

# Every symbol (most symbols) defined by `unicode-math`

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May 20, 2016

This document uses the file `unicode-math-table.tex` to print every symbol defined by the `unicode-math` package. Use this document to find the command name or the Unicode glyph slot for a symbol that you wish to use. The following fonts are shown: (with approximate symbol counts)

- M Latin Modern Math (1585)
- X XITS Math (2425)
- S STIX Math (2394)
- C Cambria Math (1588)
- A Asana Math (2253)
- P TeX Gyre Pagella Math (1638)
- D DejaVu Math TeX Gyre (1640)
- E Neo Euler (577)

Note that there are addition maths fonts in the ‘TeX Gyre’ collection which aren’t included here.

Symbols defined in Plain TeX are indicated with <sup>(p)</sup> after their macro name. L<sup>a</sup>T<sub>E</sub>X follows Plain TeX, but defines a handful more, indicated with <sup>(l)</sup>. Symbols defined in `amssymb` are indicated with <sup>(a)</sup>.

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# 1 Opening symbols, \mathopen

USV	M	X	S	C	A	P	D	E	Macro	Description
u+00028	(	(	(	(	(	(	(	(	\lparen	left parenthesis
u+0005B	[	[	[	[	[	[	[	[	\lbrack	left square bracket
u+0007B	{	{	{	{	{	{	{	{	\lbrace <sup>(p)</sup>	left curly bracket
u+0221A	✓	✓	✓	✓	✓	✓	✓	✓	\sqrt <sup>(p)</sup>	radical
u+0221B	³√	³√	³√	³√	³√				\cuberoot	cube root
u+0221C	⁴√	⁴√	⁴√	⁴√					\fourthroot	fourth root
u+02308	⌈	⌈	⌈	⌈	⌈	⌈	⌈	⌈	\lceil <sup>(p)</sup>	left ceiling
u+0230A	⌊	⌊	⌊	⌊	⌊	⌊	⌊	⌋	\lfloor <sup>(p)</sup>	left floor
u+0231C	⌜	⌜	⌜		⌜	⌜	⌜	⌞	\ulcorner	upper left corner
u+0231E	⌞	⌞	⌞		⌞	⌞	⌞	⌞	\llcorner	lower left corner
u+023B0	⌞		⌞						\lmoustache <sup>(p)</sup>	upper left or lower right curly bracket section
u+02772	⟨	⟨							\lbrbrak	light left tortoise shell bracket ornament
u+027C5	⌞	⌞	⌞						\lbag	left s-shaped bag delimiter
u+027CC	⌞	⌞							\longdivision	long division
u+027E6	〔	〕	〔	〕	〔	〕	〔	〕	\lBrack	mathematical left white square bracket
u+027E8	〈	〈	〈	〈	〈	〈	〈	〈	\langle <sup>(p)</sup>	mathematical left angle bracket
u+027EA	『	『	『	『	『	『	『	』	\lAngle	mathematical left double angle bracket
u+027EC	⌞	⌞			⌞				\Lbrbrak	mathematical left white tortoise shell bracket
u+027EE	(	(	(		(	(	(	(	\lgroup <sup>(p)</sup>	mathematical left flattened parenthesis
u+02983	〔	〕	〔	〕					\lBrace	left white curly bracket
u+02985	⟨	⟨	⟨	⟨					\lParen	left white parenthesis
u+02987	⌞	⌞	⌞						\llparenthesis	z notation left image bracket
u+02989	⌞	⌞	⌞						\llangle	z notation left binding bracket

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0298B	[	[_		[					\lbrackubar	left square bracket with underbar
U+0298D	[	[		[					\lbrackultick	left square bracket with tick in top corner
U+0298F	[	[		[					\lbracklltick	left square bracket with tick in bottom corner
U+02991	<	<		<					\angledot	left angle bracket with dot
U+02993	<	<		<					\parenless	left arc less-than bracket
U+02995	<	<		<					\Lparengtr	double left arc greater-than bracket
U+02997	(	(		(					\blkbrbrak	left black tortoise shell bracket
U+029D8	⋮	⋮		⋮					\lvzigzag	left wiggly fence
U+029DA	⋮	⋮		⋮					\Lvzigzag	left double wiggly fence
U+029FC	<	<	<	<					\lcurvyangle	left pointing curved angle bracket

## 2 Closing symbols, \mathclose

USV	M	X	S	C	A	P	D	E	Macro	Description
U+00021	!	!	!	!	!	!	!	!	\mathexclam	exclamation mark
U+00029	)	)	)	)	)	)	)	)	\rparen	right parenthesis
U+0005D	]	]	]	]	]	]	]	]	\rbrack	right square bracket
U+0007D	}	}	}	}	}	}	}	}	\rbrace <sup>(p)</sup>	right curly bracket
U+02309	]	]	]	]	]	]	]	]	\rceil <sup>(p)</sup>	right ceiling
U+0230B	]	]	]	]	]	]	]	]	\rfloor <sup>(p)</sup>	right floor
U+0231D	↗	↗	↗	↗	↗	↗	↗	↗	\urcorner	upper right corner
U+0231F	↙	↙	↙	↙	↙	↙	↙	↙	\lrcorner	lower right corner
U+023B1	{	{	{	{	{	{	{	{	\rmoustache <sup>(p)</sup>	upper right or lower left curly bracket section
U+02773	)	)	)	)	)	)	)	)	\rbrrbrak	light right tortoise shell bracket ornament
U+027C6	§	§	§	§	§	§	§	§	\rbag	right s-shaped bag delimiter
U+027E7	॥	॥	॥	॥	॥	॥	॥	॥	\rBrack	mathematical right white square bracket
U+027E9	>	>	>	>	>	>	>	>	\rangle <sup>(p)</sup>	mathematical right angle bracket
U+027EB	»	»	»	»	»	»	»	»	\rangleangle	mathematical right double angle bracket
U+027ED	﴿	﴿	﴿	﴾	﴾	﴾	﴾	﴾	\Rbrbrak	mathematical right white tortoise shell bracket
U+027EF	)	)	)	)	)	)	)	)	\rgroup <sup>(p)</sup>	mathematical right flattened parenthesis
U+02984	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rBrace	right white curly bracket
U+02986	)	)	)	)	)	)	)	)	\rParen	right white parenthesis
U+02988	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rrparenthesis	z notation right image bracket
U+0298A	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rrangle	z notation right binding bracket
U+0298C	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rbrackubar	right square bracket with underbar
U+0298E	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rbracklrtick	right square bracket with tick in bottom corner
U+02990	﴾	﴾	﴾	﴾	﴾	﴾	﴾	﴾	\rbrackurtick	right square bracket with tick in top corner

usv	M	X	S	C	A	P	D	E	Macro	Description
u+02992	»	»	»						\rangleangledot	right angle bracket with dot
u+02994	»	»	»						\rangleparengtr	right arc greater-than bracket
u+02996	»	»	»						\Rparenless	double right arc less-than bracket
u+02998	】	】	】						\rbblkbrbrak	right black tortoise shell bracket
u+029D9	»	»	»						\rvzigzag	right wiggly fence
u+029DB	»	»	»						\Rvzigzag	right double wiggly fence
u+029FD	»	»	»						\rcurvyangle	right pointing curved angle bracket

### 3 Fence symbols, \mathfence

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0007C	|	|	|	|	|	|	|	|	\vert<sup>(p)</sup>	vertical bar
U+02016	||	||	||	||	||	||	||	||	\Vert<sup>(p)</sup>	double vertical bar
U+02980	|||	|||		|||					\Vvert	triple vertical bar delimiter

### 4 Punctuation symbols, \mathpunct

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0002C	,	,	,	,	,	,	,	,	\mathcomma	comma
U+0003A	:	:	:	:	:	:	:	:	\mathcolon	colon
U+0003B	;	;	;	;	;	;	;	;	\mathsemicolon	semicolon p:

### 5 ‘Over’ symbols, \mathover

USV	M	X	S	C	A	P	D	E	Macro	Description
U+023B4	$\overline{x+y}$	$\overline{x+y}$	$\overline{x+y}$	$\overline{x+y}$	$\overline{x+y}$	$\overline{x+y}$	$\overline{x+y}$		\overbracket	top square bracket
U+023DC	$\overbrace{x+y}$	$\overbrace{x+y}$	$\overbrace{x+y}$	$\overbrace{x+y}$	$\overbrace{x+y}$	$\overbrace{x+y}$	$\overbrace{x+y}$	$\square+\square$	\overparen	top parenthesis (mathematical use)
U+023DE	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\overbrace{\widehat{x+y}}$	$\square+\square$	\overbrace<sup>(p)</sup>	top curly bracket (mathematical use)

### 6 ‘Under’ symbols, \mathunder

USV	M	X	S	C	A	P	D	E	Macro	Description
U+023B5	$\underline{x+y}$	$\underline{x+y}$	$\underline{x+y}$	$\underline{x+y}$	$\underline{x+y}$	$\underline{x+y}$	$\underline{x+y}$		\underbracket	bottom square bracket

USV	M	X	S	C	A	P	D	E	Macro	Description
U+023DD	$\underline{x+y}$	$\underline{\underline{x+y}}$	$\underline{\underline{\underline{x+y}}}$	$\underline{\underline{\underline{\underline{x+y}}}}$	$\underline{\underline{\underline{\underline{\underline{x+y}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}}$	<code>\underparen</code>	bottom parenthesis (mathematical use)
U+023DF	$\underline{\underline{x+y}}$	$\underline{\underline{\underline{x+y}}}$	$\underline{\underline{\underline{\underline{x+y}}}}$	$\underline{\underline{\underline{\underline{\underline{x+y}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}}$	$\underline{\underline{\underline{\underline{\underline{\underline{\underline{\underline{x+y}}}}}}}$	<code>\underbrace<sup>(p)</sup></code>	bottom curly bracket (mathematical use)

## 7 Accents, \mathaccent

Note that accents will only be properly placed if used with an OpenType font with the necessary information.

usv	M	X	S	C	A	P	D	E	Macro	Description
u+00300	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\grave{(p)}	grave accent
u+00301	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\acute{(p)}	acute accent
u+00302	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\hat{(p)}	circumflex accent
u+00303	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\tilde{(p)}	tilde
u+00304	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\bar{(p)}	macron
u+00305	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\overbar	overbar embellishment
u+00306	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\breve{(p)}	breve
u+00307	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\dot{(p)}	dot above
u+00308	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\ddot{(p)}	dieresis
u+00309	ᬁ	ᬁ	ᬁ	ᬁ		ᬁ	ᬁ	ᬁ	\ovhook	combining hook above
u+0030A	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\ocirc	ring
u+0030C	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\check{(p)}	caron
u+00310	ᬁ	ᬁ	ᬁ	ᬁ					\candra	candrabindu (non-spacing)
u+00312		ᬁ	ᬁ	ᬁ					\oturnedcomma	combining turned comma above
u+00315		ᬁ	ᬁ	ᬁ					\ocommatopright	combining comma above right
u+0031A		ᬁ	ᬁ	ᬁ					\droang	left angle above (non-spacing)
u+00338	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\not{(p)}	combining long solidus overlay
u+020D0	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\leftharpoonaccent	combining left harpoon above
u+020D1	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\rightharpoonaccent	combining right harpoon above
u+020D2	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\vertoverlay	combining long vertical line overlay
u+020D7	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\vec{(p)}	combining right arrow above
u+020DB	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	ᬁ	\dddot{(p)}	combining three dots above

usv	M	X	S	C	A	P	D	E	Macro	Description
U+020DC									\ddot{\ddot{x}}	combining four dots above
U+020E7									\annuity	combining annuity symbol
U+020E9									\widebridgeabove	combining wide bridge above
U+020F0									\asteraccent	combining asterisk above

## 8 Bottom accents, \mathbotaccent

usv	M	X	S	C	A	P	D	E	Macro	Description
U+020E8									\threeunderdot	combining triple underdot

## 9 Big operators, \mathop

Of the operators shown below, a subset need to be flagged by `unicode-math` for `\nolimits` adjustments. The limits behaviour as specified by `unicode-math` are shown with grey subscripts and superscripts.

usv	M	X	S	C	A	P	D	E	Macro	Description
U+02140	$\sum\limits_0^1$	<code>\Bbbsum</code>	double- struck- n-ary summation							
U+0220F	$\prod\limits_0^1$	<code>\prod^{(p)}</code>	product operator							
U+02210	$\coprod\limits_0^1$	<code>\coprod^{(p)}</code>	coproduct operator							
U+02211	$\sum\limits_0^1$	<code>\sum^{(p)}</code>	summation operator							
U+0222B	$\int\limits_0^1$	<code>\int^{(p)}</code>	integral operator							
U+0222C	$\iint\limits_0^1$	<code>\iint</code>	double integral operator							
U+0222D	$\iiint\limits_0^1$	<code>\iiint</code>	triple integral operator							
U+0222E	$\oint\limits_0^1$	<code>\oint^{(p)}</code>	contour integral operator							
U+0222F	$\oint\limits_0^1$	<code>\oint</code>	double contour integral operator							
U+02230	$\oint\oint\limits_0^1$	<code>\ointoint</code>	triple contour integral operator							
U+02231	$\oint\oint\oint\limits_0^1$	<code>\intclockwise</code>	clockwise integral							
U+02232	$\oint\oint\oint\oint\limits_0^1$	<code>\varointclockwise</code>	contour integral, clockwise							

USV	M	X	S	C	A	P	D	E	Macro	Description
u+02233									\ointccw	contour integral, anticlockwise
u+022c0									\bigwedge^{(p)}	logical or operator
u+022c1									\bigvee^{(p)}	logical and operator
u+022c2									\bigcap^{(p)}	intersection operator
u+022c3									\bigcup^{(p)}	union operator
u+027d5									\leftouterjoin	left outer join
u+027d6									\rightouterjoin	right outer join
u+027d7									\fullouterjoin	full outer join
u+027d8									\bigbot	large up tack
u+027d9									\bigtop	large down tack
u+029f8									\xsol	big solidus
u+029f9									\xbsol	big reverse solidus
u+02a00									\bigodot^{(p)}	n-ary circled dot operator
u+02a01									\bigoplus^{(p)}	n-ary circled plus operator

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AO2									\bigotimes^{(p)}	n-ary circled times operator
U+02AO3									\bigcupdot	n-ary union operator with dot
U+02AO4									\biguplus^{(p)}	n-ary union operator with plus
U+02AO5									\bigsqcap	n-ary square intersection operator
U+02AO6									\bigsqcup^{(p)}	n-ary square union operator
U+02AO7									\cong	two logical and operator
U+02AO8									\disj	two logical or operator
U+02AO9									\bigtimes	n-ary times operator
U+02AOA									\modtwosum	modulo two sum
U+02AOB									\sumint	summation with integral
U+02AOC									\iiint	quadruple integral operator
U+02AOD									\intbar	finite part integral

