

# Latex cheat sheet



A L TEX 2? Cheat Sheet 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. `\justification Environment` `\begin{center}` `\begin{flushleft}` `\begin{flushright}` Declaration centering `\raggedright` `\raggedleft` 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. Miscellaneous `\linespread{x}` changes the line spacing by the multiplier x. References 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. `\label{marker }` Text-mode symbols Symbols `& $ % & $ \\% ? ? \\ _ ^{ } ~{ } ?`  
`o o ? o ? ? | ? ... | # \dots \extbar # ? o ? o oo ? a L • § \extbullet \extbackslash`  
`S ? o ? o ? ? A ?`

Common `\documentclass` options Font size. Paper size. Use two columns. Set margins for two-sided. Landscape orientation. Must use `dvips -t landscape`. `draft` Double-space lines. Usage: `\documentclass[opt, opt]{class}`.  
`10pt/11pt/12pt letterpaper/a4paper twocolumn twoside landscape` Floating bodies `\begin{table}[place]` Add numbered table. `\begin{figure}[place]` Add numbered ? gure. `\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. Accents ``` `o` `o?` `?` `c?` `o?` `'` `o` `.` `o` `c` `c` `OE` `o` `j?` `o?` `o` `o` `.` `?` `O?` `'` `o` `"` `o` `d` `o` `ae` `O` `~` `'` `{` `{` `}` `}` `^` `o` `c` `o` `o` `AE` `I?` `'` `~` `o` `v` `o` `oo` `aa` `L` `=` `o` `H` `o` `oe` `AA` `i` Packages `fullpage` Use 1 inch margins. `ansize` Set margins: `marginsize{l}{r}{t}{b}`. `multicol` Use n columns: `egin{multicols}{n}`. `A` `latexsym` Use L TEX symbol font. `graphicx` Show image: `includegraphics[width= x ]{? le}`. `url` Insert URL:

`url{http://. . . }`. Use before `egin{document}`. Usage: `usepackage{package}`

Text properties Font face Command Declaration `E? ct` `extrm{text}` { `mfamily text`} Roman family `extsf{text}` { `sffamily text`} Sans serif family `exttt{text}` { `tfamily text`} Typewriter family `extmd{text}` { `mdseries text`} Medium series `extbf{text}` { `fseries text`} Bold series `extup{text}` { `upshape text`} Upright shape `extit{text}` { `itshape text`} Italic shape `extsl{text}` { `slshape text`} Slanted shape `extsc{text}` { `scshape text`} Small Caps shape `emph{text}` { `em text`} Emphasized `extnormal{text}`{

`ormalfont text`} Document font `underline{text}` Underline The command (tttt) form handles spacing better than the declaration (tttt) form.

Delimiters `"` `"` `"` `"` `"` `"` `[[ ]]` `(( ))` `<` `extless` `>` `extgreater` Dashes Name `hyphen` `en-dash` `em-dash` Source `---` Example X-ray 1-5 Yes—or no? Usage In words. Between numbers. Punctuation. Title `author{text}` Author of document.

`itle{text}` Title of document. `date{text}` Date. These commands go before `egin{document}`. The declaration `maketitle` goes at the top of the document.

Line and page breaks `*` `kill` `pagebreak`

oindent Begin new line without new paragraph. Prohibit pagebreak after linebreak. Don't print current line. Start new page. Do not indent current line.

Miscellaneous `pagestyle{empty}` Empty header, footer and no page numbers. Miscellaneous January 11, 2010. 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.

`ule{w}{h}` Line of width w and height h. `oday $sim$ ~ @`. Document structure `part{title}` `subsubsection{title}` `chapter{title}` `paragraph{title}` `section{title}` `subparagraph{title}` `subsection{title}` Section commands can be followed with an \*, like `section*{title}`, to suppress heading numbers.

`setcounter{secnumdepth}{x}` suppresses heading numbers of depth > x, where chapter has depth 0. Font size `iny` `tiny` `Large` `scriptsize` `scriptsize` `LARGE` `footnotesize` `footnotesize` `small` `small` `huge`

`ormalsize` `normalsize` `large` `large` `Huge` These are declarations and should be used in the form `{small . . . }`, or without braces to affect the entire

document. `Large` `LARGE` `huge` `Huge` 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. Text environments `begin{comment}` Comment block (not printed).

`egin{quote}` Indented quotation block. `egin{quotation}` Like quote with

indented paragraphs. `egin{verse}` Quotation block for verse. Verbatim text

`egin{verbatim}` Verbatim environment. `egin{verbatim*}` Spaces are shown

as . `verb! text!` Text between the delimiting characters (in this case '! ') is

verbatim. tabular environment `egin{array}[pos]{cols}` `egin{tabular}[pos]`

`{cols}` `egin{tabular*}{width}[pos]{cols}` Citation types `cite{key}`

`citeA{key}` `citeN{key}` `shortcite{key}` `shortciteA{key}` `shortciteN{key}`  
`citeyear{key}` All the above have Full author list and year. (Watson and Crick  
 1953) Full author list. (Watson and Crick) Full author list and year. Watson  
 and Crick (1953) Abbreviated author list and year. ? Abbreviated author  
 list. ? Abbreviated author list and year. ? Cite year only. (1953) an NP variant  
 without parentheses; Ex. `citeNP`. A The L TEX document should have the  
 following two lines just before `end{document}`, where `bibfile.bib` is the  
 name of the BibTEX ? le. `ibliographystyle{plain}` `ibliography{bibfile}` `tabular`  
`column specification` `l c r p{width} @{decl} |` Left-justi? ed column.  
 Centered column. Right-justi? ed column. Same as `parbox[t]{width}`.

