This list shows the symbols recognized by **MathMLStudio Lite™**. It is generally based on "The Comprehensive Latex Symbol List" by Scott Pakin. Due to lack of fonts, some symbols are displayed as a white box. Browser rendering, however, may be different, depending on the availability of fonts in your system. This list is by no means complete. Please visit our website (www.mathmlstudio.com) for any update. All errors are ours.

Punctuation Marks Not Found in OT1

《	guillemotleft	„	quotedblbase	"	textquotedbl		
»	guillemotright	‚	quotesinglbase				

AMS Commands Defined to Work in Both Math and Text Mode

✓	checkmark	®	circledR	✠	Maltese

Binary Operators

⊔	amalg	∪	cup	⊕	oplus
×	times	*	ast	†	dagger
Ø	oslash	◁	triangleleft	◯	bigcirc
‡	ddagger	⊗	otimes	▷	triangleright
▽	bigtriangledown	◇	diamond	±	pm
⊴	unlhd	△	bigtriangleup	÷	div
◁	rhd	⊵	unrhd	•	bullet
▷	lhd	\	setminus	⊎	uplus
∩	cap	∓	mp	⊓	sqcap
∨	vee	·	cdot	⊙	odot
⊔	sqcup	∧	wedge	^	circ
⊖	ominus	⋆	star	≀	wr

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		

Variable-Sized Math Operators

∩	bigcap	⊗	bigotimes	⋀	bigwedge
∏	prod	∪	bigcup	⊔	bigsqcup
∐	coprod	Σ	sum	⊙	bigodot
⊎	biguplus	∫	int	⊕	bigoplus
⋁	bigvee	∮	oint		

AMS Variable-Sized Math Operators

∭	iiint	⨌	iiiint	∬	iint

STMARYRD Variable-Sized Math Operators

⊓	bigsqcap	⋎	bigcurlyvee	∇	bigtriangledown
⋏	bigcurlywedge	∥	bigparallel	△	bigtriangleup

WASYSYM Variable-Sized Math Operators

∭	liint	∯	oiint	∮	varoint
∫	varint				

TXFONTS/PXFONTS Variable-Sized Math Operators

∮	ointclockwise	∮	ointctrclockwise	⨍	fint

| ⎕ | iiiint | ⎕ | sqint | ∭ | iiint |
| ∰ | oiiint | ⎕ | varprod | | |

Binary Relations

≈	approx	≡	equiv	⊥	perp
⌣	smile	≈	asymp	⌢	frown
≺	prec	≻	succ	⋈	bowtie
⪯	preceq	⪰	succeq	≅	cong
|	mid	∝	propto	⊢	vdash
⊣	dashv	⊨	models	∼	sim
≐	doteq	∥	parallel	≃	simeq

AMS Binary Relations

≊	approxeq	≖	eqcirc	⪸	succapprox
϶	backepsilon	≒	fallingdotseq	⪴	succcurlyeq
∽	backsim	⊸	multimap	≿	succsim
⋍	backsimeq	⋔	pitchfork	∴	therefore
∵	because	≾	precapprox	≈	thickapprox
≬	between	≼	preccurlyeq	∼	thicksim
≎	bumpeq	≾	precsim	∝	varpropto
≏	bumpeq	≓	risingdotseq	⊩	Vdash
≗	circeq	∣	shortmid	⊨	vDash
⋞	curlyeqprec	∥	shortparallel	⊪	Vvdash
⋟	curlyeqsucc	⌢	smallfrown	≑	doteqdot
⌣	smallsmile				

AMS Negated Binary Relations

| ≇ | ncong | ∦ | nshortparallel | ⊯ | nVDash |
| ∤ | nmid | ≁ | msim | ⋨ | precnapprox |

∦	nparallel	⊁	nsucc	⋨	precnsim
⊀	nprec	⊐̸	nsucceq	⋩	succnapprox
⋠	npreceq	⊯	nvDash	⋩	succnsim
∤	nshortmid	⊮	nvdash		

STMARYRD Binary Relations

⊞	inplus	⊟	niplus

Subset and Superset Relations

⊏	sqsubset	⊒	sqsupseteq	⊃	supset
⊑	sqsubseteq	⊂	subset	⊇	supseteq
⊐	sqsupset	⊆	subseteq		

AMS Subset and Superset Relations

⊈	nsubseteq	⫅	subseteqq	⫌	supsetneqq
⊉	nsupseteq	⊊	subsetneq	⊊	varsubsetneq
⊉	nsupseteqq	⫋	subsetneqq	⫋	varsubsetneqq
⊏	sqsubset	∋	supset	⊋	varsupsetneq
⊐	sqsupset	⊐	supseteqq	⊋	varsupsetneqq
⋐	Subset	⊋	supsetneq		

Inequalities

≥	geq	≫	gg	≤	leq
≪	ll	≠	neq		

AMS Inequalities

⋝	eqslantgtr	≷	gtrless	⪇	lneq
⋜	eqslantless	≳	gtrsim	≨	lneqq

≧	geqq	≩	gvertneqq	⪉	lnsim
⬚	geqslant	≦	leqq	⪇	lvertneqq
⋙	ggg	⬚	leqslant	≱	ngeq
⬚	gnapprox	⪅	lessapprox	≧	ngeqq
⬚	gneq	⋖	lessdot	⬚	ngeqslant
≩	gneqq	⪋	lesseqgtr	≯	ngtr
⋧	gnsim	⬚	lesseqqgtr	⪇	nleq
⪺	gtrapprox	⪇	lessgtr	≦	nleqq
⋗	gtrdot	⪅	lesssim	⬚	nleqslant
⪌	gtreqless	⋘	lll	≮	nless
⬚	gtreqqless	⬚	lnapprox		