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AOE									\intBar	integral with double stroke
U+02AOF									\fint	integral average with slash
U+02A10									\circfnint	circulation function
U+02A11									\awint	anticlockwise integration
U+02A12									\rppoint	line integration with rectangular path around pole
U+02A13									\scpoint	line integration with semicircular path around pole
U+02A14									\npoint	line integration not including the pole
U+02A15									\pointint	integral around a point operator
U+02A16									\sqint	quaternion integral operator
U+02A17									\intlarhk	integral with left-wards arrow with hook
U+02A18									\intx	integral with times sign

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A19									\intcap	integral with intersection
U+02A1A									\intcup	integral with union
U+02A1B									\upint	integral with overbar
U+02A1C									\lowint	integral with underbar
U+02A1D									\Join	join
U+02A1E									\bigtriangleleft	large left triangle operator
U+02A1F									\zcmp	z notation schema composition
U+02A20									\zpipe	z notation schema piping
U+02A21									\zproject	z notation schema projection
U+02AFC									\biginterleave	large triple vertical bar operator
U+02AFF									\bigtalloblong	n-ary white vertical bar
U+1EEFO									\arabicmaj	arabic mathematical operator meem with hah with tatweel

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1EEF1									\arabichad	arabic mathematical operator hah with dal

## 10 Binary relations, \mathbin

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0002B	+	+	+	+	+	+	+	+	\mathplus	plus sign b:
U+000B1	±	±	±	±	±	±	±	±	\pm^{(p)}	plus-or-minus sign
U+000B7	·	·	·	·	·	·	·	·	\cdot_{\mathrm{dotp}}^{(p)}	/centerdot b: middle dot
U+000D7	×	×	×	×	×	×	×	×	\times^{(p)}	multiply sign
U+000F7	÷	÷	÷	÷	÷	÷	÷	÷	\div^{(p)}	divide sign
U+02020	†	†	†	†	†	†	†	†	\dagger^{(p)}	dagger relation
U+02021	‡	‡	‡	‡	‡	‡	‡	‡	\ddagger^{(p)}	double dagger relation
U+02022	•	•	•	•	•	•	•	•	\smblkcircle	/bullet b: round bullet, filled
U+02040	~	~	~	~	~	~	~	~	\tieconcat	character tie, z notation sequence concatenation
U+02044	/	/	/	/	/	/	/	/	\fracslash	fraction slash
U+0214B	ؑ	ؑ	ؑ	ؑ	ؑ	ؑ	ؑ	ؑ	\upand	turned ampersand
U+02212	—	—	—	—	—	—	—	—	\minus	minus sign
U+02213	ؔ	ؔ	ؔ	ؔ	ؔ	ؔ	ؔ	ؔ	\mp^{(p)}	minus-or-plus sign
U+02214	ؒ	ؒ	ؒ	ؒ	ؒ	ؒ	ؒ	ؒ	\dotplus^{(a)}	plus sign, dot above
U+02215	/	/	/	/	/	/	/	/	\divslash	division slash
U+02216	ؘ	ؘ	ؘ	ؘ	ؘ	ؘ	ؘ	ؘ	\smallsetminus^{(a)}	small set minus (cf. reverse solidus)
U+02217	*	*	*	*	*	*	*	*	\ast^{(p)}	centered asterisk
U+02218	◦	◦	◦	◦	◦	◦	◦	◦	\vysmwhtcircle	composite function (small circle)

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02219	•	•	•	•	•	•	•	•	\vysmblkcircle	bullet operator
U+02227	∧	∧	∧	∧	∧	∧	∧	∧	\wedge^{(p)}	/wedge /land b: logical and
U+02228	∨	∨	∨	∨	∨	∨	∨	∨	\vee^{(p)}	/vee /lor b: logical or
U+02229	∩	∩	∩	∩	∩	∩	∩	∩	\cap^{(p)}	intersection
U+0222A	∪	∪	∪	∪	∪	∪	∪	∪	\cup^{(p)}	union or logical sum
U+02238	÷	÷	÷	÷	÷	÷	÷	÷	\dotminus	minus sign, dot above
U+0223E	≈	≈	≈	≈	≈	≈	≈	≈	\invlazys	most positive [inverted lazy s]
U+02240	≀	≀	≀	≀	≀	≀	≀	≀	\wr^{(p)}	wreath product
U+0228C	⊈	⊈	⊈	⊈	⊈	⊈	⊈	⊈	\cupleftarrow	multiset
U+0228D	⊉	⊉	⊉	⊉	⊉	⊉	⊉	⊉	\cupdot	union, with dot
U+0228E	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	\uplus^{(p)}	plus sign in union
U+02293	⊠	⊠	⊠	⊠	⊠	⊠	⊠	⊠	\sqcap^{(p)}	square intersection
U+02294	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	\sqcup^{(p)}	square union
U+02295	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	\oplus^{(p)}	plus sign in circle
U+02296	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	\ominus^{(p)}	minus sign in circle
U+02297	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	\otimes^{(p)}	multiply sign in circle
U+02298	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘	\oslash^{(p)}	solidus in circle
U+02299	◎	◎	◎	◎	◎	◎	◎	◎	\odot^{(p)}	middle dot in circle
U+0229A	◎	◎	◎	◎	◎	◎	◎	◎	\circledcirc^{(a)}	small circle in circle
U+0229B	⊛	⊛	⊛	⊛	⊛	⊛	⊛	⊛	\circledast^{(a)}	asterisk in circle
U+0229C	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	\circledeq	equal in circle
U+0229D	⊖	⊖	⊖	⊖	⊖	⊖	⊖	⊖	\circleddash^{(a)}	hyphen in circle
U+0229E	⊞	⊞	⊞	⊞	⊞	⊞	⊞	⊞	\boxplus^{(a)}	plus sign in box
U+0229F	⊟	⊟	⊟	⊟	⊟	⊟	⊟	⊟	\boxminus^{(a)}	minus sign in box

USV	M	X	S	C	A	P	D	E	Macro	Description
U+022A0	☒	☒	☒	☒	☒	☒	☒	☒	\boxtimes <sup>(a)</sup>	multiply sign in box
U+022A1	▣	▣	▣	▣	▣	▣	▣	▣	\boxdot <sup>(a)</sup>	/dotsquare /boxdot b: small dot in box
U+022BA	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	\intercal <sup>(a)</sup>	intercal
U+022BB	∨	∨	∨	∨	∨	∨	∨	∨	\veebar <sup>(a)</sup>	logical or, bar below (large vee); exclusive disjunction
U+022BC	⊸	⊸	⊸	⊸	⊸	⊸	⊸	⊸	\barwedge <sup>(a)</sup>	bar, wedge (large wedge)
U+022BD	⊸	⊸	⊸	⊸	⊸	⊸	⊸	⊸	\barvee	bar, vee (large vee)
U+022C4	◊	◊	◊	◊	◊	◊	◊	◊	\smwhtdiamond	white diamond
U+022C5	•	•	•	•	•	•	•	•	\cdot <sup>(p)</sup>	small middle dot
U+022C6	★	★	★	★	★	★	★	★	\star <sup>(p)</sup>	small star, filled, low
U+022C7	✖	✖	✖	✖	✖	✖	✖	✖	\divideontimes <sup>(a)</sup>	division on times
U+022C9	☒	☒	☒	☒	☒	☒	☒	☒	\ltimes <sup>(a)</sup>	times sign, left closed
U+022CA	☒	☒	☒	☒	☒	☒	☒	☒	\rtimes <sup>(a)</sup>	times sign, right closed
U+022CB	✖	✖	✖	✖	✖	✖	✖	✖	\leftthreetimes <sup>(a)</sup>	left semidirect product
U+022CC	✖	✖	✖	✖	✖	✖	✖	✖	\rightthreetimes <sup>(a)</sup>	right semidirect product
U+022CE	𝕐	𝕐	𝕐	𝕐	𝕐	𝕐	𝕐	𝕐	\curlyvee <sup>(a)</sup>	curly logical or
U+022CF	⼈	⼈	⼈	⼈	⼈	⼈	⼈	⼈	\curlywedge <sup>(a)</sup>	curly logical and
U+022D2	∩	∩	∩	∩	∩	∩	∩	∩	\Cap <sup>(a)</sup>	/cap /doublecap b: double intersection
U+022D3	∪	∪	∪	∪	∪	∪	∪	∪	\Cup <sup>(a)</sup>	/cup /doublecup b: double union
U+02305	⊸	⊸	⊸		⊸	⊸	⊸	⊸	\varbarwedge	/barwedge b: logical and, bar above [projective (bar over small wedge)]
U+02306	⊸	⊸	⊸		⊸	⊸	⊸	⊸	\vardoublebarwedge	/doublebarwedge b: logical and, double bar above [perspective (double bar over small wedge)]
U+0233D	∅	∅		∅					\obar	circle with vertical bar
U+025B3	△	△	△	△	△	△	△	△	\bigtriangleup <sup>(p)</sup>	big up triangle, open

USV	M	X	S	C	A	P	D	E	Macro	Description
U+025B7	▷	▷	▷		▷	▷	▷		\triangleright^{(p)}	(large) right triangle, open; z notation range restriction
U+025C1	◁	◁	◁		◁	◁	◁		\triangleleft^{(p)}	(large) left triangle, open; z notation domain restriction
U+025CB	○	○	○		○	○	●		\mdlgwhtcircle	medium large circle
U+025EB	□	□			□				\boxbar	vertical bar in box
U+027C7	▽	▽			▽				\veedot	or with dot inside
U+027D1	▲	▲			▲				\wedgedot	and with dot
U+027E0	◊	◊	◊		◊	◊	◊		\lozengeminus	lozenge divided by horizontal rule
U+027E1	◊	◊	◊	◊	◊	◊	◊		\concavediamond	white concave-sided diamond
U+027E2	◊	◊	◊		◊	◊	◊		\concavediamondtickleft	white concave-sided diamond with leftwards tick
U+027E3	◊	◊	◊		◊	◊	◊		\concavediamondtickright	white concave-sided diamond with rightwards tick
U+027E4	-□	-□			-□				\whitesquaretickleft	white square with leftwards tick
U+027E5	-□	-□			-□				\whitesquaretickright	white square with rightwards tick
U+02982	⋮	⋮			⋮				\typecolon	z notation type colon
U+029B5	⊖	⊖			⊖				\circlehbar	circle with horizontal bar
U+029B6	○○	○○			○○				\circledvert	circled vertical bar
U+029B7	○○	○○			○○				\circledparallel	circled parallel
U+029B8	⊗	⊗			⊗				\obslash	circled reverse solidus
U+029B9	○○	○○			○○				\operp	circled perpendicular
U+029C0	⊗	⊗			⊗				\olessthan	circled less-than
U+029C1	⊗	⊗			⊗				\ogreaterthan	circled greater-than
U+029C4	□	□			□				\boxdiag	squared rising diagonal slash
U+029C5	□	□			□				\boxbslash	squared falling diagonal slash
U+029C6	✳	✳			✳				\boxast	squared asterisk

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029C7	□	□	□	□	□	□	□	□	\boxcircle	squared small circle
U+029C8	□	□	□	□	□	□	□	□	\boxbox	squared square
U+029CD	△	△	△	△	△	△	△	△	\triangleserifs	triangle with serifs at bottom
U+029D6	☒	☒	☒	☒	☒	☒	☒	☒	\hourglass	white hourglass
U+029D7	☒	☒	☒	☒	☒	☒	☒	☒	\blackhourglass	black hourglass
U+029E2	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\shuffle	shuffle product
U+029EB	◆	◆	◆	◆	◆	◆	◆	◆	\mdlgblklozenge	black lozenge
U+029F5	＼	＼	＼	＼	＼	＼	＼	＼	\setminus^{(p)}	reverse solidus operator
U+029F6	˥	˥	˥	˥	˥	˥	˥	˥	\dsol	solidus with overbar
U+029F7	߄	߄	߄	߄	߄	߄	߄	߄	\rsolbar	reverse solidus with horizontal stroke
U+029FA	#+#	#+#	#+#	#+#	#+#	#+#	#+#	#+#	\doubleplus	double plus
U+029FB	#+#+#	#+#+#	#+#+#	#+#+#	#+#+#	#+#+#	#+#+#	#+#+#	\tripleplus	triple plus
U+029FE	+	+	+	+	+	+	+	+	\tplus	tiny
U+029FF	—	—	—	—	—	—	—	—	\tminus	miny
U+02A22	⊕	⊕	⊕	⊕	⊕	⊕	⊕	⊕	\ringplus	plus sign with small circle above
U+02A23	†	†	†	†	†	†	†	†	\plusat	plus sign with circumflex accent above
U+02A24	˜	˜	˜	˜	˜	˜	˜	˜	\simplus	plus sign with tilde above
U+02A25	‡	‡	‡	‡	‡	‡	‡	‡	\plusdot	plus sign with dot below
U+02A26	‡	‡	‡	‡	‡	‡	‡	‡	\plussim	plus sign with tilde below
U+02A27	‡₂	‡₂	‡₂	‡₂	‡₂	‡₂	‡₂	‡₂	\plussubtwo	plus sign with subscript two
U+02A28	‡*	‡*	‡*	‡*	‡*	‡*	‡*	‡*	\plustrif	plus sign with black triangle
U+02A29	‐,	‐,	‐,	‐,	‐,	‐,	‐,	‐,	\commaminus	minus sign with comma above
U+02A2A	‐.	‐.	‐.	‐.	‐.	‐.	‐.	‐.	\minusdot	minus sign with dot below
U+02A2B	‐..	‐..	‐..	‐..	‐..	‐..	‐..	‐..	\minusfdots	minus sign with falling dots

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A2C									\minusrdots	minus sign with rising dots
U+02A2D									\opluslhrim	plus sign in left half circle
U+02A2E									\oplusrhrim	plus sign in right half circle
U+02A2F									\vectimes	vector or cross product
U+02A30									\dottimes	multiplication sign with dot above
U+02A31									\timesbar	multiplication sign with underbar
U+02A32									\btimes	semidirect product with bottom closed
U+02A33									\smashtimes	smash product
U+02A34									\otimeslhrim	multiplication sign in left half circle
U+02A35									\otimesrhrim	multiplication sign in right half circle
U+02A36									\otimeshat	circled multiplication sign with circumflex accent
U+02A37									\otimes	multiplication sign in double circle
U+02A38									\odiv	circled division sign
U+02A39									\triangleplus	plus sign in triangle
U+02A3A									\triangleminus	minus sign in triangle
U+02A3B									\triangletimes	multiplication sign in triangle
U+02A3C									\intprod	interior product
U+02A3D									\intprodr	righthand interior product
U+02A3E									\fcmp	z notation relational composition
U+02A3F									\amalg^{(p)}	amalgamation or coproduct
U+02A40									\capdot	intersection with dot
U+02A41									\uminus	union with minus sign
U+02A42									\barcup	union with overbar

