The Comprehensive LaTeX Symbol List

Scott Pakin* David Carlisle Alexander Holt

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Abstract

This document lists 2010 symbols and the corresponding LaTeX commands that produce them. Some of these symbols are guaranteed to be available in every LaTeX 2ε system; others require fonts and packages that may not accompany a given distribution and that therefore need to be installed. All of the fonts and packages used to prepare this document—as well as this document itself—are freely available from the Comprehensive TeX Archive Network (`http://www.ctan.org`).

Contents

*Scott Pakin `<pakin@uiuc.edu>` is currently the contact person for this document.

1 Body-text symbols

This section lists symbols that are intended for use in running text, such as punctuation marks, accents, ligatures, and currency symbols.

Table 1: LaTeX 2_ε Escapable "Special" Characters

$	\$	%	\%	_	_	}	\}	&	\&	#	\#	{	\{

Table 2: LaTeX 2_ε Commands Defined to Work in Both Math and Text Mode

$	\$		_	_	‡	\ddag	{	\{
¶	\P	©	©	\copyright	…	\dots	}	\}
§	\S		†	\dag	£	\pounds		

Where two symbols are present, the left one is the "faked" symbol that LaTeX 2_ε provides by default, and the right one is the "true" symbol that textcomp makes available.

Table 3: Non-ASCII Letters (Excluding Accented Letters)

å	\aa	Đ	\DH*		\L	ø	\o	ß	\ss
Å	\AA	ð	\dh*		\l	Ø	\O	SS	\SS
Æ	\AE	Đ	\DJ*	Ŋ	\NG*	Œ	\OE	Þ	\TH*
æ	\ae	đ	\dj*	ŋ	\ng*	œ	\oe	þ	\th*

* Not available in the OT1 font encoding. Use the fontenc package to select an alternate font encoding, such as T1.

Table 4: Predefined LaTeX 2_ε Text-Mode Commands

	^	\textasciicircum			<	\textless
	~	\textasciitilde		a	a	\textordfeminine
	*	\textasteriskcentered		o	o	\textordmasculine
	\	\textbackslash			¶	\textparagraph
	|	\textbar			·	\textperiodcentered
	{	\textbraceleft			¿	\textquestiondown
	}	\textbraceright			“	\textquotedblleft
	•	\textbullet			”	\textquotedblright
©	©	\textcopyright			‘	\textquoteleft
	†	\textdagger			’	\textquoteright
	‡	\textdaggerdbl		®	®	\textregistered
	$	\textdollar			§	\textsection
	…	\textellipsis			£	\textsterling
	—	\textemdash		TM	™	\texttrademark
	–	\textendash			_	\textunderscore
	¡	\textexclamdown			␣	\textvisiblespace
	>	\textgreater				

Where two symbols are present, the left one is the "faked" symbol that LaTeX 2_ε provides by default, and the right one is the "true" symbol that textcomp makes available.

Table 5: Punctuation Marks Not Found in OT1

«	`\guillemotleft`	‹	`\guilsinglleft`	„	`\quotedblbase`	"	`\textquotedbl`
»	`\guillemotright`	›	`\guilsinglright`	‚	`\quotesinglbase`		

To get these symbols, use the fontenc package to select an alternate font encoding, such as T1.

Table 6: Text-Mode Accents

Ää	`\"{A}\"{a}`	Ôô	`\^{A}\^{a}`	Ạạ	`\d{A}\d{a}`	Îi͡a	`\t{A}\t{a}`
Áá	`\'{A}\'{a}`	Àà	`\‘{A}\‘{a}`	Ắắ	`\H{A}\H{a}`	Ăă	`\u{A}\u{a}`
Ȧȧ	`\.{A}\.{a}`	A̲a̲	`\b{A}\b{a}`	Ąą	`\k{A}\k{a}`†	Ǎǎ	`\v{A}\v{a}`
Āā	`\={A}\={a}`	Ąą	`\c{A}\c{a}`		`\r{A}\r{a}`	Ãã	`\~{A}\~{a}`

Ôô `\newtie{A}\newtie{a}`* Ⓐⓐ `\textcircled{A}\textcircled{a}`

* Requires the textcomp package.

† Not available in the OT1 font encoding. Use the fontenc package to select an alternate font encoding, such as T1.

Also note the existence of `\i` and `\j`, which produce dotless versions of “i” and “j” (viz., “ı” and “ȷ”). These are useful when the accent is supposed to replace the dot. For example, “`na\"{\i}ve`” produces a correct “naïve”, while “`na\"{i}ve`” would yield the rather odd-looking “naïve”. (“`na\"{i}ve`” *does* work in encodings other than OT1, however.)

Table 7: tipa Text-Mode Accents

Ǻǻ	`\textacutemacron{A}\textacutemacron{a}`
Ǻǻ	`\textacutewedge{A}\textacutewedge{a}`
Aa	`\textadvancing{A}\textadvancing{a}`
A͡a	`\textbottomtiebar{A}\textbottomtiebar{a}`
Ă̄ă̄	`\textbrevemacron{A}\textbrevemacron{a}`
Ãã	`\textcircumacute{A}\textcircumacute{a}`
Ȧ̂ȧ̂	`\textcircumdot{A}\textcircumdot{a}`
Ȧȧ	`\textdotacute{A}\textdotacute{a}`
Ặặ	`\textdotbreve{A}\textdotbreve{a}`
Ȁȁ	`\textdoublegrave{A}\textdoublegrave{a}`
A̋a̋	`\textdoublevbaraccent{A}\textdoublevbaraccent{a}`
Ȃȃ	`\textgravecircum{A}\textgravecircum{a}`
Ȧ̀ȧ̀	`\textgravedot{A}\textgravedot{a}`
Ȧ̀ȧ̀	`\textgravemid{A}\textgravemid{a}`
A̻a̻	`\textinvsubbridge{A}\textinvsubbridge{a}`
Aa	`\textlowering{A}\textlowering{a}`
Ǻǻ	`\textmidacute{A}\textmidacute{a}`

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A͓a͓	`\textovercross{A}\textovercross{a}`
A͝a͝	`\textoverw{A}\textoverw{a}`
A̡a̡	`\textpolhook{A}\textpolhook{a}`
A͇a͇	`\textraising{A}\textraising{a}`
A͉a͉	`\textretracting{A}\textretracting{a}`
A͍a͍	`\textringmacron{A}\textringmacron{a}`
A͔a͔	`\textroundcap{A}\textroundcap{a}`
A͕a͕	`\textseagull{A}\textseagull{a}`
A͎a͎	`\textsubarch{A}\textsubarch{a}`
A̲a̲	`\textsubbar{A}\textsubbar{a}`
A͇a͇	`\textsubbridge{A}\textsubbridge{a}`
Ạạ	`\textsubdot{A}\textsubdot{a}`
A̩a̩	`\textsublhalfring{A}\textsublhalfring{a}`
A͈a͈	`\textsubplus{A}\textsubplus{a}`
A͖a͖	`\textsubrhalfring{A}\textsubrhalfring{a}`
Ḁḁ	`\textsubring{A}\textsubring{a}`
A͇a͇	`\textsubsquare{A}\textsubsquare{a}`
A̰a̰	`\textsubtilde{A}\textsubtilde{a}`
A̤a̤	`\textsubumlaut{A}\textsubumlaut{a}`
A͍a͍	`\textsubw{A}\textsubw{a}`
A̪a̪	`\textsubwedge{A}\textsubwedge{a}`
A~~a~~	`\textsuperimposetilde{A}\textsuperimposetilde{a}`
A̍a̍	`\textsyllabic{A}\textsyllabic{a}`
A̰a̰	`\texttildedot{A}\texttildedot{a}`
A͡a͡	`\texttoptiebar{A}\texttoptiebar{a}`
A̍a̍	`\textvbaraccent{A}\textvbaraccent{a}`

tipa defines shortcut sequences for many of the above. See the tipa documentation for more information.

Table 8: textcomp Symbols

″	`\textacutedbl`	⚮	`\textmarried`
´	`\textasciiacute`	℧	`\textmho`
˘	`\textasciibreve`	−	`\textminus`
ˇ	`\textasciicaron`	µ	`\textmu`
¨	`\textasciidieresis`	♪	`\textmusicalnote`
`	`\textasciigrave`	₦	`\textnaira`
¯	`\textasciimacron`	9	`\textnineoldstyle`
*	`\textasteriskcentered`	№	`\textnumero`
฿	`\textbaht`	Ω	`\textohm`
‖	`\textbardbl`	½	`\textonehalf`
◯	`\textbigcircle`	1	`\textoneoldstyle`