AMS Triangle Relations

◄	blacktriangleleft	⋬	ntrianglelefteq	⊴	trianglelefteq
▷	vartriangleleft	▶	blacktriangleright	⋫	ntriangleright
≜	triangleq	◁	vartriangleright	⋪	ntriangleleft
⋭	ntrianglerighteq	▷	trianglerighteq		

Arrows

⇓	Downarrow	⬚	longleftarrow	↖	nwarrow
↓	downarrow	⬚	Longleftarrow	⇒	Rightarrow
↩	hookleftarrow	⬚	longleftrightarrow	→	rightarrow
↪	hookrightarrow	⬚	Longleftrightarrow	↘	searrow
↝	leadsto	⬚	longmapsto	↙	swarrow
←	leftarrow	⬚	Longrightarrow	↑	uparrow
⇐	Leftarrow	⬚	longrightarrow	⇑	Uparrow
⇔	Leftrightarrow	↦	mapsto	↕	updownarrow
↔	leftrightarrow	↗	nearrow	†	dag
↕	Updownarrow				

Harpoons

↽	leftharpoondown	⇁	rightharpoondown	⇌	rightleftharpoons	
↼	leftharpoonup	⇀	rightharpoonup			

AMS Arrows

↺	circlearrowleft	⇇	leftleftarrows	⇄	rightleftarrows
↻	circlearrowright	⇆	leftrightarrows	⇉	rightrightarrows
↶	curvearrowleft	↭	leftrightsquigarrow	⇝	rightsquigarrow
↷	curvearrowright	⇚	Lleftarrow	↱	Rsh
⬸	dashleftarrow	↩	looparrowleft	↞	twoheadleftarrow
⤍	dashrightarrow	↪	looparrowright	↠	twoheadrightarrow
⇊	downdownarrows	↰	Lsh	⇈	upuparrows
↢	leftarrowtail	↣	rightarrowtail		

AMS Negated Arrows

⇍	nLeftarrow	⇎	nLeftrightarrow	⇏	nRightarrow
↚	nleftarrow	↮	nleftrightarrow	↛	nrightarrow

AMS Harpoons

⇃	downharpoonleft	⇋	leftrightharpoons	↿	upharpoonleft
⇂	downharpoonright	⇌	rightleftharpoons	↾	upharpoonright

STMARYRD Arrows

⬿	leftarrowtriangle	←	shortleftarrow	↤	mapsfrom
→	shortrightarrow	⬾	leftrightarrowtriangle	↑	shortuparrow
↗	nnearrow	↘	ssearrow	↖	nnwarrow
↙	sswarrow	⟻	longmapsfrom	⬿	rightarrowtriangle

↓	shortdownarrow

CHEMARROW Arrows

→	chemarrow

Letter-Like Symbols

⊥	bot	∀	forall	ı	imath
∋	ni	⊤	top	ℓ	ell
ℏ	hbar	∈	in	∂	partial
℘	wp	∃	exists	ℑ	Im
j	jmath	ℜ	Re		

AMS Letter-Like Symbols

□	Bbbk	∁	complement	ℏ	hbar
®	circledR	ℏ	hslash	Ⓢ	circledS
∄	nexists				

AMS Delimiters

⌜	ulcorner	⌝	urcorner	⌞	llcorner
⌟	lrcorner				

Variable-Sized Delimiters

↓	downarrow	⇓	Downarrow	⟨	langle
⟩	rangle	⌈	lceil	⌉	rceil
↑	uparrow	⇑	Uparrow	⌊	lfloor
⌋	rfloor	↕	updownarrow	⇕	Updownarrow
\	backslash				

Large, Variable-Sized Delimiters

⌠	lmoustache	⌡	rmoustache	(	lgroup
)	rgroup	∣	arrowvert	∥	Arrowvert

Variable-Sized STMARYRD Delimiters

⟦	llbracket	⟧	rrbracket

NATH Variable-Sized Delimiters (Double)

⟪	lAngle	⟫	rAngle	⟦	lBrack
⟧	rBrack				

Dots

.	cdotp	:	colon	⋮	vdots
⋯	cdots	⋱	ddots	…	ldots

AMS Dots

…	dotsb	…	dotsi	…	dotso
…	dotsc	…	dotsm		

Misc LATEX Symbols

ℵ	aleph	◇	diamond	∞	infty, **infinity***
′	prime	∠	angle	◆	diamondsuit
℧	mho	♯	sharp	\	backslash
∅	emptyset	∇	nabla	♠	spadesuit
□	Box	†	dag	♭	flat
♮	natural	√	surd	♣	clubsuit
♥	heartsuit	¬	neg	△	triangle

Miscellaneous AMS Symbols

∠	angle	▼	blacktriangledown	℧	mho
`	backprime	\	diagdown	∡	sphericalangle
☐	bigstar	/	diagup	☐	square
☐	blacklozenge	ð	eth	▿	triangledown
■	blacksquare	◇	lozenge	∅	varnothing
▲	blacktriangle	∡	measuredangle	△	vartriangle

(This portion is not part of The Comprehensive Latex Symbol List)

MathML-Specific Symbols

Invisible operators

It (Invisible times)	af (Apply function)	ic (Invisible comma)

Letter-Like Symbols

dd (differential d)	quaternions	complexes
DD (differential d)	naturals	
ee (exponential e)	rationals	
ii (openface i)	primes	
jj (openface i)	reals	

Vulgar fractions

vfrac12	vfrac18	vfrac38

vfrac13	vfrac23	vfrac45
vfrac14	vfrac25	vfrac56
vfrac15	vfrac34	vfrac58
vfrac16	vfrac35	vfrac78