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A43		ⓘ	ⓘ		ⓘ				\barcap	intersection with overbar
U+02A44		ⓘ	ⓘ		ⓘ				\capwedge	intersection with logical and
U+02A45		ⓘ	ⓘ		ⓘ				\cupvee	union with logical or
U+02A46		ⓘ	ⓘ		ⓘ				\cupovercap	union above intersection
U+02A47		ⓘ	ⓘ		ⓘ				\capovercup	intersection above union
U+02A48		ⓘ	ⓘ		ⓘ				\cupbarcap	union above bar above intersection
U+02A49		ⓘ	ⓘ		ⓘ				\capbarcup	intersection above bar above union
U+02A4A		ⓘ	ⓘ		ⓘ				\twocups	union beside and joined with union
U+02A4B		ⓘ	ⓘ		ⓘ				\twocaps	intersection beside and joined with intersection
U+02A4C		ⓘ	ⓘ		ⓘ				\closedvarcup	closed union with serifs
U+02A4D		ⓘ	ⓘ		ⓘ				\closedvarcap	closed intersection with serifs
U+02A4E		ⓘ	ⓘ		ⓘ				\Sqcap	double square intersection
U+02A4F		ⓘ	ⓘ		ⓘ				\Sqcup	double square union
U+02A50		ⓘ	ⓘ		ⓘ				\closedvarcupsmashprod	closed union with serifs and smash product
U+02A51		ⓘ	ⓘ		ⓘ				\wedgeodot	logical and with dot above
U+02A52		ⓘ	ⓘ		ⓘ				\veeodot	logical or with dot above
U+02A53		ⓘ	ⓘ		ⓘ				\Wedge	double logical and
U+02A54		ⓘ	ⓘ		ⓘ				\Vee	double logical or
U+02A55		ⓘ	ⓘ		ⓘ				\wedgeonwedge	two intersecting logical and
U+02A56		ⓘ	ⓘ		ⓘ				\veeonvee	two intersecting logical or
U+02A57		ⓘ	ⓘ		ⓘ				\bigslopedvee	sloping large or
U+02A58		ⓘ	ⓘ		ⓘ				\bigslopedwedge	sloping large and
U+02A5A		ⓘ	ⓘ		ⓘ				\wedgemidvert	logical and with middle stem
U+02A5B		ⓘ	ⓘ		ⓘ				\veemidvert	logical or with middle stem

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A5C									\midbarwedge	logical and with horizontal dash
U+02A5D									\midbarvee	logical or with horizontal dash
U+02A5E									\doublebarwedge <sup>(a)</sup>	logical and with double overbar
U+02A5F									\wedgebar	logical and with underbar
U+02A60									\wedgegedoublebar	logical and with double underbar
U+02A61									\varveebar	small vee with underbar
U+02A62									\doublebarvee	logical or with double overbar
U+02A63									\veedoublebar	logical or with double underbar
U+02A64									\dsub	z notation domain antirestriction
U+02A65									\rsub	z notation range antirestriction
U+02A71									\eqqplus	equals sign above plus sign
U+02A72									\pluseqq	plus sign above equals sign
U+02AF4									\interleave	triple vertical bar binary relation
U+02AF5									\nhVvert	triple vertical bar with horizontal stroke
U+02AF6									\threedotcolon	triple colon operator
U+02AFB									\trslash	triple solidus binary relation
U+02AFD									\sslash	double solidus operator
U+02AFE									\talloblong	white vertical bar

## 11 Ordinary symbols, \mathord

USV	M	X	S	C	A	P	D	E	Macro	Description
u+00023	#	#	#	#	#	#	#	#	\mathoctothorpe	number sign
u+00024	\$	\$	\$	\$	\$	\$	\$	\$	\mathdollar	dollar sign
u+00025	%	%	%	%	%	%	%	%	\mathpercent	percent sign
u+00026	&	&	&	&	&	&	&	&	\mathampersand	ampersand
u+0002e	.	.	.	.	.	.	.	.	\mathperiod	full stop, period
u+0002f	/	/	/	/	/	/	/	/	\mathslash	solidus
u+0003f	?	?	?	?	?	?	?	?	\mathquestion	question mark
u+00040	@	@	@	@	@	@	@	@	\mathatsign	commercial at
u+0005c	\	\	\	\	\	\	\	\	\backslash^{(p)}	reverse solidus
u+000a3	£	£	£	£	£	£	£	£	\mathsterling	pound sign
u+000a5	¥	¥	¥	¥	¥	¥	¥	¥	\mathyen	yen sign
u+000a7	§	§	§	§	§	§	§	§	\mathsection	section symbol
u+000ac	¬	¬	¬	¬	¬	¬	¬	¬	\neg^{(p)}	/neg /lnot not sign
u+000b6	¶	¶	¶	¶	¶	¶	¶	¶	\mathparagraph	paragraph symbol
u+001b5	Ζ	Ζ							\Zbar	impedance (latin capital letter z with stroke)
u+003f6	϶	϶	϶						\upbackepsilon	greek reversed lunate epsilon symbol
u+02015	—	—	—	—	—	—	—	—	\horizbar	horizontal bar
u+02017	=	=	=	=	=	=	=	=	\twolowline	double low line (spacing)
u+02025	..	..	..	..	..	..	..	..	\enleadertwodots	double baseline dot (en leader)
u+02026	...	...	...	...	...	...	...	...	\unicodeellipsis	ellipsis (horizontal)

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02032	‘	’	‘	’	‘	‘	‘	’	\prime <sup>(p)</sup>	prime or minute, not superscripted
U+02033	“	”	“	”	“	”	“	”	\dprime	double prime or second, not superscripted
U+02034	“”	””	“”	””	“”	“”	“”	””	\trprime	triple prime (not superscripted)
U+02035	‘‘	’’	‘‘	’’	‘‘	‘‘	‘‘	’’	\backprime <sup>(a)</sup>	reverse prime, not superscripted
U+02036	““	””	“”	””	“”	“”	“”	””	\backdprime	double reverse prime, not superscripted
U+02037	“““	”””	“””	”””	“””	“””	”””	”””	\backtrprime	triple reverse prime, not superscripted
U+02038	^	^							\caretinsert	caret (insertion mark)
U+0203C	!!	!!	!!	!!					\Exclam	double exclamation mark
U+02043	-	-							\hyphenbullet	rectangle, filled (hyphen bullet)
U+02047	??	??							\Question	double question mark
U+02057	“””	”””	“””	”””	“””	”””	“””	”””	\qprime	quadruple prime, not superscripted
U+020AC	€	€	€	€	€	€	€	€	\euro	euro sign
U+020DD	○	○	○	○	○	○	○	○	\enclosecircle	combining enclosing circle
U+020DE	□	□	□	□	□	□	□	□	\enclosesquare	combining enclosing square
U+020DF	◇	◇	◇	◇	◇	◇	◇	◇	\enclosediamond	combining enclosing diamond
U+020E4	△	△	△	△	△	△	△	△	\enclosetriangle	combining enclosing upward pointing triangle
U+02107	ε	ε	ε	ε	ε	ε	ε	ε	\Eulerconst	euler constant

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0210E	h	h	h	h	h	h	h	h	\Planckconst	planck constant
U+02127	v	v	v	v	v	v	v	v	\mho	conductance
U+02132	ƒ	ƒ	ƒ	ƒ	ƒ				\Finv <sup>(a)</sup>	turned capital f
U+0213C	∏	∏	∏		∏	∏	∏		\Bbbpi	double-struck small pi
U+02141	ɔ	ɔ	ɔ	ɔ	ɔ				\Game <sup>(a)</sup>	turned sans-serif capital g
U+02142	˥	˥	˥	˥	˥				\sansLturned	turned sans-serif capital l
U+02143	˩	˩	˩	˩	˩				\sansLmirrored	reversed sans-serif capital l
U+02144	人性	人性	人性	人性	人性				\Yup	turned sans-serif capital y
U+02145	D	D	D	D	D	D	D		\mitBbbD	double-struck italic capital d
U+02146	d	d	d	d	d	d	d		\mitBbbd	double-struck italic small d
U+02147	e	e	e	e	e	e	e		\mitBbbe	double-struck italic small e
U+02148	i	i	i	i	i	i	i		\mitBbbi	double-struck italic small i
U+02149	j	j	j	j	j	j	j		\mitBbbj	double-struck italic small j
U+021A4	⊜	⊜	⊜						\PropertyLine	property line
U+021A8	⇓	⇓	⇓	⇓					\updownarrowbar	up down arrow with base (perpendicular)
U+021B4	⤔	⤔	⤔	⤔	⤔	⤔	⤔		\linefeed	rightwards arrow with corner downwards
U+021B5	⤎	⤎	⤎	⤎	⤎	⤎	⤎		\carriagereturn	downwards arrow with corner leftward = carriage return
U+021B8	⤏	⤏	⤏	⤏					\barovernorthwestarrow	north west arrow to long bar
U+021B9	⤏	⤏	⤏	⤏					\barleftarrowrightarrowbar	leftwards arrow to bar over rightwards arrow to bar

USV	M	X	S	C	A	P	D	E	Macro	Description
U+021BA	↺	↻	↺	↻	↺	↺	↻	↻	\acwopencirclearrow	anticlockwise open circle arrow
U+021BB	↻	↻	↻	↻	↻	↻	↻	↻	\cwopencirclearrow	clockwise open circle arrow
U+021DE	↑‡	↑‡	↑‡	↑‡					\nHuparrow	upwards arrow with double stroke
U+021DF	‡↓	‡↓	‡↓	‡↓					\nHdownarrow	downwards arrow with double stroke
U+021EO	↔...	↔...	↔...	↔...					\leftdashedarrow	leftwards dashed arrow
U+021E1	↑⋮	↑⋮	↑⋮	↑⋮					\updashedarrow	upwards dashed arrow
U+021E2	⋮→	⋮→	⋮→	⋮→					\rightdashedarrow	rightwards dashed arrow
U+021E3	⋮↓	⋮↓	⋮↓	⋮↓					\downdashedarrow	downwards dashed arrow
U+021E6	←⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	\leftwhitearrow	leftwards white arrow
U+021E7	↑⤠	⤠↑	⤠↑	⤠↑	⤠↑	⤠↑	⤠↑	⤠↑	\upwhitearrow	upwards white arrow
U+021E8	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	\rightwhitearrow	rightwards white arrow
U+021E9	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠	\downwhitearrow	downwards white arrow
U+021EA	⤠⤠	⤠⤠	⤠⤠	⤠⤠	⤠⤠				\whitearrowupfrombar	upwards white arrow from bar
U+02200	∀	∀	∀	∀	∀	∀	∀	∀	\forall^{(p)}	for all
U+02201	∁	∁	∁	∁	∁	∁	∁	∁	\complement^{(a)}	complement sign
U+02203	Ǝ	Ǝ	Ǝ	Ǝ	Ǝ	Ǝ	Ǝ	Ǝ	\exists^{(p)}	at least one exists
U+02204	⌐	⌐	⌐	⌐	⌐	⌐	⌐	⌐	\nexists^{(a)}	negated exists
U+02205	∅	∅	∅	∅	∅	∅	∅	∅	\varnothing^{(a)}	circle, slash
U+02206	△	△	△	△	△	△	△	△	\increment	laplacian (delta; nabla^2)
U+0220E	■	■	■	■	■	■	■	■	\QED	end of proof

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0221A	✓	✓	✓	✓	✓	✓	✓	✓	\surd <sup>(p)</sup>	radical
U+0221E	∞	∞	∞	∞	∞	∞	∞	∞	\infty <sup>(p)</sup>	infinity
U+0221F	∟	∟	∟	∟	∟	∟	∟	∟	\rightangle	right (90 degree) angle
U+02220	∠	∠	∠	∠	∠	∠	∠	∠	\angle <sup>(p)</sup>	angle
U+02221	⦶	⦶	⦶	⦶	⦶	⦶	⦶	⦶	\measuredangle <sup>(a)</sup>	angle-measured
U+02222	⦷	⦷	⦷	⦷	⦷	⦷	⦷	⦷	\sphericalangle <sup>(a)</sup>	angle-spherical
U+02234	∴	∴	∴	∴	∴	∴	∴	∴	\therefore <sup>(a)</sup>	therefore
U+02235	∵	∵	∵	∵	∵	∵	∵	∵	\because <sup>(a)</sup>	because
U+0223F	~	~	~	~	~	~	~	~	\sinewave	sine wave
U+022A4	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\top <sup>(p)</sup>	top
U+022A5	⊥	⊥	⊥	⊥	⊥	⊥	⊥	⊥	\bot <sup>(p)</sup>	bottom
U+022B9	+	+	+	+	+	+	+	+	\hermitmatrix	hermitian conjugate matrix
U+022BE	⦵	⦵	⦵	⦵	⦵	⦵	⦵	⦵	\measuredrightangle	right angle-measured [with arc]
U+022BF	⦾	⦾	⦾	⦾	⦾	⦾	⦾	⦾	\varltriangle	right triangle
U+022EF	...	...	...	...	...	...	...	...	\unicodedots	three dots, centered
U+02300	∅	∅	∅	∅	∅	∅	∅	∅	\diameter	diameter sign
U+02302	⌂	⌂							\house	house
U+02310	□	□	□	□	□	□	□	□	\invnot	reverse not
U+02311	□	□							\sqlozenge	square lozenge
U+02312	⏜	⏜							\proflne	profile of a line
U+02313	⏜	⏜							\profsurf	profile of a surface
U+02317	#	#							\viewdata	viewdata square

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02319	↶	↷	↶	↶	↶	↶	↷		\turnednot	turned not sign
U+02320	⨍	⨍		⨍	⨍	⨍	⨍	⨍	\inttop	top half integral
U+02321	⨍	⨍		⨍	⨍	⨍	⨍	⨍	\intbottom	bottom half integral
U+0232C	⬡	⬡							\varhexagonlrbonds	six carbon ring, corner down, double bonds lower right etc
U+02332	▷	▷							\conictaper	conical taper
U+02336	⊓	⊓							\topbot	top and bottom
U+02340	⊜	⊜							\APLnotbackslash	apl functional symbol back- slash bar
U+02353	⊟	⊟							\APLboxupcaret	boxed up caret
U+02370	⊟	⊟							\APLboxquestion	boxed question mark
U+0237C	⤷	⤷							\rangleangledownzigzagarrow	right angle with downwards zigzag arrow
U+02394	⬡	⬡							\hexagon	horizontal benzene ring [hexagon flat open]
U+0239B	⁽	⁾		⁽	⁾	⁽	⁾	⁽	\lparenuend	left parenthesis upper hook
U+0239C	⁽	⁾		⁽	⁾	⁽	⁾	⁽	\lparenextender	left parenthesis extension
U+0239D	⁽	⁾		⁽	⁾	⁽	⁾	⁽	\lparenlend	left parenthesis lower hook
U+0239E	⁾	⁾		⁾	⁾	⁾	⁾	⁾	\rparenuend	right parenthesis upper hook
U+0239F	⁾	⁾		⁾	⁾	⁾	⁾	⁾	\rparenextender	right parenthesis extension