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	ƀ	\textblank
	⋆	\textborn
	¦	\textbrokenbar
	•	\textbullet
	℃	\textcelsius
	¢	\textcent
	¢	\textcentoldstyle
	Ⓟ	\textcircledP
	₡	\textcolonmonetary
	ↄ	\textcopyleft
©	©	\textcopyright
	¤	\textcurrency
	†	\textdagger
	‡	\textdaggerdbl
	⸗	\textdblhyphen
	⸗	\textdblhyphenchar
	°	\textdegree
	†	\textdied
	⁒	\textdiscount
	÷	\textdiv
	o|o	\textdivorced
	$	\textdollar
	$	\textdollaroldstyle
	đ	\textdong
	↓	\textdownarrow
	8	\texteightoldstyle
	℮	\textestimated
	€	\texteuro
	5	\textfiveoldstyle
	f	\textflorin
	4	\textfouroldstyle
	/	\textfractionsolidus
	‟	\textgravedbl
	₲	\textguarani
	‽	\textinterrobang
	⸘	\textinterrobangdown
	⟨	\textlangle
	⟦	\textlbrackdbl
		\textleaf
	←	\textleftarrow
	£	\textlira
	¬	\textlnot
	⁅	\textlquill
	¼	\textonequarter
	¹	\textonesuperior
	○	\textopenbullet
a	ª	\textordfeminine
o	º	\textordmasculine
	¶	\textparagraph
	·	\textperiodcentered
	‱	\textpertenthousand
	‰	\textperthousand
	₱	\textpeso
	¶	\textpilcrow
	±	\textpm
	'	\textquotesingle
	‚	\textquotestraightbase
	„	\textquotestraightdblbase
	⟩	\textrangle
	⟧	\textrbrackdbl
	℞	\textrecipe
	※	\textreferencemark
®	®	\textregistered
	→	\textrightarrow
	⁆	\textrquill
	§	\textsection
	℠	\textservicemark
	7	\textsevenoldstyle
	6	\textsixoldstyle
	£	\textsterling
	√	\textsurd
	3	\textthreeoldstyle
	¾	\textthreequarters
	⅂	\textthreequartersemdash
	³	\textthreesuperior
	~	\texttildelow
	×	\texttimes
TM	™	\texttrademark
	⁻	\texttwelveudash
	2	\texttwooldstyle
	²	\texttwosuperior
	↑	\textuparrow
	₩	\textwon
	¥	\textyen
	0	\textzerooldstyle

Where two symbols are present, the left one is the "faked" symbol that LaTeX 2ε provides by default, and the right one is the "true" symbol that textcomp makes available.

These symbols are also available in math mode through the use of the mathcomp package. See the mathcomp documentation for usage information.

TABLE 9: wasysym Phonetic Symbols

Ð	\DH	ð	\dh	ɔ	\openo
Þ	\Thorn	ə	\inve	þ	\thorn

TABLE 10: tipa Phonetic Symbols

ɤ	\textbabygamma	ʔ	\textglotstop	ɭ	\textrtaill
ƀ	\textbarb	ˑ	\texthalflength	ɳ	\textrtailn
ɕ	\textbarc	ъ	\texthardsign	ɽ	\textrtailr
đ	\textbard	˞	\texthooktop	ʂ	\textrtails
ɟ	\textbardotlessj	ɓ	\texthtb	ʈ	\textrtailt
ɡ	\textbarg	ʃ	\texthtbardotlessj	ʐ	\textrtailz
ʔ	\textbarglotstop	ƈ	\texthtc	ˠ	\textrthook
ɨ	\textbari	ɗ	\texthtd	ʌ	\textsca
ɬ	\textbarl	ʄ	\texthtg	ʙ	\textscb
ɵ	\textbaro	ɦ	\texthth	ɛ	\textsce
ʕ	\textbarrevglotstop	ʃ	\texththeng	ɢ	\textscg
ʉ	\textbaru	ƙ	\texthtk	ʜ	\textsch
ɬ	\textbeltl	ƥ	\texthtp	ə	\textschwa
β	\textbeta	ʠ	\texthtq	ɪ	\textsci
⊙	\textbullseye	ƈ	\texthtscg	ʝ	\textscj
ˊ	\textceltpal	ƭ	\texthtt	ʟ	\textscl
χ	\textchi	ʰʊ	\texthvlig	ɴ	\textscn
ɛ	\textcloseepsilon	ɔ	\textinvglotstop	œ	\textscoelig
ɷ	\textcloseomega	ʁ	\textinvscr	ɷ	\textscomega
ɜ	\textcloserevepsilon	ι	\textiota	ǫ	\textscq
ʒ	\textcommatailz	ʎ	\textlambda	ʀ	\textscr
˩	\textcorner	ː	\textlengthmark	ɑ	\textscripta
ƀ	\textcrb	ʮ	\textlhookt	ʊ	\textscriptv
đ	\textcrd	ɬ	\textlhti	ᴜ	\textscu
ɡ	\textcrg	ɭ	\textlhtlongi	ʏ	\textscy
ħ	\textcrh	ʃ	\textlonglegr	ˌ	\textsecstress
ɔ	\textcrinvglotstop	˂	\textlptr	ь	\textsoftsign
ƛ	\textcrlambda	ɱ	\textltailm	ʗ	\textstretchc
ƻ	\textcrtwo	ɲ	\textltailn	ʦ	\texttctclig
ȼ	\textctc	ɬ	\textltilde	ʧ	\textteshlig
ɖ	\textctd	ƪ	\textlyoghlig	θ	\texttheta
ʣ	\textctdctzlig	ŋ	\textnrleg	þ	\textthorn
ʃ	\textctesh	ɟ	\textObardotlessj	ʦ	\texttslig
ʝ	\textctj	ƪ	\textOlyoghlig	ɐ	\textturna
ɳ	\textctn	ω	\textomega	œ	\textturncelig
ʇ	\textctt	ˌ	\textopencorner	ɥ	\textturnh
ʨ	\textcttctclig	ɔ	\textopeno	ʞ	\textturnk
ʒ	\textctyogh	˛	\textpalhook	Ɪ	\textturnlonglegr
ƶ	\textctz	ɸ	\textphi	ɯ	\textturnm
ʤ	\textdctzlig	ǀ	\textpipe	ɯ	\textturnmrleg
ɟ	\textdoublebaresh	ˈ	\textprimstress	ɹ	\textturnr
ǂ	\textdoublebarpipe	ˀ	\textraiseglotstop	ɻ	\textturnrrtail
≠	\textdoublebarslash	ʅ	\textraisevibyi	ɒ	\textturnscripta
‖	\textdoublepipe	ɤ	\textramshorns	ɬ	\textturnt

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‖	\textdoublevertline	▫	\textrectangle	ʌ	\textturnv
↓	\textdownstep	ʻ	\textrevapostrophe	ʍ	\textturnw
ʤ	\textdyoghlig	ɘ	\textreve	ʎ	\textturny
ʣ	\textdzlig	ɜ	\textrevepsilon	ʊ	\textupsilon
ɛ	\textepsilon	ʕ	\textrevglotstop	↑	\textupstep
ʃ	\textesh	ʗ	\textrevyogh	|	\textvertline
ɾ	\textfishhookr	ɜ˞	\textrhookrevepsilon	ɭ	\textvibyi
g	\textg	ɚ	\textrhookschwa	ʯ	\textvibyy
ɣ	\textgamma	˞	\textrhoticity	ƿ	\textwynn
↘	\textglobfall	˃	\textrptr	ʒ	\textyogh
↗	\textglobrise	ɖ	\textrtaild		

tipa defines shortcut characters for many of the above. It also defines a command \tone for denoting tone letters (pitches). See the tipa documentation for more information.

Table 11: marvosym Currency Symbols

ℛ	\Denarius	€	\EUR	€	\EURdig	€	\EURtm	₱	\Pfund
@	\Ecommerce	€	\EURcr	€	\EURhv	$	\EyesDollar	℔	\Shilling

Note that:

- \Deleatur is another macro name for \Denarius.
- The different euro signs are meant to be compatible with different fonts—Courier (\EURcr), Helvetica (\EURhv), Times (\EURtm), and the marvosym digits listed in Table 49 (\EURdig).

2 Mathematical symbols

Most, but not all, of the symbols in this section are math-mode only. That is, they yield a "`Missing $ inserted`" error message if not used within `$...$`, `\[...\]`, or another math-mode environment. Operators marked as "variable-sized" are taller in displayed formulas, shorter in in-text formulas, and possibly shorter still when used in various levels of superscripts or subscripts.

Alphanumeric symbols (e.g., "$\mathscr{L}$" and "$\mathbb{Z}$") are usually produced using one of the math alphabets in Table 52 rather than with an explicit symbol command. Look there first if you need a symbol for a transform, number set, or some other alphanumeric.

Table 12: Binary Operators

$\amalg$	`\amalg`	$\cup$	`\cup`	$\oplus$	`\oplus`	$\times$	`\times`
$*$	`\ast`	$\dagger$	`\dagger`	$\oslash$	`\oslash`	$\triangleleft$	`\triangleleft`
$\bigcirc$	`\bigcirc`	$\ddagger$	`\ddagger`	$\otimes$	`\otimes`	$\triangleright$	`\triangleright`
$\bigtriangledown$	`\bigtriangledown`	$\diamond$	`\diamond`	$\pm$	`\pm`	$\unlhd$*	`\unlhd`*
$\bigtriangleup$	`\bigtriangleup`	$\div$	`\div`	$\rhd$*	`\rhd`*	$\unrhd$*	`\unrhd`*
$\bullet$	`\bullet`	$\lhd$*	`\lhd`*	$\setminus$	`\setminus`	$\uplus$	`\uplus`
$\cap$	`\cap`	$\mp$	`\mp`	$\sqcap$	`\sqcap`	$\vee$	`\vee`
$\cdot$	`\cdot`	$\odot$	`\odot`	$\sqcup$	`\sqcup`	$\wedge$	`\wedge`
$\circ$	`\circ`	$\ominus$	`\ominus`	$\star$	`\star`	$\wr$	`\wr`

* Not predefined in LaTeX 2_ε. Use one of the packages latexsym, amsfonts, amssymb, txfonts, pxfonts, or wasysym.