Insert `decl` instead of inter-column space. Inserts a vertical line between  
 columns. BibTEX example The BibTEX database goes in a ? le called ? le. `bib`,  
 which is processed with `bibtex` file. `@String{N = {Na-ture}}` `@Article{WC:`  
`1953, author = {James Watson and Francis Crick}, title = {A structure for`  
`Deoxyribose Nucleic Acid}, journal = N, volume = {171}, pages = {737},`  
`year = 1953 }` A Sample L TEX document `documentclass[11pt]{article}`  
`usepackage{fullpage}` `itle{Template}` `author{Name}` `egin{document}`  
`maketitle` `section{section}` `subsection*{subsection without number}` `text`  
`extbf{bold text}` `text`.

Some math:  $2+2=5$  `subsection{subsection}` `text` `emph{emphasized`  
`text}` `text`. `cite{WC: 1953}` discovered the structure of DNA. A table:  
`egin{table}[! th]` `egin{tabular}{| l | c | r |}` `hline` first & row & data second &  
 row & data `hline` `end{tabular}` `caption{This is the caption}` `label{ex: table}`  
`end{table}` The table is numbered  
`ef{ex: table}`. `end{document}` Copyright c 2010 Winston Chang <http://www.https://assignbuster.com/latex-cheat-sheet/>

stdout. org/? winston/latex/ BibTEX entry types @article @book @booklet  
 @conference @inbook @incollection @misc @phdthesis @proceedings  
 @techreport @unpublished Journal or magazine article. Book with publisher.

Book without publisher. Article in conference proceedings. A part of a book  
 and/or range of pages. A part of book with its own title. If nothing else ? ts.

PhD. thesis. Proceedings of a conference. Tech report, usually numbered in  
 series. Unpublished. tabular elements hline Horizontal line between rows.

cline{x-y} Horizontal line across columns x through y. multicolumn{n}{cols}  
 {text} A cell that spans n columns, with cols column speci? cation. Math

mode To use math mode, surround text with \$ or use egin{equation}.

Superscriptx x y v n BibTEX ? elds Address of publisher. Not necessary for  
 major publishers. uthor Names of authors, of format .... booktitle Title of

book when part of it is cited. chapter Chapter or section number. edition

Edition of a book. editor Names of editors. institution Sponsoring institution

of tech. report. journal Journal name. key Used for cross ref. when no author.

month Month published. Use 3-letter abbreviation. note Any additional

information. number Number of journal or magazine. organization

Organization that sponsors a conference. pages Page range (2, 6, 9--12).

publisher Publisher's name. school Name of school (for thesis). series Name

of series of books. itle Title of work. type Type of tech. report, ex. " Research  
 Note". volume Volume of a journal or book. year Year of publication. Not all ?

elds need to be ? lled. See example below. address  $x^{\{x\}}$   $\frac{\{x\}}{\{y\}}$

$\sqrt[n]{\{x\}}$  Subscriptx  $n_{k=1}^n$   $\sum_{k=1}^n$   $\prod_{k=1}^n$

Math-mode symbols ? leq ? imes ?  $\circ$  ? infty ? supset ? subset ? cup a

dot a ? ? alpha epsilon ? heta ? lambda ? pi ? upilon ? omega ? Lambda ?

Upsilon  $\neg$   $\alpha$   $\mu$   $\geq$   $\div$   $\circ$

$\forall$   $\exists$   $\hat{a}$   $\eta$   $\zeta$   $\iota$   $\mu$

$\hbar$   $\phi$   $\Gamma$   $\Xi$   $\Phi$   $=$

$\pm$   $\prime$   $\wedge$   $\in$

$\otimes$   $|$   $\mid$   $\ar$   $\gamma$   $\eta$   $\kappa$

$\sigma$   $\chi$   $\Delta$   $\Pi$   $\Psi$   $\cdot$   $\dots$   $>$   $\approx$   $\cdot$

$\cdots$   $\vee$

$\rightarrow$   $\Leftarrow$   $\Leftrightarrow$   $\imath$   $\delta$   $\varepsilon$   $\vartheta$   $\xi$   $\au$   $\psi$

Theta Sigma Omega Bibliography and citations When using BibTEX, you need to run latex, bibtex, and latex twice more to resolve dependencies.

Common BibTEX style  $\les$   $\abbrv$   $\alpha$   $\plain$   $\Standard$   $\Standard$   $\Standard$

$\abstract$   $\apa$   $\unsorted$   $\alpha$   $\with$   $\abstract$   $\APA$   $\Unsorted$