USV	M	X	S	C	A	P	D	E	Macro	Description
u+023A0	՚	՚		՚	՚	՚	՚	՚	\rparenlend	right parenthesis lower hook
u+023A1	〔	〔		〔	〔	〔	〔	〕	\lbrackuend	left square bracket upper corner
u+023A2	〔	〔		〔	〔	〔	〔	〕	\lbrackextender	left square bracket exten- sion
u+023A3	〔	〔		〔	〔	〔	〔	〕	\lbracklend	left square bracket lower corner
u+023A4	〕	〕		〕	〕	〕	〕	〕	\rbrackuend	right square bracket upper corner
u+023A5	〕	〕		〕	〕	〕	〕	〕	\rbrackextender	right square bracket exten- sion
u+023A6	〕	〕		〕	〕	〕	〕	〕	\rbracklend	right square bracket lower corner
u+023A7	﴿	﴿		﴿	﴿	﴿	﴿	﴾	\lbraceuend	left curly bracket upper hook
u+023A8	﴿	﴿		﴿	﴿	﴿	﴿	﴾	\lbracemid	left curly bracket middle piece
u+023A9	﴿	﴿		﴿	﴿	﴿	﴿	﴾	\lbracelend	left curly bracket lower hook
u+023AA	﴿	﴿		﴿	﴿	﴿	﴿	﴾	\vbraceextender	curly bracket extension
u+023AB	﴾	﴾		﴾	﴾	﴾	﴾	﴾	\rbraceuend	right curly bracket upper hook
u+023AC	﴾	﴾		﴾	﴾	﴾	﴾	﴾	\rbracemid	right curly bracket mid- dle piece

USV	M	X	S	C	A	P	D	E	Macro	Description
U+023AD	⌚	⌚	⌚	⌚	⌚	⌚	⌚	⌚	\rbracelend	right curly bracket lower hook
U+023AE	⎮	⎮	⎮	⎮	⎮	⎮	⎮	⎮	\intextender	integral extension
U+023AF	—	—	—	—	—	—	—	—	\arrowextender	horizontal line extension (used to extend arrows)
U+023B2	⅀	⅀	⅀	⅀	⅀	⅀	⅀	⅀	\sumtop	summation top
U+023B3	⅀	⅀	⅀	⅀	⅀	⅀	⅀	⅀	\sumbottom	summation bottom
U+023B6	⅀	⅀	⅀	⅀	⅀	⅀	⅀	⅀	\bbrktbrk	bottom square bracket over top square bracket
U+023B7	⅀	⅀	⅀	⅀	⅀	⅀	⅀	⅀	\sqrtbottom	radical symbol bottom
U+023B8	￨	￨	￨	￨	￨	￨	￨	￨	\l vboxline	left vertical box line
U+023B9	￨	￨	￨	￨	￨	￨	￨	￨	\r vboxline	right vertical box line
U+023CE	↵	↵	↵	↵	↵	↵	↵	↵	\varcarriagereturn	return symbol
U+023E0	⌿	⌿	⌿	⌿	⌿	⌿	⌿	⌿	\obrbrak	top tortoise shell bracket (mathematical use)
U+023E1	⌿	⌿	⌿	⌿	⌿	⌿	⌿	⌿	\ubrbrak	bottom tortoise shell bracket (mathematical use)
U+023E2	⌺	⌺	⌺	⌺	⌺	⌺	⌺	⌺	\trapezium	white trapezium
U+023E3	⦶	⦶	⦶	⦶	⦶	⦶	⦶	⦶	\benzenr	benzene ring with circle
U+023E4	▬	▬	▬	▬	▬	▬	▬	▬	\strns	straightness
U+023E5	□	□	□	□	□	□	□	□	\fltns	flatness
U+023E6	♾	♾	♾	♾	♾	♾	♾	♾	\accurrent	ac current



USV	M	X	S	C	A	P	D	E	Macro	Description
U+025A8									\squareneswfill	square, ne-to-sw rule filled
U+025A9									\squarecrossfill	square with diagonal crosshatch fill
U+025AA	■	■	■			■	■		\smbblkssquare	/blacksquare - sq bullet, filled
U+025AB	□	□	□			□	□		\smwhtsquare	white small square
U+025AC	■	■	■			■	■		\hrectangleblack	black rectangle
U+025AD	□	□	□	□		□	□		\hrectangle	horizontal rectangle, open
U+025AE	■	■							\vrectangleblack	black vertical rectangle
U+025AF	□	□							\vrectangle	rectangle, white (vertical)
U+025B0	■	■							\parallelogramblack	black parallelogram
U+025B1	□	□							\parallelogram	parallelogram, open
U+025B2	▲	▲	▲		▲	▲	▲		\bigblacktriangleup	ox25b2 6 6d black up-pointing triangle
U+025B4	▲	▲							\blacktriangle <sup>(a)</sup>	up triangle, filled
U+025B6	▶	▶	▶		▶	▶	▶		\blacktriangleright <sup>(a)</sup>	(large) right triangle, filled
U+025B8	▶	▶							\smallblacktriangleright	right triangle, filled
U+025B9	▶	▶							\smalltriangleright	right triangle, open
U+025BA	▶	▶		▶		▶			\blackpointerright	black right-pointing pointer
U+025BB	▶	▶		▶					\whitepointerright	white right-pointing pointer
U+025BC	▼	▼	▼		▼	▼	▼		\bigblacktriangledown	big down triangle, filled
U+025BD	▽	▽	▽		▽	▽	▽		\bigtriangledown <sup>(p)</sup>	big down triangle, open

USV	M	X	S	C	A	P	D	E	Macro	Description
U+025BE		▼	▼						\blacktriangledown <sup>(a)</sup>	down triangle, filled
U+025BF		▽	▽						\triangledown <sup>(a)</sup>	down triangle, open
U+025C0	◀	◀	◀		◀	◀	◀		\blacktriangleleft <sup>(a)</sup>	(large) left trian- gle, filled
U+025C2	◀	◀	◀						\smallblacktriangleleft	left triangle, filled
U+025C3	◀	◀							\smalltriangleleft	left triangle, open
U+025C4	◀	◀	◀		◀		◀		\blackpointerleft	black left- pointing pointer
U+025C5	◀	◀	◀		◀				\whitepointerleft	white left- pointing pointer
U+025C6	◆	◆							\mdlgblkdiamond	black diamond
U+025C7	◆	◆							\mdlgwhtdiamond	white diamond; diamond, open
U+025C8	◆	◆							\blackinwhitediamond	white diamond containing black small diamond
U+025C9	◎	◎							\fisheye	fisheye
U+025CA	◊	◊	◊	◊	◊	◊	◊		\mdlgwhtlozenge	lozenge or total mark
U+025CC	○	○	○	○					\dottedcircle	dotted circle
U+025CD	◐	◐							\circlevertfill	circle with verti- cal fill
U+025CE	◎	◎		◎					\bullseye	bullseye
U+025CF	●	●	●		●	●	●		\mdlgblkcircle	circle, filled
U+025D0	◐	◑	◑						\circlelefthalfblack	circle, filled left half [harvey ball]
U+025D1	◐	◑							\circlerighthalfblack	circle, filled right half
U+025D2	◐	◑							\circlebottomhalfblack	circle, filled bottom half
U+025D3	◐	◑							\circletophalfblack	circle, filled top half

USV	M	X	S	C	A	P	D	E	Macro	Description
U+025D4									\circleurquadblack	circle with upper right quadrant black
U+025D5									\blackcircleulquadwhite	circle with all but upper left quadrant black
U+025D6									\blacklefthalfcircle	left half black circle
U+025D7									\blackrighthalfcircle	right half black circle
U+025D8									\inversebullet	inverse bullet
U+025D9									\inversewhitecircle	inverse white circle
U+025DA									\invwhiteupperhalfcircle	upper half inverse white circle
U+025DB									\invwhitelowerhalfcircle	lower half inverse white circle
U+025DC									\ularc	upper left quadrant circular arc
U+025DD									\urarc	upper right quadrant circular arc
U+025DE									\lrarc	lower right quadrant circular arc
U+025DF									\llarc	lower left quadrant circular arc
U+025E0									\topsemicircle	upper half circle
U+025E1									\botsemicircle	lower half circle
U+025E2									\lrbblacktriangle	lower right triangle, filled
U+025E3									\llblacktriangle	lower left triangle, filled
U+025E4									\ulblacktriangle	upper left triangle, filled
U+025E5									\urblacktriangle	upper right triangle, filled

USV	M	X	S	C	A	P	D	E	Macro	Description
U+025E6	○	○	○	○	○	○	○	○	\smwhtcircle	white bullet
U+025E7	□	□	□	□					\squareleftblack	square, filled left half
U+025E8	□	□	□	□					\squarerightblack	square, filled right half
U+025E9	□	□							\squareulblack	square, filled top left corner
U+025EA	□	□							\squarerlblack	square, filled bottom right corner
U+025EC	△	△							\triangledot	triangle with centered dot
U+025ED	△	△	△						\triangleleftblack	up-pointing triangle with left half black
U+025EE	△	△	△						\trianglerightblack	up-pointing triangle with right half black
U+025EF	○	○	○	○	○	○	○	○	\lgwhtcircle	large circle
U+025F0	□	□							\squareulquad	white square with upper left quadrant
U+025F1	□	□							\squarellquad	white square with lower left quadrant
U+025F2	□	□							\squarelrquad	white square with lower right quadrant
U+025F3	□	□							\squareurquad	white square with upper right quadrant
U+025F4	⊕	⊕							\circleulquad	white circle with upper left quadrant
U+025F5	⊕	⊕							\circlellquad	white circle with lower left quadrant
U+025F6	⊕	⊕							\circlelrquad	white circle with lower right quadrant

USV	M	X	S	C	A	P	D	E	Macro	Description
U+025F7		⊕	⊖						\circleurquad	white circle with upper right quadrant
U+025F8		◤	◥						\ultriangle	upper left triangle
U+025F9		◥	◤						\urtriangle	upper right triangle
U+025FA		◤	◥						\lltriangle	lower left triangle
U+025FB		□	□		□				\mdwhtsquare	white medium square
U+025FC		■	■		■				\mdblkssquare	black medium square
U+025FD		□	□						\mdsmwhtsquare	white medium small square
U+025FE		■	■						\mdsmbblkssquare	black medium small square
U+025FF		◤	◥						\lrtriangle	lower right triangle
U+02605	★	★	★						\bigstar <sup>(a)</sup>	star, filled
U+02606	★	★	★						\bigwhitestar	star, open
U+02609	◎	◎							\astrosun	sun
U+02621	☡	☡							\danger	dangerous bend (caution sign)
U+0263B	☺	☺							\blacksmiley	black smiling face
U+0263C	☀	☀							\sun	white sun with rays
U+0263D	☽	☽							\rightmoon	first quarter moon
U+0263E	☾	☾							\leftmoon	last quarter moon
U+02640	♀	♀							\female	venus, female
U+02642	♂	♂							\male	mars, male
U+02660	♠	♠	♠	♠	♠	♠	♠		\spadesuit <sup>(p)</sup>	spades suit symbol

USV	M	X	S	C	A	P	D	E	Macro	Description
u+02661	♥	♥	♥	♥	♥	♥	♥	♥	\heartsuit <sup>(p)</sup>	heart suit symbol
u+02662	♦	♦	♦		♦	♦	♦		\diamondsuit <sup>(p)</sup>	diamond suit symbol
u+02663	♣	♣	♣		♣	♣	♣		\clubsuit <sup>(p)</sup>	club suit symbol
u+02664	♠	♠	♠		♠	♠	♠		\varspadesuit	spade, white (card suit)
u+02665	♥	♥	♥		♥	♥	♥		\varheartsuit	filled heart (card suit)
u+02666	♦	♦	♦	♦	♦	♦	♦		\vardiamondsuit	filled diamond (card suit)
u+02667	♣	♣	♣		♣	♣	♣		\varclubsuit	club, white (card suit)
u+02669		♪	♪		♪				\quarternote	music note (sung text sign)
u+0266a	♪	♪	♪		♪	♪	♪		\eighthnote	eighth note
u+0266b		♪	♪						\twonotes	beamed eighth notes
u+0266d	♭	♭	♭		♭	♭	♭		\flat <sup>(p)</sup>	musical flat
u+0266e	♮	♮	♮		♮	♮	♮		\natural <sup>(p)</sup>	music natural
u+0266f	#	#	#		#	#	#		\sharp <sup>(p)</sup>	musical sharp
u+0267e	♾	♾							\acidfree	permanent paper sign
u+02680	⚇	⚇		⚇					\dicei	die face-1
u+02681	⚇	⚇		⚇					\diceii	die face-2
u+02682	⚇	⚇		⚇					\diceiii	die face-3
u+02683	⚇	⚇		⚇					\diceiv	die face-4
u+02684	⚇	⚇		⚇					\dicev	die face-5
u+02685	⚇	⚇		⚇					\dicevi	die face-6
u+02686	⚆	⚆							\circledrightdot	white circle with dot right
u+02687	⚆	⚆							\circledtwodots	white circle with two dots

USV	M	X	S	C	A	P	D	E	Macro	Description
u+02688		●	●						\blackcircledrightdot	black circle with white dot right
u+02689		●	●						\blackcircledtwodots	black circle with two white dots
u+026A5		⚥	⚥						\Hermaphrodite	male and female sign
u+026AA		○	○						\mdwhtcircle	medium white circle
u+026AB		●	●						\mdblkcircle	medium black circle
u+026AC		○	○						\mdsmwhtcircle	medium small white circle
u+026B2		♀	♀						\neuter	neuter
u+02713	✓	✓	✓		✓	✓	✓		\checkmark	tick, check mark
u+02720	✗	✗	✗		✗	✗	✗		\maltese	maltese cross
u+0272A	★	★							\circledstar	circled white star
u+02736	★	★		*					\varstar	six pointed black star
u+0273D	✳	✳							\dingasterisk	heavy teardrop-spoked asterisk
u+0279B	→	→							\draftingarrow	right arrow with bold head (drafting)
u+027C0	↙	↖		↖					\threedangle	three dimensional angle
u+027C1	▲	▲		▲					\whiteinwhitetriangle	white triangle containing small white triangle
u+027C3	◎	◎		◎					\subsetcirc	open subset
u+027C4	◎	◎		◎					\supsetcirc	open superset
u+027D0	◇	◇		◇					\diamondcdot	white diamond with centred dot
u+0292B	⤒	⤓	⤔	⤓					\rdiagovfdiag	rising diagonal crossing falling diagonal