Table 13: Relation Symbols

$\approx$	`\approx`	$\in$	`\in`	$\prec$	`\prec`	$\subset$	`\subset`
$\asymp$	`\asymp`	$\bowtie$	`\Join`*	$\preceq$	`\preceq`	$\subseteq$	`\subseteq`
$\bowtie$	`\bowtie`	$\leq$	`\leq`	$\propto$	`\propto`	$\succ$	`\succ`
$\cong$	`\cong`	$\ll$	`\ll`	$\sim$	`\sim`	$\succeq$	`\succeq`
$\dashv$	`\dashv`	$\mid$	`\mid`	$\simeq$	`\simeq`	$\supset$	`\supset`
$\doteq$	`\doteq`	$\models$	`\models`	$\smile$	`\smile`	$\supseteq$	`\supseteq`
$\equiv$	`\equiv`	$\neq$	`\neq`	$\sqsubset$*	`\sqsubset`*	$\vdash$	`\vdash`
$\frown$	`\frown`	$\ni$	`\ni`	$\sqsubseteq$	`\sqsubseteq`		
$\geq$	`\geq`	$\parallel$	`\parallel`	$\sqsupset$*	`\sqsupset`*		
$\gg$	`\gg`	$\perp$	`\perp`	$\sqsupseteq$	`\sqsupseteq`		

* Not predefined in LaTeX 2_ε. Use one of the packages latexsym, amsfonts, amssymb, txfonts, pxfonts, or wasysym.

Table 14: Punctuation Symbols (Math Mode)

,	,	;	;	:	`\colon`	.	`\ldotp`	·	`\cdotp`

TABLE 15: Arrow Symbols

⇓	\Downarrow	⟵	\longleftarrow	⇒	\Rightarrow
↓	\downarrow	⟸	\Longleftarrow	⇁	\rightharpoondown
↩	\hookleftarrow	⟷	\longleftrightarrow	⇀	\rightharpoonup
↪	\hookrightarrow	⟺	\Longleftrightarrow	⇌	\rightleftharpoons
⇝	\leadsto*	⟼	\longmapsto	↘	\searrow
⇐	\Leftarrow	⟶	\longrightarrow	↙	\swarrow
←	\leftarrow	⟹	\Longrightarrow	↑	\uparrow
↽	\leftharpoondown	↦	\mapsto	⇑	\Uparrow
↼	\leftharpoonup	↗	\nearrow	⇕	\Updownarrow
⇔	\Leftrightarrow	↖	\nwarrow	↕	\updownarrow
↔	\leftrightarrow	→	\rightarrow		

* Not predefined in LaTeX 2ε. Use one of the packages latexsym, amsfonts, amssymb, txfonts, pxfonts, or wasysym.

TABLE 16: Miscellaneous LaTeX 2ε Symbols

ℵ	\aleph	ℓ	\ell	𝚥	\jmath	♠	\spadesuit
∠	\angle	∅	\emptyset	…	\ldots	√	\surd
\	\backslash	∃	\exists	℧	\mho*	⊤	\top
⊥	\bot	♭	\flat	∇	\nabla	△	\triangle
□	\Box*	∀	\forall	♮	\natural	⋮	\vdots
⋯	\cdots	ℏ	\hbar	¬	\neg	℘	\wp
♣	\clubsuit	♡	\heartsuit	∂	\partial	‖	\\|
⋱	\ddots	ℑ	\Im	′	\prime		
◇	\Diamond*	ı	\imath	ℜ	\Re		
♢	\diamondsuit	∞	\infty	♯	\sharp		

* Not predefined in LaTeX 2ε. Use one of the packages latexsym, amsfonts, amssymb, txfonts, pxfonts, or wasysym.

TABLE 17: Variable-sized Math Operators

⋂	\bigcap	⨂	\bigotimes	⋀	\bigwedge	∏	\prod
⋃	\bigcup	⨆	\bigsqcup	∐	\coprod	∑	\sum
⨀	\bigodot	⨄	\biguplus	∫	\int		
⨁	\bigoplus	⋁	\bigvee	∮	\oint		

Table 18: Log-like Symbols

`\arccos`	`\cos`	`\csc`	`\exp`	`\ker`	`\limsup`	`\min`	`\sinh`
`\arcsin`	`\cosh`	`\deg`	`\gcd`	`\lg`	`\ln`	`\Pr`	`\sup`
`\arctan`	`\cot`	`\det`	`\hom`	`\lim`	`\log`	`\sec`	`\tan`
`\arg`	`\coth`	`\dim`	`\inf`	`\liminf`	`\max`	`\sin`	`\tanh`

Calling the above "symbols" may be a bit misleading.[1] Each log-like symbol merely produces the eponymous textual equivalent, but with proper surrounding spacing. See Section 5.3 for more information.

Table 19: Delimiters

(	(	)	)	↑	`\uparrow`	⇑	`\Uparrow`
[	[	]	]	↓	`\downarrow`	⇓	`\Downarrow`
{	`\{`	}	`\}`	↕	`\updownarrow`	⇕	`\Updownarrow`
⌊	`\lfloor`	⌋	`\rfloor`	⌈	`\lceil`	⌉	`\rceil`
⟨	`\langle`	⟩	`\rangle`	/	/	\	`\backslash`
|	|	‖	`\\|`			

Table 20: Large Delimiters

⎱	`\rmoustache`	⎰	`\lmoustache`	)	`\rgroup`	(	`\lgroup`
⏐	`\arrowvert`	‖	`\Arrowvert`	⏐	`\bracevert`		

Table 21: Math-Mode Accents

$\acute{a}$	`\acute{a}`	$\breve{a}$	`\breve{a}`	$\ddot{a}$	`\ddot{a}`	$\grave{a}$	`\grave{a}`	$\tilde{a}$	`\tilde{a}`
$\bar{a}$	`\bar{a}`	$\check{a}$	`\check{a}`	$\dot{a}$	`\dot{a}`	$\hat{a}$	`\hat{a}`	$\vec{a}$	`\vec{a}`

Also note the existence of `\imath` and `\jmath`, which produce dotless versions of "i" and "j". (See Table 16 on the preceding page.) These are useful when the accent is supposed to replace the dot. For example, "`\hat{\imath}`" produces a correct "$\hat{\imath}$", while "`\hat{i}`" would yield the rather odd-looking "$\hat{i}$".

Table 22: Some Other Constructions

$\widetilde{abc}$	`\widetilde{abc}`	$\widehat{abc}$	`\widehat{abc}`
$\overleftarrow{abc}$	`\overleftarrow{abc}`	$\overrightarrow{abc}$	`\overrightarrow{abc}`
$\overline{abc}$	`\overline{abc}`	$\underline{abc}$	`\underline{abc}`
$\overbrace{abc}$	`\overbrace{abc}`	$\underbrace{abc}$	`\underbrace{abc}`
$\sqrt{abc}$	`\sqrt{abc}`	$\sqrt[n]{abc}$	`\sqrt[n]{abc}`
f'	`f'`	$\frac{abc}{xyz}$	`\frac{abc}{xyz}`

[1] Michael J. Downes prefers the more general term, "atomic math objects".

Table 23: Greek Letters

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

The remaining Greek majuscules can be produced with ordinary Latin letters. The symbol "M", for instance, is used for both an uppercase "m" and an uppercase "μ".

Table 24: AMS Delimiters

$\ulcorner$	\ulcorner	$\urcorner$	\urcorner	$\llcorner$	\llcorner	$\lrcorner$	\lrcorner

Table 25: AMS Arrows

$\circlearrowleft$	\circlearrowleft	$\leftleftarrows$	\leftleftarrows	$\rightleftarrows$	\rightleftarrows
$\circlearrowright$	\circlearrowright	$\leftrightarrows$	\leftrightarrows	$\rightleftharpoons$	\rightleftharpoons
$\curvearrowleft$	\curvearrowleft	$\leftrightharpoons$	\leftrightharpoons	$\rightrightarrows$	\rightrightarrows
$\curvearrowright$	\curvearrowright	$\leftrightsquigarrow$	\leftrightsquigarrow	$\rightsquigarrow$	\rightsquigarrow
$\dashleftarrow$	\dashleftarrow	$\Lleftarrow$	\Lleftarrow	$\Rsh$	\Rsh
$\dashrightarrow$	\dashrightarrow	$\looparrowleft$	\looparrowleft	$\twoheadleftarrow$	\twoheadleftarrow
$\downdownarrows$	\downdownarrows	$\looparrowright$	\looparrowright	$\twoheadrightarrow$	\twoheadrightarrow
$\downharpoonleft$	\downharpoonleft	$\Lsh$	\Lsh	$\upharpoonleft$	\upharpoonleft
$\downharpoonright$	\downharpoonright	$\multimap$	\multimap	$\upharpoonright$	\upharpoonright
$\leftarrowtail$	\leftarrowtail	$\rightarrowtail$	\rightarrowtail	$\upuparrows$	\upuparrows

Table 26: AMS Negated Arrows

$\nLeftarrow$	\nLeftarrow	$\nLeftrightarrow$	\nLeftrightarrow	$\nRightarrow$	\nRightarrow
$\nleftarrow$	\nleftarrow	$\nleftrightarrow$	\nleftrightarrow	$\nrightarrow$	\nrightarrow

Table 27: AMS Greek

F	\digamma	$\varkappa$	\varkappa

Table 28: AMS Hebrew

$\beth$	\beth	$\daleth$	\daleth	$\gimel$	\gimel

Recall that \aleph appears in Table 16 on page 11.

Table 29: AMS Log-like Symbols

$\injlim$	\injlim	$\varinjlim$	\varinjlim	$\varlimsup$	\varlimsup
$\projlim$	\projlim	$\varliminf$	\varliminf	$\varprojlim$	\varprojlim

Load the amsmath package to get these symbols. See Section 5.3 for some additional comments regarding log-like symbols.

