LATEX Reference Card

1 Greek Letters

α	\alpha	β	\beta	γ	\gamma	δ	\delta	ϵ	\epsilon	ε	\varepsilon
ζ	\zeta	η	\eta	θ	\theta	ϑ	$\$ vartheta	ι	\iota	κ	\kappa
λ	\lambda	μ	\mu	ν	\nu	ξ	\xi	o	0	π	\pi
ϖ	\varpi	ρ	\rho	ϱ	\varrho	σ	\sigma	ς	\varsigma	au	\tau
v	υ	ϕ	\phi	φ	\varphi	χ	\chi	ψ	\psi	ω	\omega
Γ	\Gamma	Δ	\Delta	Θ	Θ	Λ	\Lambda	Ξ	\Xi	Π	\Pi
Σ	\Sigma	Υ	Υ	Φ	\Phi	Ψ	\Psi	Ω	\Omega		

2 AMS

\hbar	\hbar	\hbar	\hslash	1	\backprime	Ø	\varnothing
Δ	\vartriangle	∇	\triangledown	\odot	\circledS	*	\bigstar
_	\angle	\triangleleft	\sphericalangle	4	\measuredangle	∄	\nexists
G	\Game	$\dot{+}$	\dotplus	\	\smallsetminus	\bowtie	\ltimes
\rtimes	\rtimes	\bigcap	\Cap	U	\Cup	\blacksquare	\boxplus
\rightarrow	\leftthreetimes	\angle	\rightthreetimes	人	\curlywedge	Υ	\curlyvee
\bigcirc	\circleddash	\blacktriangle	\blacktriangle	▼	ackslashblacktriangledown		\square
	\blacksquare	\Diamond	\lozenge	♦	\blacklozenge	С	\complement
Ω	\mho	\mathfrak{F}	\eth	\exists	\Finv	/	\diagup
	\diagdown	k	\Bbbk	$\overline{\wedge}$	\barwedge	$\underline{\vee}$	\veebar
$\bar{\wedge}$	\doublebarwedge	\Box	\boxminus	\boxtimes	\boxtimes	·	\boxdot
*	\circledast	0	\circledcirc		\centerdot	*	\divideontimes
Т	\intercal	◀	\blacktriangleleft	•	\blacktriangleright	··.	\therefore
•.•	\because	•••	\because				

3 More AMS

\leq	\leqq	\geq	\geqq	\leq	\leqslant	\geqslant	\geqslant
<	\eqslantless	≽	\eqslantgtr	\lesssim	\lesssim	\gtrsim	\gtrsim
≨	\lessapprox	\gtrapprox	\gtrapprox	\cong	\approxeq		\eqcirc
≓	\risingdotseq	$\stackrel{\circ}{=}$	\circeq	=	\fill fallingdotseq	\triangleq	$\$ triangleq
\sim	\backsim	~	\thicksim	\leq	\backsimeq	\approx	\thickapprox
\subseteq	\subseteqq	\supseteq	\supseteqq	£≋	\succapprox	\triangleleft	\vartriangleleft
\triangleright	\vartriangleright	\leq	\trianglelefteq	\geq	\trianglerighteq	F	\vDash
⊩	\Vdash	$\parallel \vdash$	\Vvdash	\smile	\smallsmile	<	\lessdot
⋗	\gtrdot	///	\111	>>>	\ggg	\leq	\lessgtr
\geq	\gtrless	<u> </u>	\lesseqgtr	\geq	\gtreqless	W/ /	\lesseqqgtr
<u>></u>	\gtreqqless	÷	\doteqdot	€	\Subset	∋	\Supset
È	\sqsubset	\Box	\sqsupset	\preccurlyeq	\preccurlyeq	\succcurlyeq	\succcurlyeq
\curlyeqprec	\curlyeqprec	\succ	\curlyeqsucc	$\stackrel{\sim}{\sim}$	\precsim	\succeq	\succsim
\approx	\precapprox	$\overline{}$	\smallfrown	<u>~</u>	\bumpeq	≎	\Bumpeq
1	\shortmid	П	\shortparallel	Ŏ	\between	Ψ	\pitchfork
\propto	\varpropto	€	\backepsilon				