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0292C		☒	☒	☒	☒				\fdiagovrdiag	falling diagonal crossing rising diagonal
U+0292D		☒	☒	☒	☒				\seovnearrow	south east arrow crossing north east arrow
U+0292E		☒	☒	☒	☒				\neovnearrow	north east arrow crossing south east arrow
U+0292F		☒	☒	☒	☒				\fdiagovnearrow	falling diagonal crossing north east arrow
U+02930		☒	☒	☒	☒				\rdiagovsearrow	rising diagonal crossing south east arrow
U+02931		☒	☒	☒	☒				\neovnarrow	north east arrow crossing north west arrow
U+02932		☒	☒	☒	☒				\nwovnearrow	north west arrow crossing north east arrow
U+02934		↗	↗	↗	↗				\uprightcurvearrow	arrow pointing rightwards then curving upwards
U+02935		↘	↘	↘	↘				\downrightcurvedarrow	arrow pointing rightwards then curving downwards
U+02981	●	●	●						\mdsmblkcircle	z notation spot
U+02999	⋮	⋮	⋮						\fourvdots	dotted fence
U+0299A	〰	〰	〰						\vzigzag	vertical zigzag line
U+0299B	✖	✖	✖						\measuredangleleft	measured angle opening left
U+0299C	∟	∟	∟						\rightanglesqr	right angle variant with square
U+0299D	∟	∟	∟						\rightanglemdot	measured right angle with dot
U+0299E	⦿	⦿	⦿						\angles	angle with s inside
U+0299F	⦿	⦿	⦿						\angdnr	acute angle

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029A0		▷	▷		▷				\gtlpar	spherical angle opening left
U+029A1		▽	▽		▽				\sphericalangleup	spherical angle opening up
U+029A2		↗	↗		↗				\turnangle	turned angle
U+029A3		↘	↘		↘				\revangle	reversed angle
U+029A4		≤	≤		≤				\angleubar	angle with underbar
U+029A5		≥	≥		≥				\revangleubar	reversed angle with underbar
U+029A6		↖	↖		↖				\wideangledown	oblique angle opening up
U+029A7		↗	↗		↗				\wideangleup	oblique angle opening down
U+029A8		↗	↗		↗				\measanglerutone	measured angle with open arm ending in arrow pointing up and right
U+029A9		↖	↖		↖				\measanglelutonw	measured angle with open arm ending in arrow pointing up and left
U+029AA		↘	↘		↘				\measanglerdtose	measured angle with open arm ending in arrow pointing down and right
U+029AB		↙	↙		↙				\measangleldtosw	measured angle with open arm ending in arrow pointing down and left
U+029AC		↗	↗		↗				\measangleurtone	measured angle with open arm ending in arrow pointing right and up
U+029AD		↖	↖		↖				\measanglelutonw	measured angle with open arm ending in arrow pointing left and up

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029AE		▷	▷		▷				\measangledrtose	measured angle with open arm ending in arrow pointing right and down
U+029AF		▷	▷		◁				\measangledltosw	measured angle with open arm ending in arrow pointing left and down
U+029B0		∅	∅		∅				\revemptyset	reversed empty set
U+029B1		∅	∅		∅				\emptysetobar	empty set with overbar
U+029B2		∅	∅		∅				\emptysetocirc	empty set with small circle above
U+029B3		∅	∅		∅				\emptysetoarr	empty set with right arrow above
U+029B4		∅	∅		∅				\emptysetoarrl	empty set with left arrow above
U+029BA		⊕	⊕		⊕				\obot	circle divided by horizontal bar and top half divided by vertical bar
U+029BB		⊗	⊗		⊗				\olcross	circle with superimposed x
U+029BC		⊗	⊗		⊗				\odotslashdot	circled anticlockwise-rotated division sign
U+029BD		◊	◊		◊				\uparrowarrowoncircle	up arrow through circle
U+029BE		◎	◎		◎				\circledwhitebullet	circled white bullet
U+029BF		◎	◎		◎				\circledbullet	circled bullet
U+029C2		○°	○°		○°				\cirscir	circle with small circle to the right
U+029C3		○=	○=		○=				\cirE	circle with two horizontal strokes to the right

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029C9									\boxonbox	two joined squares
U+029CA									\triangleodot	triangle with dot above
U+029CB									\triangleubar	triangle with underbar
U+029CC									\triangles	s in triangle
U+029DC									\iinfin	incomplete infinity
U+029DD									\tieinfty	tie over infinity
U+029DE									\nvinfty	infinity negated with vertical bar
U+029EO									\laplac	square with contoured outline
U+029E7									\thermod	thermodynamic
U+029E8									\downtriangleleftblack	down-pointing triangle with left half black
U+029E9									\downtrianglerightblack	down-pointing triangle with right half black
U+029EA									\blackdiamonddownarrow	black diamond with down arrow
U+029EC									\circledownarrow	white circle with down arrow
U+029ED									\blackcircledownarrow	black circle with down arrow
U+029EE									\errbarsquare	error-barred white square
U+029EF									\errbarblacksquare	error-barred black square
U+029F0									\errbardiamond	error-barred white diamond
U+029F1									\errbarblackdiamond	error-barred black diamond
U+029F2									\errbarcircle	error-barred white circle

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029F3									\errbarblackcircle	error-barred black circle
U+02AE1									\perps	perpendicular with s
U+02AF1									\topcir	down tack with circle below
U+02B12									\squaretopblack	square with top half black
U+02B13									\squarebotblack	square with bottom half black
U+02B14									\squareurblack	square with upper right diagonal half black
U+02B15									\squarellblack	square with lower left diagonal half black
U+02B16									\diamondleftblack	diamond with left half black
U+02B17									\diamondrightblack	diamond with right half black
U+02B18									\diamondtopblack	diamond with top half black
U+02B19									\diamondbotblack	diamond with bottom half black
U+02B1A									\dottedsquare	dotted square
U+02B1B									\lgblksquare	black large square
U+02B1C									\lgwhtsquare	white large square
U+02B1D	.	.							\vysmblksquare	black very small square
U+02B1E	.	.							\vysmwhtsquare	white very small square
U+02B1F									\pentagonblack	black pentagon
U+02B20									\pentagon	white pentagon
U+02B21									\varhexagon	white hexagon

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02B22		◐	◑						\varhexagonblack	black hexagon
U+02B23		◐	◑						\hexagonblack	horizontal black hexagon
U+02B24		◑	●						\lgbblkcircle	black large circle
U+02B25		◆	◆						\mdblkdiamond	black medium diamond
U+02B26		◇	◇						\mdwhtdiamond	white medium diamond
U+02B27		◆	◆						\mdblklozenge	black medium lozenge
U+02B28		◇	◇						\mdwhtlozenge	white medium lozenge
U+02B29		◆	◆						\smbblkdiamond	black small diamond
U+02B2A		◆	◆						\smbblklozenge	black small lozenge
U+02B2B		◊	◊						\smwhtlozenge	white small lozenge
U+02B2C		◑	●						\blkhorzoval	black horizontal ellipse
U+02B2D		○	○						\whthorzoval	white horizontal ellipse
U+02B2E		◑	●						\blkvertoval	black vertical ellipse
U+02B2F		○	○						\whtvertoval	white vertical ellipse
U+02B50		★	★	★					\medwhitestar	white medium star
U+02B51		★	★	★					\medblackstar	black medium star
U+02B52		★	★	★					\smwhitestar	white small star
U+02B53		◐	◑						\rightpentagonblack	black right-pointing pentagon
U+02B54		◇	◇						\rightpentagon	white right-pointing pentagon
U+03012		〒	〒						\postalmark	postal mark

USV	M	X	S	C	A	P	D	E	Macro	Description
U+03030		~~	~~						\hzigzag	zigzag
U+1D7CE	0	0	0	0	0	0	0	0	\mbfzero	mathematical bold digit 0
U+1D7CF	1	1	1	1	1	1	1	1	\mbfone	mathematical bold digit 1
U+1D7D0	2	2	2	2	2	2	2	2	\mbftwo	mathematical bold digit 2
U+1D7D1	3	3	3	3	3	3	3	3	\mbfthree	mathematical bold digit 3
U+1D7D2	4	4	4	4	4	4	4	4	\mbffour	mathematical bold digit 4
U+1D7D3	5	5	5	5	5	5	5	5	\mbffive	mathematical bold digit 5
U+1D7D4	6	6	6	6	6	6	6	6	\mbfsix	mathematical bold digit 6
U+1D7D5	7	7	7	7	7	7	7	7	\mbfseven	mathematical bold digit 7
U+1D7D6	8	8	8	8	8	8	8	8	\mbfeight	mathematical bold digit 8
U+1D7D7	9	9	9	9	9	9	9	9	\mbfnine	mathematical bold digit 9
U+1D7D8	0	0	0	0	0	0	0	0	\Bbbzero	mathematical double-struck digit 0
U+1D7D9	1	1	1	1	1	1	1	1	\Bbbone	mathematical double-struck digit 1
U+1D7DA	2	2	2	2	2	2	2	2	\Bbbtwo	mathematical double-struck digit 2
U+1D7DB	3	3	3	3	3	3	3	3	\Bbbthree	mathematical double-struck digit 3
U+1D7DC	4	4	4	4	4	4	4	4	\Bbbfour	mathematical double-struck digit 4
U+1D7DD	5	5	5	5	5	5	5	5	\Bbbfive	mathematical double-struck digit 5
U+1D7DE	6	6	6	6	6	6	6	6	\Bbbsix	mathematical double-struck digit 6

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D7DF	7	7	7	7	7	7	7	7	\Bbbseven	mathematical double-struck digit 7
U+1D7EO	8	8	8	8	8	8	8	8	\Bbbeight	mathematical double-struck digit 8
U+1D7E1	9	9	9	9	9	9	9	9	\Bbbnine	mathematical double-struck digit 9
U+1D7E2	0	0	0	0	0	0	0	0	\msanszero	mathematical sans-serif digit 0
U+1D7E3	1	1	1	1	1	1	1	1	\msansone	mathematical sans-serif digit 1
U+1D7E4	2	2	2	2	2	2	2	2	\msanstwo	mathematical sans-serif digit 2
U+1D7E5	3	3	3	3	3	3	3	3	\msansthree	mathematical sans-serif digit 3
U+1D7E6	4	4	4	4	4	4	4	4	\msansfour	mathematical sans-serif digit 4
U+1D7E7	5	5	5	5	5	5	5	5	\msansfive	mathematical sans-serif digit 5
U+1D7E8	6	6	6	6	6	6	6	6	\msanssix	mathematical sans-serif digit 6
U+1D7E9	7	7	7	7	7	7	7	7	\msansseven	mathematical sans-serif digit 7
U+1D7EA	8	8	8	8	8	8	8	8	\msanseight	mathematical sans-serif digit 8
U+1D7EB	9	9	9	9	9	9	9	9	\msansnine	mathematical sans-serif digit 9
U+1D7EC	0	0	0	0	0	0	0	0	\mbfsanszero	mathematical sans-serif bold digit 0
U+1D7ED	1	1	1	1	1	1	1	1	\mbfsansone	mathematical sans-serif bold digit 1
U+1D7EE	2	2	2	2	2	2	2	2	\mbfsanstwo	mathematical sans-serif bold digit 2
U+1D7EF	3	3	3	3	3	3	3	3	\mbfsansthree	mathematical sans-serif bold digit 3
U+1D7FO	4	4	4	4	4	4	4	4	\mbfsansfour	mathematical sans-serif bold digit 4

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D7F1	5	5	5	5	5	5	5		\mbfsansfive	mathematical sans-serif bold digit 5
U+1D7F2	6	6	6	6	6	6	6		\mbfsanssix	mathematical sans-serif bold digit 6
U+1D7F3	7	7	7	7	7	7	7		\mbfsansseven	mathematical sans-serif bold digit 7
U+1D7F4	8	8	8	8	8	8	8		\mbfsanseight	mathematical sans-serif bold digit 8
U+1D7F5	9	9	9	9	9	9	9		\mbfsansnine	mathematical sans-serif bold digit 9
U+1D7F6	0	0	0	0	0	0	0		\mttzero	mathematical monospace digit 0
U+1D7F7	1	1	1	1	1	1	1		\mttone	mathematical monospace digit 1
U+1D7F8	2	2	2	2	2	2	2		\mtttwo	mathematical monospace digit 2
U+1D7F9	3	3	3	3	3	3	3		\mttthree	mathematical monospace digit 3
U+1D7FA	4	4	4	4	4	4	4		\mttfour	mathematical monospace digit 4
U+1D7FB	5	5	5	5	5	5	5		\mttfive	mathematical monospace digit 5
U+1D7FC	6	6	6	6	6	6	6		\mttsix	mathematical monospace digit 6
U+1D7FD	7	7	7	7	7	7	7		\mttseven	mathematical monospace digit 7
U+1D7FE	8	8	8	8	8	8	8		\mtteight	mathematical monospace digit 8
U+1D7FF	9	9	9	9	9	9	9		\mttnine	mathematical monospace digit 9