Table 30: Miscellaneous AMS Symbols

∠	\angle	∁	\complement	∡	\measuredangle
‵	\backprime	╲	\diagdown	℧	\mho
𝕜	\Bbbk	╱	\diagup	∄	\nexists
★	\bigstar	ð	\eth	⩤	\sphericalangle
⧫	\blacklozenge	ⅎ	\Finv	□	\square
■	\blacksquare	⅁	\Game	▽	\triangledown
▲	\blacktriangle	ℏ	\hbar	∅	\varnothing
▼	\blacktriangledown	ℏ	\hslash	△	\vartriangle
Ⓢ	\circledS	◊	\lozenge		

Table 31: AMS Commands Defined to Work in Both Math and Text Mode

✓	\checkmark	®	\circledR	✠	\maltese

Table 32: AMS Binary Operators

⊼	\barwedge	⊚	\circledcirc	⊺	\intercal
⊡	\boxdot	⊖	\circleddash	⋋	\leftthreetimes
⊟	\boxminus	⋓	\Cup	⋉	\ltimes
⊞	\boxplus	⋎	\curlyvee	⋌	\rightthreetimes
⊠	\boxtimes	⋏	\curlywedge	⋊	\rtimes
⋒	\Cap	⋇	\divideontimes	∖	\smallsetminus
∙	\centerdot	∔	\dotplus	⩒	\veebar
⊛	\circledast	⩔	\doublebarwedge		

Table 33: AMS Binary Relations

≊	\approxeq	⪀	\gtrdot	⌣	\smallsmile
϶	\backepsilon	⋛	\gtreqless	⊏	\sqsubset
∽	\backsim	⪌	\gtreqqless	⊐	\sqsupset
⋍	\backsimeq	≷	\gtrless	⋐	\Subset
∵	\because	≳	\gtrsim	⊆	\subseteqq
≬	\between	≦	\leqq	⪷	\succapprox
◀	\blacktriangleleft	⩽	\leqslant	⪺	\succcurlyeq
▶	\blacktriangleright	⪅	\lessapprox	≿	\succsim
≎	\Bumpeq	⩿	\lessdot	⋑	\Supset
≏	\bumpeq	⪋	\lesseqgtr	⊇	\supseteqq
≗	\circeq	⪋	\lesseqqgtr	∴	\therefore
≼	\curlyeqprec	≶	\lessgtr	≈	\thickapprox
≽	\curlyeqsucc	≲	\lesssim	∼	\thicksim
≒	\doteqdot	⋘	\lll	⊴	\trianglelefteq
≖	\eqcirc	⫛	\pitchfork	≜	\triangleq
⪖	\eqslantgtr	⪷	\precapprox	⊵	\trianglerighteq
⪕	\eqslantless	≼	\preccurlyeq	∝	\varpropto
≒	\fallingdotseq	≾	\precsim	◁	\vartriangleleft
≧	\geqq	≓	\risingdotseq	▷	\vartriangleright
⩾	\geqslant	∣	\shortmid	⊩	\Vdash
⋙	\ggg	∥	\shortparallel	⊨	\vDash
≳	\gtrapprox	⌢	\smallfrown	⊪	\Vvdash

Table 34: AMS Negated Binary Relations

⪊	\gnapprox	⩽̸	\nleqslant	⋬	\ntrianglerighteq
≩	\gneq	≮	\nless	⊬	\nvdash
≩	\gneqq	∤	\nmid	⊭	\nvDash
⋧	\gnsim	∦	\nparallel	⊯	\nVDash
≩	\gvertneqq	⊀	\nprec	⪹	\precnapprox
⪉	\lnapprox	⪯̸	\npreceq	⋨	\precnsim
≨	\lneq	↛	\nshortmid	⊄	\subsetneq
≨	\lneqq	∦	\nshortparallel	⫋	\subsetneqq
⋦	\lnsim	≁	\nsim	⪺	\succnapprox
≨	\lvertneqq	⊈	\nsubseteq	⋩	\succnsim
≇	\ncong	⊁	\nsucc	⊋	\supsetneq
≱	\ngeq	⪰̸	\nsucceq	⫌	\supsetneqq
≱	\ngeqq	⊉	\nsupseteq	⊊	\varsubsetneq
⩾̸	\ngeqslant	⫆̸	\nsupseteqq	⫋	\varsubsetneqq
≯	\ngtr	⋪	\ntriangleleft	⊋	\varsupsetneq
≰	\nleq	⋬	\ntrianglelefteq	⫌	\varsupsetneqq
≰	\nleqq	⋫	\ntriangleright		

Table 35: stmaryrd Delimiters

⟅	\Lbag	⟆	\Rbag	⦇	\lbag	⦈	\rbag
⌈	\llceil	⌉	\rrceil	⌊	\llfloor	⌋	\rrfloor
⟦	\llbracket	⟧	\rrbracket				

TABLE 36: stmaryrd Arrows

⇜	\leftarrowtriangle	⇚	\Mapsfrom	↓	\shortdownarrow
⇿	\leftrightarroweq	↤	\mapsfrom	←	\shortleftarrow
⇹	\leftrightarrowtriangle	⇛	\Mapsto	→	\shortrightarrow
↯	\lightning	↗	\nnearrow	↑	\shortuparrow
⟸	\Longmapsfrom	↖	\nnwarrow	↘	\ssearrow
⟻	\longmapsfrom	⇾	\rightarrowtriangle	↙	\sswarrow
⟹	\Longmapsto	⦈	\rrparenthesis		

TABLE 37: stmaryrd Extension Characters

⫽	\Arrownot	⫮	\Mapsfromchar	⫯	\Mapstochar
⫻	\arrownot	⫰	\mapsfromchar		

TABLE 38: stmaryrd Binary Operators

⟠	\baro	⫼	\interleave	⊛	\varoast
⫶	\bbslash	⪡	\leftslice	⊍	\varobar
⅋	\binampersand	⩛	\merge	⊘	\varobslash
⋇	\bindnasrepma	⊖	\minuso	⊚	\varocircle
⧆	\boxast	⫫	\moo	⊙	\varodot
⧈	\boxbar	⨦	\nplus	⊖	\varogreaterthan
⧉	\boxbox	⊍	\obar	⊖	\varolessthan
⧅	\boxbslash	⧠	\oblong	⊖	\varominus
⧇	\boxcircle	⦸	\obslash	⊕	\varoplus
⊡	\boxdot	⧁	\ogreaterthan	⊘	\varoslash
☐	\boxempty	⧀	\olessthan	⊗	\varotimes
⧄	\boxslash	⩒	\ovee	⩒	\varovee
⟇	\curlyveedownarrow	⩑	\owedge	⩑	\varowedge
⟈	\curlyveeuparrow	⪢	\rightslice	⨯	\vartimes
⟑	\curlywedgedownarrow	⫽	\sslash	⟙	\Ydown
⟇	\curlywedgeuparrow	⫿	\talloblong	≺	\Yleft
⧵	\fatbslash	◯	\varbigcirc	≻	\Yright
⁏	\fatsemi	⟇	\varcurlyvee	⟙	\Yup
⫻	\fatslash	⟑	\varcurlywedge		

TABLE 39: Variable-sized stmaryrd Math Operators

⨆	\bigbox	⫼	\biginterleave	⨅	\bigsqcap
⨉	\bigcurlyvee	⨄	\bignplus	▽	\bigtriangledown
⟑	\bigcurlywedge	⫴	\bigparallel	△	\bigtriangleup

TABLE 40: stmaryrd Binary Relations

⋹	\inplus	⫅	\subsetpluseq	⧏	\trianglelefteqslant
⋺	\niplus	⫆	\supsetplus	⧐	\trianglerighteqslant
⋽	\subsetplus	⫆	\supsetpluseq		

TABLE 41: stmaryrd Negated Binary Relations

⋪	\ntriangleleftеqslant	⋫	\ntrianglerighteqslant

TABLE 42: Variable-sized wasysym Math Operators

⨌	\iiint	∯	\oiint	∲	\varoint
∬	\iint	∫	\varint		

TABLE 43: Other wasysym Math-Mode Symbols

≳	\apprge	⋈	\Join	℧	\mho	⊐	\sqsupset
≲	\apprle	⇝	\leadsto	○	\ocircle	⊴	\unlhd
□	\Box	◁	\lhd	▷	\rhd	⊵	\unrhd
◇	\Diamond	◀	\LHD	▶	\RHD	∝	\wasypropto
⌐	\invneg	⊛	\logof	⊏	\sqsubset		

TABLE 44: txfonts/pxfonts Binary Operators

⦶	\circledbar	⦵	\circledwedge	○	\medcirc
⦸	\circledbslash	⅋	\invamp	⊞	\sqcapplus
⩒	\circledvee	●	\medbullet	⊎	\sqcupplus

