title of document.

 \del{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.

Document structure

 $\sl title$

Section commands can be followed with an *, like \section*{title}, to supress heading numbers.

\setcounter{secnumdepth} $\{x\}$ supresses heading numbers of depth > x, where chapter has depth 0.

Text environments

\begin{comment} Comment block (not printed). \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.

 $\$ Add an item.

 $\forall x \in [x] \ text$ 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:item}.

\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.

The place is a list valid placements for the body. t=top, h=here, b=bottom, p=separate page, !=place even if ugly. Captions and label markers should be within the environment.

Text properties

Font face

CommandDeclarationEffect\textrm{text} {\rmfamily \text} Roman family Sans serif family \textsf{text} {\sffamily \text} \texttt{text} {\ttfamily \text} Typewriter family text{\mdseries text} Medium series \textbf{text} {\bfseries text} Bold series \textup{text} Upright shape {\upshape \text} \textit{text} {\itshape text} Italic shape \textsl{text} {\slshape text} Slanted shape \textsc{text} SMALL CAPS SHAPE {\scshape text} $\mbox{emph}\{text\}$ $\{ em \ text \}$ Emphasized\textnormal{text}{\normalfont text}Document font \underline{text} Underline

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

Font size

\tiny tiny \tage Large \tage \

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

Verbatim text

 $\label{thm:locality:problem} $$ \operatorname{Verbatim} \ \operatorname{Verbatim} \ \operatorname{Spaces} \ \operatorname{are} \ \operatorname{shown} \ \operatorname{as} \ \sqcup .$

\verb!text! Text between the delimiting characters (in

this case '!') is verbatim.

Justification

Environment Declaration
\begin{center} \centering
\begin{flushleft} \raggedright
\begin{flushright} \raggedleft

Miscellaneous

 $\label{linespread} x \$ changes the line spacing by the multiplier x.

Text-mode symbols

Symbols

&	\&	_	_		\ldots	•	\textbullet
\$	\\$	^	\^{}		\textbar	\	\textbackslash
%	۱%	~	\~{}	#	\#	ξ	\S

Accents

à \'o	6 120	م ۱ م ا	õ \~o	ō \=o
0 (0	0 (0	0 , 0	0 , 0	0 , 0
ò ∖.o	Ö \"o	g ∖c o	ŏ \v o	ő \H o
ç \c c	o ∕d o	o √p o	⊙ \t 00	∞ \oe
Œ \OE	æ \ae	Æ \AE	å \aa	Å \AA
	Ø \0	ł \1	Ł \L	1 \i
ı\i	; ~ (; ?'		

Delimiters

```
'' "'' {\{ [[ (( < \textless '' "'' } \} ]] )) > \textgreater
```

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 January 11, 2010.

\$\sim\$ Prints ~ instead of \^{{}}, which makes ~.
Space, disallow linebreak (W.J.~Clinton).

\circ . Indicate that the . ends a sentence when following an uppercase letter.

\hspace{l} Horizontal space of length l (Ex: l = 20pt).

\text{vspace}{t} Vertical space of length t (Ex. t = 20)

 \mathbf{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.