## 12 Relation symbols, \mathrel

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0003C	<	<	<	<	<	<	<	<	\less	less-than sign r:
U+0003D	=	=	=	=	=	=	=	=	\equal	equals sign r:
U+0003E	>	>	>	>	>	>	>	>	\greater	greater-than sign r:
U+02050	○	○		○					\closure	close up
U+02190	←	←	←	←	←	←	←	←	\leftarrow <sup>(p)</sup>	/leftarrow /gets a: leftward arrow
U+02191	↑	↑	↑	↑	↑	↑	↑	↑	\uparrowarrow <sup>(p)</sup>	upward arrow
U+02192	→	→	→	→	→	→	→	→	\rightarrow <sup>(p)</sup>	/rightarrow /to a: rightward arrow
U+02193	↓	↓	↓	↓	↓	↓	↓	↓	\downarrowarrow <sup>(p)</sup>	downward arrow
U+02194	↔	↔	↔	↔	↔	↔	↔	↔	\leftrightarrow <sup>(p)</sup>	left and right arrow
U+02195	↕	↕	↕	↕	↕	↕	↕	↕	\updownarrowarrow <sup>(p)</sup>	up and down arrow
U+02196	↖	↖	↖	↖	↖	↖	↖	↖	\nwarrow <sup>(p)</sup>	nw pointing arrow
U+02197	↗	↗	↗	↗	↗	↗	↗	↗	\nearrow <sup>(p)</sup>	ne pointing arrow
U+02198	↘	↘	↘	↘	↘	↘	↘	↘	\searrow <sup>(p)</sup>	se pointing arrow
U+02199	↙	↙	↙	↙	↙	↙	↙	↙	\swarrow <sup>(p)</sup>	sw pointing arrow
U+0219A	↚	↚	↚	↚	↚	↚	↚	↚	\nleftarrow <sup>(a)</sup>	not left arrow
U+0219B	↛	↛	↛	↛	↛	↛	↛	↛	\nrightarrow <sup>(a)</sup>	not right arrow
U+0219C	↜	↝	↝	↝					\leftarrowwavearrow	left arrow-wavy
U+0219D	↝	↝	↝	↝					\rightarrowwavearrow	right arrow-wavy
U+0219E	↞	↞	↞	↞	↞	↞	↞	↞	\twoheadleftarrow <sup>(a)</sup>	left two-headed arrow
U+0219F	↟	↟	↟	↟	↟	↟	↟	↟	\twoheaduparrow	up two-headed arrow
U+021A0	↠	↠	↠	↠	↠	↠	↠	↠	\twoheadrightarrow <sup>(a)</sup>	right two-headed arrow

USV	M	X	S	C	A	P	D	E	Macro	Description
U+021A1	↓	↓	↓	↓	↓	↓	↓		\twoheaddownarrow	down two-headed arrow
U+021A2	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\leftarrowtail <sup>(a)</sup>	left arrow-tailed
U+021A3	⤧	⤨	⤩	⤪	⤫	⤬	⤭		\rightarrowtail <sup>(a)</sup>	right arrow-tailed
U+021A4	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\mapsfrom	maps to, leftward
U+021A5	↑	↑	↑	↑	↑	↑	↑		\mapsup	maps to, upward
U+021A6	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\mapsto <sup>(p)</sup>	maps to, rightward
U+021A7	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\mapsdown	maps to, downward
U+021A9	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\hookleftarrow <sup>(p)</sup>	left arrow-hooked
U+021AA	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\hookrightarrow <sup>(p)</sup>	right arrow-hooked
U+021AB	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\looparrowleft <sup>(a)</sup>	left arrow-looped
U+021AC	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\looparrowright <sup>(a)</sup>	right arrow-looped
U+021AD	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\leftrightsquigarrow <sup>(a)</sup>	left and right arr-wavy
U+021AE	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\nleftrightarrow <sup>(a)</sup>	not left and right arrow
U+021AF	⤠	⤡	⤢	⤣	⤤				\downzigzagarrow	downwards zigzag arrow
U+021B0	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\Lsh <sup>(a)</sup>	/lsh a:
U+021B1	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\Rsh <sup>(a)</sup>	/rsh a:
U+021B2	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\Ldsh	left down angled arrow
U+021B3	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\Rdsh	right down angled arrow
U+021B6	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\curvearrowleft <sup>(a)</sup>	left curved arrow
U+021B7	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\curvearrowright <sup>(a)</sup>	right curved arrow
U+021BC	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\leftharpoonup <sup>(p)</sup>	left harpoon-up
U+021BD	⤠	⤡	⤢	⤣	⤤	⤥	⤦		\leftharpoondown <sup>(p)</sup>	left harpoon-down

USV	M	X	S	C	A	P	D	E	Macro	Description
U+021BE	↑	↑	↑	↑	↑	↑	↑	↑	\upharpoonright <sup>(a)</sup>	/upharpoonright /restriction a: up harpoon-right
U+021BF	↓	↓	↓	↓	↓	↓	↓	↓	\upharpoonleft <sup>(a)</sup>	up harpoon-left
U+021CO	→	→	→	→	→	→	→	→	\rightharpoonup <sup>(p)</sup>	right harpoon-up
U+021C1	→	→	→	→	→	→	→	→	\rightharpoondown <sup>(p)</sup>	right harpoon-down
U+021C2	↓	↓	↓	↓	↓	↓	↓	↓	\downharpoonright <sup>(a)</sup>	down harpoon-right
U+021C3	↓	↓	↓	↓	↓	↓	↓	↓	\downharpoonleft <sup>(a)</sup>	down harpoon-left
U+021C4	⇄	⇄	⇄	⇄	⇄	⇄	⇄	⇄	\rightleftarrows <sup>(a)</sup>	right arrow over left arrow
U+021C5	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	\updownarrows	up arrow, down arrow
U+021C6	↔	↔	↔	↔	↔	↔	↔	↔	\leftrightarrows <sup>(a)</sup>	left arrow over right arrow
U+021C7	⇐	⇐	⇐	⇐	⇐	⇐	⇐	⇐	\leftleftarrows <sup>(a)</sup>	two left arrows
U+021C8	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	\upuparrows <sup>(a)</sup>	two up arrows
U+021C9	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	\rightrightarrows <sup>(a)</sup>	two right arrows
U+021CA	↓↓	↓↓	↓↓	↓↓	↓↓	↓↓	↓↓	↓↓	\downdownarrows <sup>(a)</sup>	two down arrows
U+021CB	↖	↖	↖	↖	↖	↖	↖	↖	\leftrightharpoons <sup>(a)</sup>	left harpoon over right
U+021CC	⤒	⤒	⤒	⤒	⤒	⤒	⤒	⤒	\rightleftharpoons <sup>(l)</sup>	right harpoon over left
U+021CD	⤓	⤓	⤓	⤓	⤓	⤓	⤓	⤓	\nLeftarrow <sup>(a)</sup>	not implied by
U+021CE	⤔	⤔	⤔	⤔	⤔	⤔	⤔	⤔	\nLeftrightarrow <sup>(a)</sup>	not left and right double arrows
U+021CF	⤕	⤕	⤕	⤕	⤕	⤕	⤕	⤕	\nRightarrow <sup>(a)</sup>	not implies
U+021D0	⤑	⤑	⤑	⤑	⤑	⤑	⤑	⤑	\Leftarrow <sup>(p)</sup>	is implied by
U+021D1	⤒	⤒	⤒	⤒	⤒	⤒	⤒	⤒	\Uparrow <sup>(p)</sup>	up double arrow
U+021D2	⤓	⤓	⤓	⤓	⤓	⤓	⤓	⤓	\Rrightarrow <sup>(p)</sup>	implies

USV	M	X	S	C	A	P	D	E	Macro	Description
U+021D3	⬇	⬇	⬇	⬇	⬇	⬇	⬇	⬇	\Downarrow <sup>(p)</sup>	down double arrow
U+021D4	↔	↔	↔	↔	↔	↔	↔	↔	\Leftrightarrow <sup>(p)</sup>	left and right double arrow
U+021D5	↕	↕	↕	↕	↕	↕	↕	↕	\Updownarrow <sup>(p)</sup>	up and down double arrow
U+021D6	↖	↖	↖	↖	↖	↖	↖	↖	\Nwarrow	nw pointing double arrow
U+021D7	↗	↗	↗	↗	↗	↗	↗	↗	\Nearrow	ne pointing double arrow
U+021D8	↘	↘	↘	↘	↘	↘	↘	↘	\Searrow	se pointing double arrow
U+021D9	↙	↙	↙	↙	↙	↙	↙	↙	\Swarrow	sw pointing double arrow
U+021DA	⇐	⇐	⇐	⇐	⇐	⇐	⇐	⇐	\Lleftarrow <sup>(a)</sup>	left triple arrow
U+021DB	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	\Rrightarrow <sup>(a)</sup>	right triple arrow
U+021DC	↶	↶	↶	↶	↶	↶	↶	↶	\leftsquigarrow	leftwards squiggle arrow
U+021DD	↷	↷	↷	↷	↷	↷	↷	↷	\rightsquigarrow <sup>(a)</sup>	rightwards squiggle arrow
U+021E4	⬅	⬅	⬅	⬅	⬅				\barleftarrow	leftwards arrow to bar
U+021E5	➡	➡	➡	➡	➡				\rightarrowbar	rightwards arrow to bar
U+021F4	⇒○	⇒○	⇒○	⇒○					\circleonrightarrow	right arrow with small circle
U+021F5	⤒	⤒	⤒	⤒	⤒	⤒	⤒	⤒	\downuparrows	downwards arrow leftwards of upwards arrow
U+021F6	⤓	⤓	⤓	⤓	⤓	⤓	⤓	⤓	\rightthreearrows	three rightwards arrows
U+021F7	⤔	⤔	⤔	⤔					\nvleftarrow	leftwards arrow with vertical stroke
U+021F8	⤕	⤕	⤕	⤕					\nvrightarrow	rightwards arrow with vertical stroke
U+021F9	⤖	⤖	⤖	⤖					\nvleftrightarrow	left right arrow with vertical stroke



USV	M	X	S	C	A	P	D	E	Macro	Description
U+0223A	⋮⋮	⋮⋮	⋮⋮	⋮⋮	⋮⋮	⋮⋮	⋮⋮	⋮⋮	\dotsminusdots	minus with four dots, geometric properties
U+0223B	↷	↷	↷	↷	↷	↷	↷	↷	\kernelcontraction	homothetic
U+0223C	~	~	~	~	~	~	~	~	\sim^{(p)}	similar
U+0223D	~	~	~	~	~	~	~	~	\backsim^{(a)}	reverse similar
U+02241	≵	≵	≵	≵	≵	≵	≵	≵	\nsim^{(a)}	not similar
U+02242	≵	≵	≵	≵	≵	≵	≵	≵	\eqsim^{(a)}	equals, similar
U+02243	≵	≵	≵	≵	≵	≵	≵	≵	\simeq^{(p)}	similar, equals
U+02244	≷	≷	≷	≷	≷	≷	≷	≷	\nsimeq	not similar, equals
U+02243	≷	≷	≷	≷	≷	≷	≷	≷	\simeq	similar, equals (alias)
U+02244	≷	≷	≷	≷	≷	≷	≷	≷	\nsimeq	not similar, equals (alias)
U+02245	≅	≅	≅	≅	≅	≅	≅	≅	\cong^{(l)}	congruent with
U+02246	≻	≻	≻	≻	≻	≻	≻	≻	\simneqq	similar, not equals [vert only for 9573 entity]
U+02247	≻	≻	≻	≻	≻	≻	≻	≻	\ncong^{(a)}	not congruent with
U+02248	≈	≈	≈	≈	≈	≈	≈	≈	\approx^{(p)}	approximate
U+02249	≈	≈	≈	≈	≈	≈	≈	≈	\napprox	not approximate
U+0224A	≈	≈	≈	≈	≈	≈	≈	≈	\approxeq^{(a)}	approximate, equals
U+0224B	≋	≋	≋	≋	≋	≋	≋	≋	\approxident	approximately identical to
U+0224C	≣	≣	≣	≣	≣	≣	≣	≣	\backcong	all equal to
U+0224D	( )	( )	( )	( )	( )	( )	( )	( )	\asymp^{(p)}	asymptotically equal to
U+0224E	≏	≏	≏	≏	≏	≏	≏	≏	\BumpEq^{(a)}	bumpy equals
U+0224F	≏	≏	≏	≏	≏	≏	≏	≏	\bumpEq^{(a)}	bumpy equals, equals



USV	M	X	S	C	A	P	D	E	Macro	Description
u+02265	≥	≥	≥	≥	≥	≥	≥	≥	\geq <sup>(p)</sup>	/geq /ge r: greater-than-or-equal
u+02266	≤	≤	≤	≤	≤	≤	≤	≤	\leqq <sup>(a)</sup>	less, double equals
u+02267	≥	≥	≥	≥	≥	≥	≥	≥	\geqq <sup>(a)</sup>	greater, double equals
u+02268	≤	≤	≤	≤	≤	≤	≤	≤	\lneqq <sup>(a)</sup>	less, not double equals
u+02269	≥	≥	≥	≥	≥	≥	≥	≥	\gneqq <sup>(a)</sup>	greater, not double equals
u+0226a	⋘	⋘	⋘	⋘	⋘	⋘	⋘	⋘	\ll <sup>(p)</sup>	much less than, type 2
u+0226b	⋙	⋙	⋙	⋙	⋙	⋙	⋙	⋙	\gg <sup>(p)</sup>	much greater than, type 2
u+0226c	⌚	⌚	⌚	⌚	⌚	⌚	⌚	⌚	\between <sup>(a)</sup>	between
u+0226d	*	*	*	*	*	*	*	*	\nasmp	not asymptotically equal to
u+0226e	✗	✗	✗	✗	✗	✗	✗	✗	\nless <sup>(a)</sup>	not less-than
u+0226f	✗	✗	✗	✗	✗	✗	✗	✗	\ngtr <sup>(a)</sup>	not greater-than
u+02270	✗	✗	✗	✗	✗	✗	✗	✗	\nleq <sup>(a)</sup>	not less-than-or-equal
u+02271	✗	✗	✗	✗	✗	✗	✗	✗	\ngeq <sup>(a)</sup>	not greater-than-or-equal
u+02272	≾	≾	≾	≾	≾	≾	≾	≾	\lessim <sup>(a)</sup>	less, similar
u+02273	≿	≿	≿	≿	≿	≿	≿	≿	\gtrsim <sup>(a)</sup>	greater, similar
u+02274	✗	✗	✗	✗	✗	✗	✗	✗	\nlessim	not less, similar
u+02275	✗	✗	✗	✗	✗	✗	✗	✗	\ngtrsim	not greater, similar
u+02276	≾	≾	≾	≾	≾	≾	≾	≾	\lessgtr <sup>(a)</sup>	less, greater
u+02277	≿	≿	≿	≿	≿	≿	≿	≿	\gtrless <sup>(a)</sup>	greater, less
u+02278	✗	✗	✗	✗	✗	✗	✗	✗	\nlessgtr	not less, greater
u+02279	✗	✗	✗	✗	✗	✗	✗	✗	\ngtrless	not greater, less