TABLE 45: txfonts/pxfonts Binary Relations

⇐⊡	\boxdotLeft	⋈	\lrtimes	⋨	\npreceqq
←⊡	\boxdotleft	⫞	\Mappedfromchar	⋠	\nprecsim
⊡→	\boxdotright	⫞	\mappedfromchar	≠	\nsimeq
⊡⇒	\boxdotRight	⫴	\mmappedfromchar	⊄	\nsqsubset
←□	\boxleft	⫴	\Mmappedfromchar	⋢	\nsqsubseteq
⇐□	\boxLeft	⫦	\mmapstochar	⊅	\nsqsupset
□⇒	\boxRight	⫦	\Mmapstochar	⋣	\nsqsupseteq
□→	\boxright	⧟	\multimapboth	⋹	\nSubset
←⊙	\circleddotleft	⧳	\multimapbothvert	⫅	\nsubseteqq
⊙→	\circleddotright	⧟	\multimapdot	⪸	\nsuccapprox
⊜	\circledgtr	⧟	\multimapdotboth	⋡	\nsucccurlyeq
⊜	\circledless	⧟	\multimapdotbothA	⋫	\nsucceqq
←○	\circleleft	⧳	\multimapdotbothAvert	⋠	\nsuccsim
○→	\circleright	⧟	\multimapdotbothB	⋑	\nSupset
:≈	\colonapprox	⧳	\multimapdotbothBvert	≵	\nthickapprox
::≈	\Colonapprox	⧳	\multimapdotbothvert	↞	\ntwoheadleftarrow
:−	\coloneq	⧟	\multimapdotinv	↠	\ntwoheadrightarrow
::−	\Coloneq	⧟	\multimapinv	∦	\nvarparallel
:=	\coloneqq	≉	\napproxeq	⫮	\nvarparallelinv

(continued on next page)

(continued from previous page)

::=	\Coloneqq	≭	\nasymp	⊮	\nVdash
:∼	\colonsim	∽̸	\nbacksim	⇖	\Nwarrow
::∼	\Colonsim	≠	\nbacksimeq	⨯	\openJoin
↮	\dashleftrightarrow	≠	\nBumpeq	×	\opentimes
←◈	\Diamonddotleft	≠	\nbumpeq	⫫	\Perp
⇐◈	\DiamonddotLeft	⇗	\Nearrow	≦	\preceqq
◈→	\Diamonddotright	≢	\nequiv	≨	\precneqq
◈⇒	\DiamonddotRight	≫	\ngg	⟕	\rJoin
←◇	\Diamondleft	≵	\ngtrapprox	⇛	\Rrightarrow
⇐◇	\DiamondLeft	≯	\ngtrless	⇘	\Searrow
◇→	\Diamondright	≵	\ngtrsim	⥽	\strictfi
◇⇒	\DiamondRight	≴	\nlessapprox	⇾	\strictif
−::	\Eqcolon	≸	\nlessgtr	⥿	\strictiff
−:	\eqcolon	≴	\nlesssim	≧	\succeqq
=::	\Eqqcolon	≪̸	\nll	≩	\succneqq
=:	\eqqcolon	∉	\notin	⇙	\Swarrow
≃	\eqsim	∌	\notni	∥	\varparallel
↭	\leftsquigarrow	≵	\nprecapprox	⫽	\varparallelinv
⋉	\lJoin	⋠	\npreccurlyeq	⊫	\VvDash

Table 46: txfonts/pxfonts Upright Greek Letters

α	\alphaup	λ	\lambdaup	τ	\tauup	ϑ	\varthetaup
β	\betaup	μ	\muup	θ	\thetaup	ξ	\xiup
χ	\chiup	ν	\nuup	υ	\upsilonup	ζ	\zetaup
δ	\deltaup	ω	\omegaup	ε	\varepsilonup		
ϵ	\epsilonup	ϕ	\phiup	*g*	\varg		
η	\etaup	π	\piup	φ	\varphiup		
γ	\gammaup	ψ	\psiup	ϖ	\varpiup		
ι	\iotaup	ρ	\rhoup	ϱ	\varrhoup		
κ	\kappaup	σ	\sigmaup	ς	\varsigmaup		

TABLE 47: Variable-sized txfonts/pxfonts Math Operators

⨦	⨁	\bigsqcapplus	∲	∲	\ointclockwise
⨥	⨁	\bigsqcupplus	∳	∳	\ointctrclockwise
⨍	⨍	\fint	⨌	⨌	\sqiiint
∫⋯∫	∫⋯∫	\idotsint	⨋	⨋	\sqiint
⨌	⨌	\iiiint	⨆	⨆	\sqint
∭	∭	\iiint	⨍	⨍	\varoiiintclockwise
∬	∬	\iint	⨌	⨌	\varoiiintctrclockwise
∰	∰	\oiiintclockwise	⨏	⨏	\varoiintclockwise
∰	∰	\oiiintctrclockwise	⨏	⨏	\varoiintctrclockwise
∰	∰	\oiiint	∳	∳	\varointclockwise
∯	∯	\oiintclockwise	∳	∳	\varointctrclockwise
∯	∯	\oiintctrclockwise	×	×	\varprod
∯	∯	\oiint			

TABLE 48: Miscellaneous txfonts/pxfonts Symbols

◆	\Diamondblack	ƛ	\lambdaslash	♣	\varclubsuit	♤	\varspadesuit
◈	\Diamonddot	¢	\mathcent	♦	\vardiamondsuit		
ƛ	\lambdabar	£	\mathsterling	♥	\varheartsuit		

TABLE 49: marvosym Math Symbols

0	\MVZero	2	\MVTwo	4	\MVFour	6	\MVSix	8	\MVEight
1	\MVOne	3	\MVThree	5	\MVFive	7	\MVSeven	9	\MVNine

∢	\Anglesign	·	\Squaredot	→	\Vectorarrowhigh
≙	\Corresponds	→	\Vectorarrow		

TABLE 50: ar Aspect Ratio Symbol

Æ	\AR

TABLE 51: ulsy Contradiction and Other Symbols

↯	\blitza	↯	\blitzb	↯	\blitzc	↯	\blitzd	↯	\blitze	⊖	\odplus

Table 52: Math Alphabets

		Required package
ABCdef123	`\mathrm{ABCdef123}`	*none*
ABCdef123	`\mathit{ABCdef123}`	*none*
*ABCdef*123	`\mathnormal{ABCdef123}`	*none*
$\mathcal{ABC}$	`\mathcal{ABC}`	*none*
$\mathscr{ABC}$	`\mathscr{ABC}`	mathrsfs
$\mathcal{ABC}$	`\mathcal{ABC}`	euscript with option: mathcal
or	`\mathscr{ABC}`	euscript with option: mathcr
$\mathpzc{ABCdef123}$	`\mathpzc{ABCdef123}`	none; manually defined*
$\mathbb{ABC}$	`\mathbb{ABC}`	amsfonts or amssymb
$\mathbb{ABCdef123}$	`\mathbb{ABCdef123}`	bbold
$\mathbbm{ABCdef12}$	`\mathbbm{ABCdef12}`	bbm
$\mathbbmss{ABCdef12}$	`\mathbbmss{ABCdef12}`	bbm
$\mathbbmtt{ABCdef12}$	`\mathbbmtt{ABCdef12}`	bbm
$\mathds{ABC1}$	`\mathds{ABC1}`	dsfont
$\mathds{ABC1}$	`\mathds{ABC1}`	dsfont with option: sans
$\mathfrak{ABCdef123}$	`\mathfrak{ABCdef123}`	eufrak
$\textfrak{ABCdef123}$	`\textfrak{ABCdef123}`	yfonts
$\textswab{ABCdef123}$	`\textswab{ABCdef123}`	yfonts

* Put "`\DeclareMathAlphabet{\mathpzc}{OT1}{pzc}{m}{it}`" in your document's preamble to make `\mathpzc` typeset its argument in Zapf Chancery.

3 Science and technology symbols

This section lists symbols that are employed in various branches of science and engineering (and, because we were extremely liberal in our classification, astrology, too).

Table 53: wasysym Electrical and Physical Symbols

∼	\AC	≋	\VHF	∿∿∿	\photon	≈	\HF	∿∿∿	\gluon

Table 54: wasysym Astronomical Symbols

☊	\ascnode	♃	\jupiter	●	\newmoon	♀	\venus
⊙	\astrosun	☾	\leftmoon	♇	\pluto	♈	\vernal
☋	\descnode	♂	\mars	☽	\rightmoon		
♁	\earth	☿	\mercury	♄	\saturn		
○	\fullmoon	♆	\neptune	♅	\uranus		

Table 55: wasysym APL Symbols

⍞	\APLbox	⍠	\APLinv	⋆	\APLstar
⍝	\APLcomment	⍇	\APLleftarrowbox	⍙	\APLup
∇	\APLdown	⍟	\APLlog	⍐	\APLuparrowbox
⍗	\APLdownarrowbox	¯	\APLminus	⍀	\notbackslash
⍞	\APLinput	⍈	\APLrightarrowbox	⌿	\notslash

Table 56: wasysym APL Modifiers

∘	\APLcirc{}	~	\APLnot{}	|	\APLvert{}		

Table 57: marvosym Engineering Symbols

⚌	\Beam	↓	\Force	●	\Octosteel	⌶	\RoundedTTsteel
⏃	\Bearing	⬢	\Hexasteel	◘	\Rectpipe	◘	\Squarepipe
⭘	\Circpipe	⍧	\Lefttorque	■	\Rectsteel	■	\Squaresteel
●	\Circsteel	⫸	\Lineload	⍥	\Righttorque	⊤	\Tsteel
⏄	\Fixedbearing	⏃	\Loosebearing	⊤	\RoundedLsteel	⌶	\TTsteel
━	\Flatsteel	⌞	\Lsteel	⌞	\RoundedTsteel		

Table 58: marvosym Biological Symbols

⚲	\Female	⚣	\FemaleMale	⚥	\MALE	⚪	\Neutral
⚲	\FEMALE	⚤	\Hermaphrodite	⚦	\Male		
⚢	\FemaleFemale	⚥	\HERMAPHRODITE	⚣	\MaleMale		

Table 59: marvosym Astronomical Symbols

☿	\Mercury	♂	\Mars	♅	\Uranus	☉	\Sun
♀	\Venus	♃	\Jupiter	♆	\Neptune	☽	\Moon
♁	\Earth	♄	\Saturn	♇	\Pluto		

Table 60: marvosym Astrological Symbols

♈	\Aries	♋	\Cancer	♎	\Libra	♑	\Capricorn
♉	\Taurus	♌	\Leo	♏	\Scorpio	♒	\Aquarius
♊	\Gemini	♍	\Virgo	♐	\Sagittarius	♓	\Pisces

Note that \Aries...\Pisces can also be specified with \Zodiac{1}... \Zodiac{12} .