4 Binary Operations

\pm	\pm	干	\mp	\times	\times	÷	\div	*	\ast
*	\star	0	\circ	•	\bullet		\cdot	\cap	\cap
\cup	\cup	\forall	\uplus	П	\sqcap	\sqcup	\sqcup	\vee	\vee
\wedge	\wedge	\	\setminus	}	\wr	\Diamond	\diamond	\triangleleft	\l
\triangle	\bigtriangleup	\triangleright	\rhd	\leq	\unline	\trianglerighteq	\unrhd	\oplus	\oplus
∇	\bigtriangledown	\ominus	\ominus	\otimes	\otimes	\oslash	\oslash	\odot	\odot
◁	\triangleleft	\bigcirc	\bigcirc	†	\dagger	‡	\ddagger	П	\aggreen amalg
	\ + m i a m m] a m i m h +								

5 Relation Symbols

\leq	\leq	\geq	\geq	=	\equiv	=	\models	\prec	\prec	\succ	\succ
\sim	\sim	\perp	\perp	\preceq	\preceq	\succeq	\succeq	\simeq	\simeq		\mid
«	\11	\gg	\gg	\simeq	\asymp		\parallel	\subset	\subset	\supset	\supset
\approx	\approx	\bowtie	\bowtie	\subseteq	\subseteq	\supseteq	\supseteq	\cong	\cong	M	\Join
	\sqsubset		\sqsupset	\neq	\neq	\smile	\smile		\sqsubseteq	\supseteq	\sqsupseteq
Ė	\doteq	$\overline{}$	\frown	\in	\in	\ni	\ni	\propto	\propto	=	=
\vdash	\vdash	\dashv	\dashv	<	<	>	>				

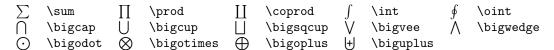
6 Arrow Symbols

\leftarrow	\leftarrow	\Leftarrow	\Leftarrow	\rightarrow	\rightarrow
\Rightarrow	\Rightarrow	\longleftrightarrow	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	\Leftrightarrow	\Leftrightarrow
\mapsto	\mapsto	←—	$\label{longleftarrow}$	\iff	\Longleftarrow
\longrightarrow	$\label{longright} \$	\Longrightarrow	\Longrightarrow	\longleftrightarrow	$\label{longleftrightarrow}$
\iff	\Longleftrightarrow	\longmapsto	$\label{longmapsto}$	↑	\uparrow
\uparrow	\Uparrow	\downarrow	\downarrow	\Downarrow	\Downarrow
\uparrow	\updownarrow	\$	\Updownarrow	7	\nearrow
\	\searrow	/	\swarrow	_	\nwarrow
\leftarrow	\hookleftarrow	\hookrightarrow	\hookrightarrow		\leftharpoonup
\rightarrow	\rightharpoonup	$\overline{}$	\leftharpoondown	\rightarrow	\rightharpoondown

7 Miscellaneous

	\ldots		\cdots	:	\vdots	٠.	\ddots	X	\aleph
1	\prime	\forall	\forall	∞	∞	\hbar	\hbar	Ø	\emptyset
\exists	\exists	∇	\nabla		\surd		\Box	\triangle	\triangle
\Diamond	\Diamond	\imath	$\$ imath	J	\jmath	ℓ	\ell	\neq	\neq
Т	\top	b	\flat	þ	\natural	#	\sharp	Ø	/wp
\perp	\bot	*	\clubsuit	\Diamond	\diamondsuit	\Diamond	\heartsuit		\spadesuit
Ω	\mho	\Re	\Re	\Im	\Im	_	\angle	∂	\partial

8 Sum Like Symbols



9 Delimiters

L	\lfloor	\rfloor	Γ	\lceil]	\rceil	<	$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $
\rangle	\rangle			\	{	\{	}	\}

10 Special Characters

The following are "reserved" characters. This means that in your source you have to use special commands to input them into your document. These are the ten reserved symbols:

Reserved Character	Command
\$	\\$
&	\&
%	\%
#	\#
{	\{
}	\}
-	_
~	\$\sim\$
\wedge	\$\wedge\$
\	\$\backslash\$

11 Class Summary

Basic comparison between the *standard* document classes in LATEX just to illustrate the differences between the environment within each class. Adopted from Albert.Ornstein.

environment	article	report	book	letter	slides
abstract	•	•			
description	•	•	•	•	•
figure	•	•	•		
figure*	•	•	•		
picture	•	•	•	•	•
quotation	•	•	•	•	•
quote	•	•	•	•	•
table	•	•	•		
table*	•	•	•		
tabular	•	•	•	•	•
thebibliography	•	•	•		
theindex	•	•	•		
titlepage	•	•	•		•
verse	•	•	•	•	•

12 Remarks

Originally AMS-IATEX was separate from IATEX , but in the new version of IATEX , called IATEX2e , introduced three years ago, all these separate programs became IATEX packages. So now AMS-IATEX is just a set of IATEX packages.

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