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0227A	⤔	⤕	⤖	⤗	⤘	⤙	⤚	⤛	\prec <sup>(p)</sup>	precedes
U+0227B	⤐	⤑	⤒	⤓	⤔	⤕	⤖	⤗	\succ <sup>(p)</sup>	succeeds
U+0227C	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\preccurlyeq <sup>(a)</sup>	precedes, curly equals
U+0227D	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\succcurlyeq <sup>(a)</sup>	succeeds, curly equals
U+0227E	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\precsim <sup>(a)</sup>	precedes, similar
U+0227F	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\succsim <sup>(a)</sup>	succeeds, similar
U+02280	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nprec	not precedes
U+02281	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nsucc	not succeeds
U+02282	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\subset <sup>(p)</sup>	subset or is implied by
U+02283	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\supset <sup>(p)</sup>	superset or implies
U+02284	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nsubset	not subset, variant [slash negation]
U+02285	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nsupset	not superset, variant [slash negation]
U+02286	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\subsetreq <sup>(p)</sup>	subset, equals
U+02287	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\supsetreq <sup>(p)</sup>	superset, equals
U+02288	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nsubsetreq <sup>(a)</sup>	not subset, equals
U+02289	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\nsupsetreq <sup>(a)</sup>	not superset, equals
U+0228A	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\subsetneq <sup>(a)</sup>	subset, not equals
U+0228B	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\supsetneq <sup>(a)</sup>	superset, not equals
U+0228F	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\sqsubset	square subset
U+02290	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\sqsupset	square superset
U+02291	⤔⤔	⤕⤕	⤖⤖	⤗⤗	⤘⤘	⤙⤙	⤚⤚	⤛⤛	\sqsubsetreq <sup>(p)</sup>	square subset, equals

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02292	☒	☒	☒	☒	☒	☒	☒	☒	\sqsupseteq <sup>(p)</sup>	square superset, equals
U+022A2	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\vdash <sup>(p)</sup>	vertical, dash
U+022A3	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\dashv <sup>(p)</sup>	dash, vertical
U+022A6	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\assert	assertion (vertical, short dash)
U+022A7	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\models <sup>(p)</sup>	models (vertical, short double dash)
U+022A8	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\vDash <sup>(a)</sup>	vertical, double dash
U+022A9	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\Vdash <sup>(a)</sup>	double vertical, dash
U+022AA	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\VvDash <sup>(a)</sup>	triple vertical, dash
U+022AB	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\VDash	double vert, double dash
U+022AC	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\nvDash <sup>(a)</sup>	not vertical, dash
U+022AD	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\nvDash <sup>(a)</sup>	not vertical, double dash
U+022AE	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\nVdash <sup>(a)</sup>	not double vertical, dash
U+022AF	⊤	⊤	⊤	⊤	⊤	⊤	⊤	⊤	\nVDash <sup>(a)</sup>	not double vert, double dash
U+022B0	⊸	⊸	⊸	⊸	⊸				\prurel	element precedes under relation
U+022B1	⊸	⊸	⊸	⊸	⊸				\scurel	succeeds under relation
U+022B2	⊲	⊲	⊲	⊲	⊲	⊲	⊲	⊲	\vartriangleleft <sup>(a)</sup>	left triangle, open, variant
U+022B3	⊳	⊳	⊳	⊳	⊳	⊳	⊳	⊳	\vartriangleright <sup>(a)</sup>	right triangle, open, variant
U+022B4	⊲	⊲	⊲	⊲	⊲	⊲	⊲	⊲	\trianglelefteq <sup>(a)</sup>	left triangle, equals
U+022B5	⊳	⊳	⊳	⊳	⊳	⊳	⊳	⊳	\trianglerighteq <sup>(a)</sup>	right triangle, equals
U+022B6	○•	○•	○•	○•	○•	○•	○•	○•	\origof	original of

USV	M	X	S	C	A	P	D	E	Macro	Description
U+022B7	•◦	◦•	•◦	◦•	•◦	◦•	◦•	◦•	\imageof	image of
U+022B8	◦◦	◦◦	◦◦	◦◦	◦◦	◦◦	◦◦	◦◦	\multimap <sup>(a)</sup>	/multimap a:
U+022C8	☒	☒	☒	☒	☒	☒	☒	☒	\bowtie <sup>(p)</sup>	bowtie
U+022CD	⊲	⊲	⊲	⊲	⊲	⊲	⊲	⊲	\backsimeq <sup>(a)</sup>	reverse similar, equals
U+022D0	⊏	⊏	⊏	⊏	⊏	⊏	⊏	⊏	\Subset <sup>(a)</sup>	double subset
U+022D1	⊐	⊐	⊐	⊐	⊐	⊐	⊐	⊐	\Supset <sup>(a)</sup>	double superset
U+022D4	⊮	⊮	⊮	⊮	⊮				\pitchfork <sup>(a)</sup>	pitchfork
U+022D5	#	#	#	#	#	#	#	#	\equalparallel	parallel, equal; equal or parallel
U+022D6	⟨◦	⟨◦	⟨◦	⟨◦	⟨◦	⟨◦	⟨◦	⟨◦	\lessdot <sup>(a)</sup>	less than, with dot
U+022D7	⟩◦	⟩◦	⟩◦	⟩◦	⟩◦	⟩◦	⟩◦	⟩◦	\gtrdot <sup>(a)</sup>	greater than, with dot
U+022D8	⋘	⋘	⋘	⋘	⋘	⋘	⋘	⋘	\lll <sup>(a)</sup>	/ll /lll /llless r: triple less-than
U+022D9	⋙	⋙	⋙	⋙	⋙	⋙	⋙	⋙	\ggg <sup>(a)</sup>	/ggg /gg /gggr r: triple greater-than
U+022DA	∨\wedge	∨\wedge	∨\wedge	∨\wedge	∨\wedge	∨\wedge	∨\wedge	∨\wedge	\lesseqgtr<sup>(a)</sup>	less, equals, greater
U+022DB	∧\vee	∧\vee	∧\vee	∧\vee	∧\vee	∧\vee	∧\vee	∧\vee	\gtreqless<sup>(a)</sup>	greater, equals, less
U+022DC	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\eqless	equal-or-less
U+022DD	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\wedge\vee	\eqgtr	equal-or-greater
U+022DE	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\curlyeqprec<sup>(a)</sup>	curly equals, pre- cedes
U+022DF	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\wedge\wedge	\curlyeqsucc<sup>(a)</sup>	curly equals, suc- ceeds
U+022E0	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\npreccurlyeq	not precedes, curly equals
U+022E1	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\not\wedge\wedge	\nsucccurlyeq	not succeeds, curly equals
U+022E2	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\not\sqsubseteq	\nsqsubseteq	not, square subset, equals

USV	M	X	S	C	A	P	D	E	Macro	Description
U+022E3	≠	≠	≠	≠	≠	≠	≠	≠	\nsqsupseteq	not square superset, equals
U+022E4	⊈	⊈	⊈	⊈	⊈	⊈	⊈	⊈	\sqsubsetneq	square subset, not equals
U+022E5	⊉	⊉	⊉	⊉	⊉	⊉	⊉	⊉	\sqsupsetneq	square superset, not equals
U+022E6	⊏	⊏	⊏	⊏	⊏	⊏	⊏	⊏	\lnsim <sup>(a)</sup>	less, not similar
U+022E7	⊐	⊐	⊐	⊐	⊐	⊐	⊐	⊐	\gnsim <sup>(a)</sup>	greater, not similar
U+022E8	⊑	⊑	⊑	⊑	⊑	⊑	⊑	⊑	\precnsim <sup>(a)</sup>	precedes, not similar
U+022E9	⊒	⊒	⊒	⊒	⊒	⊒	⊒	⊒	\succnnsim <sup>(a)</sup>	succeeds, not similar
U+022EA	⋪	⋪	⋪	⋪	⋪	⋪	⋪	⋪	\nvartriangleleft	not left triangle
U+022EB	⋪	⋪	⋪	⋪	⋪	⋪	⋪	⋪	\nvartriangleright	not right triangle
U+022EC	⋪	⋪	⋪	⋪	⋪	⋪	⋪	⋪	\ntrianglelefteq <sup>(a)</sup>	not left triangle, equals
U+022ED	⋪	⋪	⋪	⋪	⋪	⋪	⋪	⋪	\ntrianglerighteq <sup>(a)</sup>	not right triangle, equals
U+022EE	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	\vdots	vertical ellipsis
U+022F0	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	\adots	three dots, ascending
U+022F1	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	\ddots	three dots, descending
U+022F2	϶	϶	϶	϶	϶				\disin	element of with long horizontal stroke
U+022F3	϶	϶	϶	϶	϶				\varisins	element of with vertical bar at end of horizontal stroke
U+022F4	϶	϶	϶	϶	϶				\isins	small element of with vertical bar at end of horizontal stroke
U+022F5	϶	϶	϶	϶	϶				\isindot	element of with dot above
U+022F6	϶	϶	϶	϶	϶				\varisinobar	element of with overbar



USV	M	X	S	C	A	P	D	E	Macro	Description
U+027D4		↖	↖		↖				\pushout	upper left corner with dot
U+027DA	≠	≠	≠	≠	≠	≠	≠		\DashVDash	left and right double turnstile
U+027DB	≠	≠	≠	≠	≠	≠	≠		\dashVdash	left and right tack
U+027DC	○—	○—	○—	○—	○—	○—	○—		\multimapinv	left multimap
U+027DD	─	─	─	─	─	─	─		\vlongdash	long left tack
U+027DE	─	─	─	─	─	─	─		\longdashv	long right tack
U+027DF	♂	♂	♂	♂	♂	♂	♂		\cirbot	up tack with circle above
U+027F0	⤠	⤠	⤠	⤠	⤠	⤠	⤠		\UUparrow	upwards quadruple arrow
U+027F1	⤢	⤢	⤢	⤢	⤢	⤢	⤢		\DDownarrow	downwards quadruple arrow
U+027F2	⟳	⟳	⟳	⟳	⟳	⟳	⟳		\acwgapcirclearrow	anticlockwise gapped circle arrow
U+027F3	⟳	⟳	⟳	⟳	⟳	⟳	⟳		\cwgapcirclearrow	clockwise gapped circle arrow
U+027F4	⊕→	⊕→	⊕→	⊕→	⊕→	⊕→	⊕→		\rightarrowarrowonoplus	right arrow with circled plus
U+027F5	⟵	⟵	⟵	⟵	⟵	⟵	⟵	⟵	\longleftarrow <sup>(p)</sup>	long leftwards arrow
U+027F6	⟶	⟶	⟶	⟶	⟶	⟶	⟶	⟶	\longrightarrow <sup>(p)</sup>	long rightwards arrow
U+027F7	↔	↔	↔	↔	↔	↔	↔	↔	\longleftrightarrow <sup>(p)</sup>	long left right arrow
U+027F8	⟵	⟵	⟵	⟵	⟵	⟵	⟵	⟵	\Longleftarrow <sup>(p)</sup>	long leftwards double arrow
U+027F9	⟶	⟶	⟶	⟶	⟶	⟶	⟶	⟶	\Longrightarrow <sup>(p)</sup>	long rightwards double arrow
U+027FA	↔	↔	↔	↔	↔	↔	↔	↔	\Longleftrightarrow <sup>(p)</sup>	long left right double arrow
U+027FB	⟵	⟵	⟵	⟵	⟵	⟵	⟵	⟵	\longmapsfrom	long leftwards arrow from bar

USV	M	X	S	C	A	P	D	E	Macro	Description
U+027FC	→	→	→	→	→	→	→	→	\longmapsto <sup>(p)</sup>	long rightwards arrow from bar
U+027FD	↔	↔	↔	↔	↔	↔	↔	↔	\Longmapsfrom	long leftwards double arrow from bar
U+027FE	⇒	⇒	⇒	⇒	⇒	⇒	⇒	⇒	\Longmapsto	long rightwards double arrow from bar
U+027FF	↝	↝	↝	↝	↝	↝	↝	↝	\longrightsquigarrow	long rightwards squiggle arrow
U+02900	⤠	⤠	⤠	⤠					\nvtwoheadrightarrow	rightwards two-headed arrow with vertical stroke
U+02901	⤡	⤡	⤡	⤡					\nVtwoheadrightarrow	rightwards two-headed arrow with double vertical stroke
U+02902	⤢	⤢	⤢	⤢					\nvLeftarrow	leftwards double arrow with vertical stroke
U+02903	⤣	⤣	⤣	⤣					\nvRightarrow	rightwards double arrow with vertical stroke
U+02904	⤤	⤤	⤤	⤤					\nvLeftrightarrow	left right double arrow with vertical stroke
U+02905	⤥	⤥	⤥	⤥					\twoheadmapsto	rightwards two-headed arrow from bar
U+02906	⤦	⤦	⤦	⤦	⤦	⤦	⤦		\Mapsfrom	leftwards double arrow from bar
U+02907	⤧	⤧	⤧	⤧	⤧	⤧	⤧		\Mapsto	rightwards double arrow from bar
U+02908	⤨	⤨	⤨	⤨					\downarrowbarred	downwards arrow with horizontal stroke
U+02909	⤩	⤩	⤩	⤩					\uparrowbarred	upwards arrow with horizontal stroke
U+0290A	⤪	⤪	⤪	⤪					\Upuparrow	upwards triple arrow
U+0290B	⤫	⤫	⤫	⤫					\DownDownarrow	downwards triple arrow

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0290C		←-	←-	←-	←-				\leftbkarow	leftwards double dash arrow
U+0290D		-→	-→	-→	-→				\rightbkarow	rightwards double dash arrow
U+0290E		↔-	↔-	↔-	↔-				\leftdbkarow	leftwards triple dash arrow
U+0290F		↔-	↔-	↔-	↔-				\dbkarow	rightwards triple dash arrow
U+02910		↔↔↔	↔↔↔	↔↔	↔↔				\drbkarrow	rightwards two-headed triple dash arrow
U+02911		↔↔	↔↔	↔↔	↔↔				\rightdotarrow	rightwards arrow with dotted stem
U+02912		↑	↑	↑	↑				\baruparrow	upwards arrow to bar
U+02913		↓	↓	↓	↓				\downarrowbar	downwards arrow to bar
U+02914		⤠	⤠	⤠	⤠				\nvrightarrowtail	rightwards arrow with tail with vertical stroke
U+02915		⤠	⤠	⤠	⤠				\nVrightarrowtail	rightwards arrow with tail with double vertical stroke
U+02916		⤠	⤠	⤠	⤠				\twoheadrightarrowtail	rightwards two-headed arrow with tail
U+02917		⤠	⤠	⤠	⤠				\nvtwoheadrightarrowtail	rightwards two-headed arrow with tail with vertical stroke
U+02918		⤠	⤠	⤠	⤠				\nVtwoheadrightarrowtail	rightwards two-headed arrow with tail with double vertical stroke
U+02919		⤠	⤠	⤠	⤠				\lefttail	leftwards arrow-tail
U+0291A		⤠	⤠	⤠	⤠				\righttail	rightwards arrow-tail
U+0291B		⤠	⤠	⤠	⤠				\leftdbltail	leftwards double arrow-tail
U+0291C		⤠	⤠	⤠	⤠				\rightdbltail	rightwards double arrow-tail