Table 61: marvosym Communication Symbols

	\Email	FAX	\fax		\Faxmachine	ϟ	\Lightning		\Pickup
	\Emailct	FAX	\FAX	✉	\Letter		\Mobilefone	☎	\Telefon

Table 62: marvosym Safety-Related Symbols

☣	\Biohazard	CE	\CEsign	Ex	\Explosionsafe	☢	\Radioactivity
XEL	\BSEfree		\Estatically		\Laserbeam	STOP	\Stopsign

Table 63: marvosym Computer Hardware Symbols

	\ComputerMouse		\ParallelPort		\SerialInterface
	\Keyboard		\Printer		\SerialPort

Table 64: ifsym Pulse Diagram Symbols

	\FallingEdge		\LongPulseLow		\PulseLow		\ShortPulseHigh
	\LongPulseHigh		\PulseHigh		\RaisingEdge		\ShortPulseLow

In addition, within \textifsym{...}, the following codes are valid:

	l		m		h		d		<		>
	L		M		H		D		<<		>>

This enables one to write "\textifsym{mm<DDD>mm}" to get "" or "\textifsym{L|H|L|H|L}" to get "".

Finally, \textifsym supports the display of segmented digits, as would appear on an LCD: "\textifsym{-123.456}" produces "- 123.456". "\textifsym{b}" outputs a blank with the same width as an "8".

4 Other symbols

The following are all the symbols that didn't fit neatly or unambiguously into any of the previous sections. (Do weather symbols belong under "Science and technology"? Should dice be considered "mathematics"? Are checkboxes and smiley faces possibly body-text symbols?) While some of the tables contain clearly related groups of symbols (e.g., musical notes), others represent motley assortments of whatever the font designer felt like drawing.

Table 65: wasysym General Symbols

℧	\agemO	◷	\clock	◀	\LEFTarrow	☺	\smiley
⛇	\ataribox	¤	\currency	ϟ	\lightning	☼	\sun
🔔	\bell	⌀	\diameter	♂	\male	▲	\UParrow
☻	\blacksmiley	▼	\DOWNarrow	‰	\permil	⍼	\varangle
⋈	\Bowtie	♀	\female	☎	\phone	⌑	\wasylozenge
¦	\brokenvert	☹	\frownie	➪	\pointer	∴	\wasytherefore
¢	\cent	⍉	\invdiameter	⌕	\recorder		
✓	\checked	✠	\kreuz	▶	\RIGHTarrow		

Table 66: wasysym Polygons and Stars

☑	\CheckedBox	✡	\davidsstar	◯	\octagon	✳	\varhexstar
□	\Square	⎔	\hexagon	⬠	\pentagon		
☒	\XBox	✳	\hexstar	⬡	\varhexagon		

Table 67: wasysym Musical Notes

♪	\eighthnote	𝅗𝅥	\halfnote	♫	\twonotes	𝅝	\fullnote	♩	\quarternote

Table 68: wasysym Circles

●	\CIRCLE	◐	\LEFTcircle	◑	\RIGHTcircle	↻	\rightturn
○	\Circle	◖	\Leftcircle	◗	\Rightcircle		
◖	\LEFTCIRCLE	◗	\RIGHTCIRCLE	↺	\leftturn		

Table 69: pifont Commands for Accessing Zapf Dingbats

✁	\ding{33}	✧	\ding{71}	❍	\ding{109}	⑩	\ding{181}	→	\ding{219}
✂	\ding{34}	★	\ding{72}	■	\ding{110}	❶	\ding{182}	➜	\ding{220}
✃	\ding{35}	☆	\ding{73}	❑	\ding{111}	❷	\ding{183}	→	\ding{221}
✄	\ding{36}	✪	\ding{74}	❒	\ding{112}	❸	\ding{184}	→	\ding{222}
✆	\ding{37}	✯	\ding{75}	❑	\ding{113}	❹	\ding{185}	➟	\ding{223}
✇	\ding{38}	✭	\ding{76}	❒	\ding{114}	❺	\ding{186}	➟	\ding{224}

(continued on next page)

(continued from previous page)

✉	\ding{39}	✯	\ding{77}	▲	\ding{115}	❻	\ding{187}	➡	\ding{225}
✍	\ding{40}	✯	\ding{78}	▼	\ding{116}	❼	\ding{188}	➢	\ding{226}
✉	\ding{41}	✯	\ding{79}	◆	\ding{117}	❽	\ding{189}	➢	\ding{227}
✒	\ding{42}	✰	\ding{80}	❖	\ding{118}	❾	\ding{190}	➤	\ding{228}
✑	\ding{43}	✶	\ding{81}	◗	\ding{119}	❿	\ding{191}	➥	\ding{229}
✌	\ding{44}	✶	\ding{82}	❙	\ding{120}	①	\ding{192}	➦	\ding{230}
✍	\ding{45}	✳	\ding{83}	❚	\ding{121}	②	\ding{193}	➧	\ding{231}
✎	\ding{46}	✴	\ding{84}	❯	\ding{122}	③	\ding{194}	➨	\ding{232}
✏	\ding{47}	✵	\ding{85}	❛	\ding{123}	④	\ding{195}	➩	\ding{233}
✐	\ding{48}	✶	\ding{86}	❜	\ding{124}	⑤	\ding{196}	➪	\ding{234}
✐	\ding{49}	✷	\ding{87}	❝	\ding{125}	⑥	\ding{197}	➫	\ding{235}
✒	\ding{50}	✸	\ding{88}	❞	\ding{126}	⑦	\ding{198}	➬	\ding{236}
✓	\ding{51}	✹	\ding{89}	❡	\ding{161}	⑧	\ding{199}	➭	\ding{237}
✔	\ding{52}	✺	\ding{90}	❢	\ding{162}	⑨	\ding{200}	➮	\ding{238}
✕	\ding{53}	✻	\ding{91}	❣	\ding{163}	⑩	\ding{201}	➯	\ding{239}
✖	\ding{54}	✻	\ding{92}	❤	\ding{164}	❶	\ding{202}	➱	\ding{241}
✗	\ding{55}	✼	\ding{93}	❥	\ding{165}	❷	\ding{203}	➲	\ding{242}
✘	\ding{56}	✽	\ding{94}	❦	\ding{166}	❸	\ding{204}	➳	\ding{243}
✙	\ding{57}	✾	\ding{95}	❧	\ding{167}	❹	\ding{205}	➴	\ding{244}
✚	\ding{58}	✿	\ding{96}	♣	\ding{168}	❺	\ding{206}	➵	\ding{245}
✛	\ding{59}	❀	\ding{97}	♦	\ding{169}	❻	\ding{207}	➶	\ding{246}
✜	\ding{60}	✲	\ding{98}	♥	\ding{170}	❼	\ding{208}	➷	\ding{247}
†	\ding{61}	❁	\ding{99}	♠	\ding{171}	❽	\ding{209}	➸	\ding{248}
✝	\ding{62}	❂	\ding{100}	①	\ding{172}	❾	\ding{210}	➹	\ding{249}
✞	\ding{63}	❃	\ding{101}	②	\ding{173}	❿	\ding{211}	➺	\ding{250}
✠	\ding{64}	❄	\ding{102}	③	\ding{174}	➔	\ding{212}	➻	\ding{251}
✡	\ding{65}	❅	\ding{103}	④	\ding{175}	→	\ding{213}	➼	\ding{252}
☩	\ding{66}	❆	\ding{104}	⑤	\ding{176}	↔	\ding{214}	➽	\ding{253}
☪	\ding{67}	❇	\ding{105}	⑥	\ding{177}	↕	\ding{215}	➾	\ding{254}
☯	\ding{68}	❈	\ding{106}	⑦	\ding{178}	➘	\ding{216}		
✣	\ding{69}	❉	\ding{107}	⑧	\ding{179}	➙	\ding{217}		
✤	\ding{70}	●	\ding{108}	⑨	\ding{180}	➷	\ding{218}		

Table 70: marvosym Information Symbols

🚲	\Bicycle	✂	\Cutleft	🏭	\Industry	☞	\Pointinghand
☑	\Checkedbox	---	\Cutline	🛈	\Info	✂	\Rightscissors
🕓	\Clocklogo	✂	\Cutright	---	\Kutline	♿	\Wheelchair
☕	\Coffeecup	⚽	\Football	🚺	\Ladiesroom	✍	\Writinghand
☒	\Crossedbox	🚹	\Gentsroom	✂	\Leftscissors		

Table 71: marvosym Navigation Symbols

▶	\Forward	▼	\MoveDown	⏮	\RewindToIndex	⏫	\ToTop
⏭	\ForwardToEnd	▲	\MoveUp	⏮	\RewindToStart		
⏭	\ForwardToIndex	◀	\Rewind	⏬	\ToBottom		

TABLE 72: marvosym Laundry Symbols

	\AtForty		\Handwash		\ShortNinetyFive
	\AtNinetyFive		\IroningI		\ShortSixty
	\AtSixty		\IroningII		\ShortThirty
△	\Bleech		\IroningIII		\SpecialForty
Ⓐ	\CleaningA		\NoBleech		\Tumbler
Ⓕ	\CleaningF		\NoChemicalCleaning		\WashCotton
Ⓕ	\CleaningFF		\NoIroning		\WashSynthetics
Ⓟ	\CleaningP		\NoTumbler		\WashWool
Ⓟ	\CleaningPP		\ShortFifty		
	\Dontwash		\ShortForty		

TABLE 73: Other marvosym Symbols

†	\Ankh	✝	\Cross	♡	\Heart	☺	\Smiley
	\Bat		\FHBOlogo		\MartinVogel		\Womanface
	\Bouquet		\FHBOLOGO		\Mundus		\Yinyang
	\Celtcross	☹	\Frowny	@	\MVAt		
Ⓐ	\CircledA		\FullFHBO	→	\Rightarrow*		

* Standard LaTeX 2_ε defines \Rightarrow to display "⇒", while marvosym redefines it to display "→" (or ":" in math mode). This conflict can be problematic for math symbols defined in terms of \Rightarrow, such as \Longleftrightarrow, which ends up looking like "⇐:".

TABLE 74: manfnt Dangerous Bend Symbols

\dbend \lhdbend \reversedvideodbend

Note that these symbols descend far beneath the baseline. manfnt also defines non-descending versions, which it calls, correspondingly, \textdbend, \textlhdbend, and \textreversedvideodbend.

TABLE 75: Other manfnt Symbols

	\manboldkidney		\manpenkidney
	\manconcentriccircles		\manquadrifolium
	\manconcentricdiamond		\manquartercircle
	\mancone		\manrotatedquadrifolium
	\mancube		\manrotatedquartercircle
	\manerrarrow		\manstar
	\manfilledquartercircle		\mantiltpennib
	\manhpennib	▼	\mantriangledown
	\manimpossiblecube	▸	\mantriangleright
	\mankidney	▲	\mantriangleup
	\manlhpenkidney		\manvpennib

Table 76: bbding Scissors

✁	\ScissorHollowLeft	✃	\ScissorLeftBrokenTop
✂	\ScissorHollowRight	✄	\ScissorRight
✂	\ScissorLeft	✄	\ScissorRightBrokenBottom
✃	\ScissorLeftBrokenBottom	✃	\ScissorRightBrokenTop

Table 77: bbding Hands

☚	\HandCuffLeft	☛	\HandCuffRightUp	✍	\HandPencilLeft
☚	\HandCuffLeftUp	☜	\HandLeft	☞	\HandRight
☛	\HandCuffRight	☜	\HandLeftUp	☞	\HandRightUp

Table 78: bbding Pencils and Nibs

✒	\NibLeft	✏	\PencilLeft	✎	\PencilRightDown
✒	\NibRight	✏	\PencilLeftDown	✎	\PencilRightUp
✒	\NibSolidLeft	✎	\PencilLeftUp		
✒	\NibSolidRight	✏	\PencilRight		

Table 79: bbding Crosses, Plusses, and Xs

✝	\Cross	✞	\CrossOutline	✕	\XSolid
✟	\CrossBoldOutline	✚	\Plus	✖	\XSolidBold
✠	\CrossClowerTips	✜	\PlusCenterOpen	✗	\XSolidBrush
✠	\CrossMaltese	✙	\PlusOutline		
✝	\CrossOpenShadow	✛	\PlusThinCenterOpen		

Table 80: bbding Stars, Flowers, Snowflakes, and Similar Shapes

✻	\Asterisk	✿	\FiveFlowerPetal	✢	\JackStar
✱	\AsteriskBold	★	\FiveStar	✣	\JackStarBold
✼	\AsteriskCenterOpen	☆	\FiveStarCenterOpen	❀	\SixFlowerAlternate
✽	\AsteriskRoundedEnds	✯	\FiveStarConvex	❋	\SixFlowerAltPetal
✳	\AsteriskThin	✡	\FiveStarLines	✼	\SixFlowerOpenCenter
✳	\AsteriskThinCenterOpen	☆	\FiveStarOpen	❀	\SixFlowerPetalDotted
✡	\DavidStar	✪	\FiveStarOpenCircled	✻	\SixFlowerPetalRemoved
✸	\DavidStarSolid	✭	\FiveStarOpenDotted	❀	\SixFlowerRemovedOpenPetal
✷	\EightAsterisk	✭	\FiveStarOutline	✶	\SixStar
❁	\EightFlowerPetal	✯	\FiveStarOutlineHeavy	✺	\SixteenStarLight
✻	\EightFlowerPetalRemoved	☆	\FiveStarShadow	❄	\Snowflake
✴	\EightStar	✢	\FourAsterisk	❄	\SnowflakeChevron
✸	\EightStarBold	❀	\FourClowerOpen	❆	\SnowflakeChevronBold
✵	\EightStarConvex	✤	\FourClowerSolid	✻	\Sparkle
✴	\EightStarTaper	✦	\FourStar	✼	\SparkleBold
❀	\FiveFlowerOpen	✧	\FourStarOpen	✹	\TwelweStar

Table 81: bbding Geometric Shapes

○	\CircleShadow	❖	\OrnamentDiamondSolid	❑	\SquareShadowBottomRight
●	\CircleSolid	▏	\Rectangle	❑	\SquareShadowTopLeft
◆	\DiamondSolid	▌	\RectangleBold	❑	\SquareShadowTopRight
⬭	\Ellipse	▏	\RectangleThin	■	\SquareSolid
⬭	\EllipseShadow	□	\Square	▼	\TriangleDown
⬬	\EllipseSolid	❑	\SquareCastShadowBottomRight	▲	\TriangleUp
◖	\HalfCircleLeft	❑	\SquareCastShadowTopLeft		
◗	\HalfCircleRight	❑	\SquareCastShadowTopRight		

Table 82: Other bbding Symbols

➥	\ArrowBoldDownRight	✓	\Checkmark	✆	\PhoneHandset
➲	\ArrowBoldRightCircled	✔	\CheckmarkBold	✈	\Plane
➧	\ArrowBoldRightShort	✉	\Envelope	✪	\SunshineOpenCircled
➠	\ArrowBoldRightStrobe	✌	\Peace	✇	\Tape
➦	\ArrowBoldUpRight	☎	\Phone		

Table 83: ifsym Weather Symbols

	\Blitz		\FilledWeakRainCloud		\Rain		\ThinFog
	\Cloud		\Fog		\RainCloud		\WeakRain
	\FilledCloud		\Graupel		\Snow		\WeakRainCloud
	\FilledRainCloud		\Hagel		\SnowCloud		
	\FilledSnowCloud		\HalfSun		\Sun		
	\FilledSunCloud		\NoSun		\SunCloud		

In addition, \Thermo{0}…\Thermo{6} produce thermometers that are between 0/6 and 6/6 full of mercury:

Similarly, \wind{⟨*sun*⟩}{⟨*angle*⟩}{⟨*strength*⟩} will draw wind symbols with a given amount of sun (0–4), a given angle (in degrees), and a given strength in km/h (0–100). For example, \wind{0}{0}{0} produces "○ ", \wind{2}{0}{0} produces "◒ ", and \wind{4}{0}{100} produces "● ".

Table 84: ifsym Alpine Symbols

	\FilledHut		\Joch		\Tent		\Vermessung
	\Flag		\Mountain		\VarFlag		\Village
	\HalfFilledHut		\StoneMan		\VarIceMountain		
	\Hut		\Summit		\VarMountain		
	\IceMountain		\SummitSign		\VarSummit		

Table 85: ifsym Clocks

\Interval	\StopWatchStart	\VarClock	\Wecker
\StopWatchEnd	\Taschenuhr	\VarTaschenuhr	

ifsym also exports a \showclock macro. \showclock{⟨*hours*⟩}{⟨*minutes*⟩} outputs a clock displaying the corresponding time. For instance, "\showclock{5}{40}" produces "". ⟨*hours*⟩ must be an integer from 0 to 11, and ⟨*minutes*⟩ must be an integer multiple of 5 from 0 to 55.

Table 86: ifsym Geometric Shapes

\BigCircle	\FilledBigTriangleRight	\SmallCircle
\BigCross	\FilledBigTriangleUp	\SmallCross
\BigDiamondshape	\FilledCircle	\SmallDiamondshape
\BigHBar	\FilledDiamondShadowA	\SmallHBar
\BigLowerDiamond	\FilledDiamondShadowC	\SmallLowerDiamond
\BigRightDiamond	\FilledDiamondshape	\SmallRightDiamond
\BigSquare	\FilledSmallCircle	\SmallSquare
\BigTriangleDown	\FilledSmallDiamondshape	\SmallTriangleDown
\BigTriangleLeft	\FilledSmallSquare	\SmallTriangleLeft
\BigTriangleRight	\FilledSmallTriangleDown	\SmallTriangleRight
\BigTriangleUp	\FilledSmallTriangleLeft	\SmallTriangleUp
\BigVBar	\FilledSmallTriangleRight	\SmallVBar
\Circle	\FilledSmallTriangleUp	\SpinDown
\Cross	\FilledSquare	\SpinUp
\DiamondShadowA	\FilledSquareShadowA	\Square
\DiamondShadowB	\FilledSquareShadowC	\SquareShadowA
\DiamondShadowC	\FilledTriangleDown	\SquareShadowB
\Diamondshape	\FilledTriangleLeft	\SquareShadowC
\FilledBigCircle	\FilledTriangleRight	\TriangleDown
\FilledBigDiamondshape	\FilledTriangleUp	\TriangleLeft
\FilledBigSquare	\HBar	\TriangleRight
\FilledBigTriangleDown	\LowerDiamond	\TriangleUp
\FilledBigTriangleLeft	\RightDiamond	\VBar

The ifsym documentation points out that one can use \rlap to combine some of the above into useful, new symbols. For example, \BigCircle and \FilledSmallCircle combine to give "". Likewise, \Square and \Cross combine to give "".

TABLE 87: Other ifsym Symbols

❖	\FilledSectioningDiamond	✉	\Letter	☢	\Radiation
	\Fire		\PaperLandscape	❖	\SectioningDiamond
✕	\Irritant		\PaperPortrait	☎	\Telephone
|	\StrokeOne	|||	\StrokeThree	𝍸	\StrokeFive
||	\StrokeTwo	||||	\StrokeFour		

In addition, \Cube{1}...\Cube{6} produce dice with the corresponding number of spots: ⚀ ⚁ ⚂ ⚃ ⚄ ⚅

5 Additional Information

Unlike the previous sections of this document, Section 5 does not contain lists of symbols. Rather, it provides additional help in using the Comprehensive LaTeX Symbol List. First, it makes a few points about symbol names used by multiple packages. Then, it provides some guidelines for finding symbols and gives some examples regarding how to construct missing symbols out of existing ones. Next, it comments on spacing around symbols in math mode. And finally, it lists some statistics about this document itself.

5.1 Symbol Name Clashes

Unfortunately, a number of symbol names are not unique; they appear in more than one package. Depending on how the symbols are defined in each package, LaTeX will either output an error message or replace an earlier-defined symbol with a later-defined symbol. Table 88 lists the name clashes that appear in this document. The symbol "N/A" is used to indicate that the corresponding package was not available when `symbols.tex` was compiled.

Table 88: Symbol Name Clashes

Symbol	LaTeX 2ε	AMS	stmaryrd	wasysym	marvosym	bbding	ifsym
`\angle`	∠	∠					
`\bigtriangledown`	▽		⨆				
`\bigtriangleup`	△		⨅				
`\Circle`				○			○
`\Cross`					✝	✝	×
`\Letter`					✉		✉
`\lightning`			↯	↯			
`\Rightarrow`	⇒				➔		
`\rightleftharpoons`	⇌	⇌					
`\Square`				□		□	□
`\Sun`					☉		☼
`\TriangleDown`						▼	▽
`\TriangleUp`						▲	△

Using multiple symbols with the same name in the same document—or even simply loading conflicting symbol packages—can be tricky, but, as evidenced by this document, not impossible. The general procedure is to load the first package, rename the conflicting symbols, and then load the second package. Examine the LaTeX source for this document—especially the `\savesymbol` and `\restoresymbol` macros and their subsequent usage—to see one possible way to handle symbol conflicts.

txfonts and pxfonts redefine a huge number of symbols—essentially, all the symbols defined by latexsym, textcomp, the various AMS symbol sets, and LaTeX 2ε itself. The txfonts and pxfonts conflicts are not listed in Table 88 because they are designed to be compatible with the symbols they replace. Table 89 illustrates what "compatible" means in this context.

Table 89: Example of a Benign Name Clash

Symbol	Default (Computer Modern)	txfonts (Times Roman)
`R`	R	R
`\textrecipe`	℞	℞

To use the new txfonts/pxfonts symbols without altering the document's main font, merely reset the default font families back to their original values after loading one of those packages:

```
\renewcommand\rmdefault{cmr}
```

```
\renewcommand\sfdefault{cmss}
\renewcommand\ttdefault{cmtt}
```

5.2 Where can I find the symbol for ... ?

If you can't find some symbol you're looking for in this document, there are a few possible explanations:

- The symbol isn't intuitively named. As a few examples, the command to draw dice is "`\Cube`"; a plus sign with a circle around it ("exclusive or" to computer engineers) is "`\oplus`"; and lightning bolts in fonts designed by German speakers may have "blitz" in their names. The moral of the story is to be creative with synonyms when searching the index.
- The symbol is defined by some package that was overlooked (or deemed unimportant) by the authors of this document. If there's some symbol package you think should be included in the Comprehensive LaTeX Symbol List, please send e-mail to the address listed on the title page.
- The symbol isn't defined in any package whatsoever.

Even in the last case, all is not lost; some symbols can be fabricated out of existing symbols. The LaTeX 2_ε source file called `fontdef.dtx` contains a number of such definitions. For example, `\models` (see Table 13 on page 10) is defined in that file with:

```
\def\models{\mathrel|\joinrel=}
```

where `\mathrel` and `\joinrel` are used to control the horizontal spacing. (See The TeXbook for more information on those commands.)

With some simple pattern-matching, one can easily define a backward `\models` sign ("⫤"):

```
\def\ismodeledby{=\joinrel\mathrel|}
```

As another example, `fontdef.dtx` composes the `\ddots` symbol (see Table 16 on page 11) out of three periods, raised 7 pt., 4 pt., and 1 pt., respectively:

```
\def\ddots{\mathinner{\mkern1mu\raise7\p@
    \vbox{\kern7\p@\hbox{.}}\mkern2mu
    \raise4\p@\hbox{.}\mkern2mu\raise\p@\hbox{.}\mkern1mu}}
```

`\p@` is a LaTeX 2_ε shortcut for "`1.0pt`". The remaining commands are defined in The TeXbook. To draw a version of `\ddots` with the dots going along the opposite diagonal, we merely have to reorder the `\raise7\p@`, `\raise4\p@`, and `\raise\p@`:

```
\makeatletter
\def\revddots{\mathinner{\mkern1mu\raise\p@
    \vbox{\kern7\p@\hbox{.}}\mkern2mu
    \raise4\p@\hbox{.}\mkern2mu\raise7\p@\hbox{.}\mkern1mu}}
\makeatother
```

(The `\makeatletter` and `\makeatother` commands are needed to coerce LaTeX into accepting "`@`" as part of a macro name.)

As a final example of creating new symbols out of existing ones, the following code defines a principal value integral symbol, which is an integral sign with a line through it:

```
\def\Xint#1{\mathchoice
   {\XXint\displaystyle\textstyle{#1}}%
   {\XXint\textstyle\scriptstyle{#1}}%
   {\XXint\scriptstyle\scriptscriptstyle{#1}}%
   {\XXint\scriptscriptstyle\scriptscriptstyle{#1}}%
   \!\int}
\def\XXint#1#2#3{{\setbox0=\hbox{$#1{#2#3}{\int}$}
     \vcenter{\hbox{$#2#3$}}\kern-.5\wd0}}
\def\ddashint{\Xint=}
\def\dashint{\Xint-}
```

`\dashint` produces a single-dashed integral sign ("$\fint$"), while `\ddashint` produces a double-dashed one ("$\ffint$"). The same technique can be used to produce, for example, clockwise and counterclockwise contour integrals. (Search the `comp.text.tex` archives for a post by Donald Arseneau that says exactly how.) The preceding code was taken verbatim from the UK TEX Users' Group FAQ (`http://www.tex.ac.uk/faq`).

5.3 Math-mode spacing

Terms such as "binary operators", "relations", and "punctuation" in Section 2 primarily regard the surrounding spacing. To use an symbol for a different purpose, you can use the TEX commands `\mathord`, `\mathop`, `\mathbin`, `\mathrel`, `\mathopen`, `\mathclose`, and `\mathpunct`. For example, if you want to use `\downarrow` as a variable (an "ordinary" symbol) instead of a delimiter, you can write "`$3 x + \mathord{\downarrow}$`" to get the properly spaced "$3x + \downarrow$" rather than the awkward-looking "$3x+ \downarrow$". See The TEXbook for more information.

The purpose of the "log-like symbols" in Tables 18 and 29 is to provide the correct amount of spacing around and within multiletter function names. Table 90 contrasts the output of the log-like symbols with various, naïve alternatives. In addition to spacing, the log-like symbols also handle subscripts properly. For example, "`\max_{p \in P}`" produces "$\max_{p \in P}$" in text, but "$\max\limits_{p \in P}$" as part of a displayed formula.

Table 90: Spacing Around/Within Log-like Symbols

LATEX expression	Output
`$r \sin \theta$`	$r \sin \theta$ (best)
`$r sin \theta$`	$rsin\theta$
`$r \mbox{sin} \theta$`	$r\mathrm{sin}\theta$

5.4 About this document

Table 91 lists some of this document's build characteristics. Most important is the list of packages that LATEX couldn't find, but that `symbols.tex` otherwise would have been able to take advantage of. Complete, prebuilt versions of this document are available from CTAN (`http://www.ctan.org`) in the directory `info/symbols/comprehensive`.

Table 91: Document Characteristics

Characteristic	Value
Source file:	`symbols.tex`
Build date:	March 10, 2001
Symbols documented:	2010
Packages included:	textcomp latexsym amssymb stmaryrd euscript wasysym pifont marvosym manfnt bbding ifsym tipa ulsy ar txfonts yfonts mathrsfs zapfchan bbold dsfont bbm
Packages omitted:	*none*

Index

If you're having trouble locating a symbol, try looking under "T" for "`\text`...". Many text-mode commands begin with that prefix.

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D

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N

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P

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R

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U

V

W

X

Y

Z