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0291D		↳	⟵	⤻	⤹				\diamondleftarrow	leftwards arrow to black diamond
U+0291E		⤸	⤹	⤻	⤺				\rightarrowdiamond	rightwards arrow to black diamond
U+0291F		⤻	⤹	⤻	⤹				\diamondleftarrowbar	leftwards arrow from bar to black diamond
U+02920		⤸	⤹	⤻	⤺				\barrightarrowdiamond	rightwards arrow from bar to black diamond
U+02921		⤻	⤹	⤻	⤹				\nwsearrow	north west and south east arrow
U+02922		⤻	⤹	⤻	⤹				\neswarrow	north east and south west arrow
U+02923		⤻	⤹	⤻	⤹				\hknwarrow	north west arrow with hook
U+02924		⤻	⤹	⤻	⤹				\hknearrow	north east arrow with hook
U+02925		⤻	⤹	⤻	⤹				\hksearrow	south east arrow with hook
U+02926		⤻	⤹	⤻	⤹				\hkswarrow	south west arrow with hook
U+02927		⤻	⤹	⤻	⤹				\tona	north west arrow and north east arrow
U+02928		⤻	⤹	⤻	⤹				\toea	north east arrow and south east arrow
U+02929		⤻	⤹	⤻	⤹				\tosa	south east arrow and south west arrow
U+0292A		⤻	⤹	⤻	⤹				\towa	south west arrow and north west arrow
U+02933		⤻	⤹	⤻	⤹				\rightcurvedarrow	wave arrow pointing directly right
U+02936		⤻	⤹	⤻	⤹				\leftdowncurvedarrow	arrow pointing downwards then curving leftwards
U+02937		⤻	⤹	⤻	⤹				\rightdowncurvedarrow	arrow pointing downwards then curving rightwards

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02938		⤵	⤶	⤷	⤸				\cwrightarcarrow	right-side arc clockwise arrow
U+02939		⤹	⤺	⤻	⤼				\acwleftarcarrow	left-side arc anticlockwise arrow
U+0293A		⤻	⤼	⤽	⤾				\acwoverarcarrow	top arc anticlockwise arrow
U+0293B		⤵	⤶	⤷	⤸				\acwunderarcarrow	bottom arc anticlockwise arrow
U+0293C		⤷	⤸	⤹	⤺				\curvearrowrightminus	top arc clockwise arrow with minus
U+0293D		⤷	⤸	⤹	⤺				\curvearrowleftplus	top arc anticlockwise arrow with plus
U+0293E		⤵	⤼	⤽	⤾				\cwundercurvearrow	lower right semi-circular clockwise arrow
U+0293F		⤷	⤸	⤹	⤺				\ccwundercurvearrow	lower left semicircular anticlockwise arrow
U+02940		⤧	⤨	⤩	⤪				\acwcirclearrow	anticlockwise closed circle arrow
U+02941		⤧	⤨	⤩	⤪				\cwcirclearrow	clockwise closed circle arrow
U+02942		⤮	⤯	⤰	⤱				\rightarrowshortleftarrow	rightwards arrow above short leftwards arrow
U+02943		⤮	⤯	⤰	⤱				\leftarrowshortrightarrow	leftwards arrow above short rightwards arrow
U+02944		⤮	⤯	⤰	⤱				\shortrightarrowleftarrow	short rightwards arrow above leftwards arrow
U+02945		⤮	⤯	⤰	⤱				\rightarrowplus	rightwards arrow with plus below
U+02946		⤮	⤯	⤰	⤱				\leftarrowplus	leftwards arrow with plus below
U+02947		⤮	⤯	⤰	⤱				\rightarrowx	rightwards arrow through x
U+02948		⤮	⤯	⤰	⤱				\leftrightarrowcircle	left right arrow through small circle

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02949		↑	↑	↑	↑				\twoheaduparrowcircle	upwards two-headed arrow from small circle
U+0294A		↙	↖	↘	↗				\leftrightharpoonupdown	left barb up right barb down harpoon
U+0294B		↙	↖	↘	↗				\leftrightharpoondownup	left barb down right barb up harpoon
U+0294C		↓	↑	↓	↑				\updownharpoonrightleft	up barb right down barb left harpoon
U+0294D		↓	↑	↓	↑				\updownharpoonleftright	up barb left down barb right harpoon
U+0294E		↔	↔	↔	↔				\leftrightharpoonupup	left barb up right barb up harpoon
U+0294F		▷	▷	▷	▷				\updownharpoonrightright	up barb right down barb right harpoon
U+02950		↔	↔	↔	↔				\leftrightharpoondowndown	left barb down right barb down harpoon
U+02951		↓	↑	↓	↑				\updownharpoonleftleft	up barb left down barb left harpoon
U+02952		◀	◀	◀	◀				\barleftharpoonup	leftwards harpoon with barb up to bar
U+02953		→	→	→	→				\rightharpoonupbar	rightwards harpoon with barb up to bar
U+02954		⊤	⊤	⊤	⊤				\barupharpoonright	upwards harpoon with barb right to bar
U+02955		↓	↓	↓	↓				\downharpoonrightbar	downwards harpoon with barb right to bar
U+02956		◀	◀	◀	◀				\barleftharpoondown	leftwards harpoon with barb down to bar
U+02957		→	→	→	→				\rightharpoondownbar	rightwards harpoon with barb down to bar
U+02958		⊤	⊤	⊤	⊤				\barupharpoonleft	upwards harpoon with barb left to bar

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02959		↓	↓	↓	↓				\downharpoonleftbar	downwards harpoon with barb left to bar
U+0295A		↶	↶	↶	↶				\leftharpoonupbar	leftwards harpoon with barb up from bar
U+0295B		↷	↷	↷	↷				\rightharpoonup	rightwards harpoon with barb up from bar
U+0295C		↑	↑	↑	↑				\upharpoonrightbar	upwards harpoon with barb right from bar
U+0295D		↓	↓	↓	↓				\bardownharpoonright	downwards harpoon with barb right from bar
U+0295E		↶	↶	↶	↶				\leftharpoondownbar	leftwards harpoon with barb down from bar
U+0295F		↷	↷	↷	↷				\rightharpoondown	rightwards harpoon with barb down from bar
U+02960	1	1	1	1					\upharpoonleftbar	upwards harpoon with barb left from bar
U+02961	↓	↓	↓	↓					\bardownharpoonleft	downwards harpoon with barb left from bar
U+02962	⇐	⇐	⇐	⇐					\leftharpoonsupdown	leftwards harpoon with barb up above leftwards harpoon with barb down
U+02963	↑↑	↑↑	↑↑	↑↑					\upharpoonsleftright	upwards harpoon with barb left beside upwards harpoon with barb right
U+02964	⇒⇒	⇒⇒	⇒⇒	⇒⇒					\rightharpoonsupdown	rightwards harpoon with barb up above rightwards harpoon with barb down
U+02965	↓↓	↓↓	↓↓	↓↓					\downharpoonsleftright	downwards harpoon with barb left beside downwards harpoon with barb right

USV	M	X	S	C	A	P	D	E	Macro	Description
u+02966		⤵	⤶	⤷	⤸				\leftrightharpoonsup	leftwards harpoon with barb up above rightwards harpoon with barb up
u+02967		⤹	⤺	⤻	⤼				\leftrightharpoonsdown	leftwards harpoon with barb down above rightwards harpoon with barb down
u+02968		⤻	⤺	⤻	⤼				\rightleftharpoonsup	rightwards harpoon with barb up above leftwards harpoon with barb up
u+02969		⤻	⤺	⤻	⤼				\rightleftharpoonsdown	rightwards harpoon with barb down above leftwards harpoon with barb down
u+0296A		⤵	⤶	⤷	⤸				\leftharpoonupdash	leftwards harpoon with barb up above long dash
u+0296B		⤹	⤺	⤻	⤼				\dashleftharpoondown	leftwards harpoon with barb down below long dash
u+0296C		⤻	⤺	⤻	⤼				\rightharpoonupdash	rightwards harpoon with barb up above long dash
u+0296D		⤹	⤺	⤻	⤼				\dashrightharpoondown	rightwards harpoon with barb down below long dash
u+0296E		⤪	⤫	⤬	⤭				\updownharpoonsleftright	upwards harpoon with barb left beside downwards harpoon with barb right
u+0296F		⤪	⤫	⤬	⤭				\downupharpoonsleftright	downwards harpoon with barb left beside upwards harpoon with barb right
u+02970		⤧	⤨	⤩	⤪				\rightimply	right double arrow with rounded head
u+02971		⤧	⤨	⤩	⤪				\equalrightarrow	equals sign above rightwards arrow
u+02972		⤧	⤨	⤩	⤪				\similarrightarrow	tilde operator above rightwards arrow

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02973		⤻	⤼	⤽	⤾				\leftarrowsimilar	leftwards arrow above tilde operator
U+02974		⤸	⤹	⤺	⤻				\rightarrowsimilar	rightwards arrow above tilde operator
U+02975		⤻	⤼	⤺	⤾				\rightarrowapprox	rightwards arrow above almost equal to
U+02976		⤻	⤼	⤽	⤾				\ltlarr	less-than above leftwards arrow
U+02977		⤻	⤼	⤽	⤾				\leftarrowless	leftwards arrow through less-than
U+02978		⤻	⤼	⤽	⤾				\gtrarr	greater-than above rightwards arrow
U+02979		⤻	⤼	⤽	⤾				\subrarr	subset above rightwards arrow
U+0297A		⤻	⤼	⤽	⤾				\leftarrowsubset	leftwards arrow through subset
U+0297B		⤻	⤼	⤽	⤾				\suplarr	superset above leftwards arrow
U+0297C		⤻	⤼	⤽	⤾				\leftfishtail	left fish tail
U+0297D		⤻	⤼	⤽	⤾				\rightfishtail	right fish tail
U+0297E		⤻	⤼	⤽	⤾				\upfishtail	up fish tail
U+0297F		⤻	⤼	⤽	⤾				\downfishtail	down fish tail
U+029CE		⤻	⤼	⤽	⤾				\rtriltri	right triangle above left triangle
U+029CF		⤻	⤼	⤽	⤾				\ltrivb	left triangle beside vertical bar
U+029D0		⤻	⤼	⤽	⤾				\vbrtri	vertical bar beside right triangle
U+029D1		⤻	⤼	⤽					\lfbowtie	left black bowtie
U+029D2		⤻	⤼	⤽					\rbbowtie	right black bowtie
U+029D3		⤻	⤼	⤽					\fbbowtie	black bowtie
U+029D4		⤻	⤼	⤽					\lftimes	left black times

USV	M	X	S	C	A	P	D	E	Macro	Description
U+029D5		☒	☒	☒					\rftimes	right black times
U+029DF		○○	○○	○○					\dualmap	double-ended multimap
U+029E1		⠇	⠇	⠇					\lrtriangleeq	increases as
U+029E3		#	#	#					\eparsl	equals sign and slanted parallel
U+029E4		˜#	˜#	˜#					\smeparsl	equals sign and slanted parallel with tilde above
U+029E5		#	#	#					\eqvparsl	identical to and slanted parallel
U+029E6		☰	☰	☰					\gleichstark	gleich stark
U+029F4		⋮→	⋮→	⋮→					\ruledelayed	rule-delayed
U+02A59		☒	☒	☒					\veeonwedge	logical or overlapping logical and
U+02A66		≡.	≡.	≡.					\eqdot	equals sign with dot below
U+02A67		⋮.	⋮.	⋮.					\dotequiv	identical with dot above
U+02A68		#	#	#					\equivVert	triple horizontal bar with double vertical stroke
U+02A69		#	#	#					\equivVvert	triple horizontal bar with triple vertical stroke
U+02A6A		˜	˜	˜					\dotsim	tilde operator with dot above
U+02A6B		˜.	˜.	˜.					\simrdots	tilde operator with rising dots
U+02A6C		≈	≈	≈					\simminusim	similar minus similar
U+02A6D		˜≈	˜≈	˜≈					\congdot	congruent with dot above
U+02A6E		✳	✳	✳					\asteq	equals with asterisk

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A6F		≈	≈		≈				\hatapprox	almost equal to with circumflex accent
U+02A70		≈≈	≈≈		≈≈				\approxeqq	approximately equal or equal to
U+02A73		≂	≂		≂				\eqqsim	equals sign above tilde operator
U+02A74	::=	::=			::=				\Coloneq	double colon equal
U+02A75	==	==			==				\eqqeq	two consecutive equals signs
U+02A76	====	====			====				\eqqeqq	three consecutive equals signs
U+02A77	:::	:::			:::				\ddotseq	equals sign with two dots above and two dots below
U+02A78	::::	::::			::::				\equivDD	equivalent with four dots above
U+02A79	◊	◊			◊				\ltcir	less-than with circle inside
U+02A7A	◊	◊			◊				\gtcir	greater-than with circle inside
U+02A7B	՞	՞			՞				\ltquest	less-than with question mark above
U+02A7C	՞	՞			՞				\gtquest	greater-than with question mark above
U+02A7D	⟨⟨	⟨⟨	⟨⟨		⟨⟨	⟨⟨	⟨⟨		\leqslant <sup>(a)</sup>	less-than or slanted equal to
U+02A7E	⟩⟩	⟩⟩	⟩⟩		⟩⟩	⟩⟩	⟩⟩		\geqslant <sup>(a)</sup>	greater-than or slanted equal to
U+02A7F	⟨⟨.	⟨⟨.			⟨⟨.				\lesdot	less-than or slanted equal to with dot inside
U+02A80	⟩⟩.	⟩⟩.			⟩⟩.				\gesdot	greater-than or slanted equal to with dot inside
U+02A81	⟨⟨^	⟨⟨^			⟨⟨^				\lesdoto	less-than or slanted equal to with dot above

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A82									\gesdoto	greater-than or slanted equal to with dot above
U+02A83									\lesdotor	less-than or slanted equal to with dot above right
U+02A84									\gesdotol	greater-than or slanted equal to with dot above left
U+02A85									\lessapprox <sup>(a)</sup>	less-than or approximate
U+02A86									\gtrapprox <sup>(a)</sup>	greater-than or approximate
U+02A87									\lneq <sup>(a)</sup>	less-than and single-line not equal to
U+02A88									\gneq <sup>(a)</sup>	greater-than and single-line not equal to
U+02A89									\lnapprox <sup>(a)</sup>	less-than and not approximate
U+02A8A									\gnapprox <sup>(a)</sup>	greater-than and not approximate
U+02A8B									\lesseqgtr <sup>(a)</sup>	less-than above double-line equal above greater-than
U+02A8C									\gtreqqless <sup>(a)</sup>	greater-than above double-line equal above less-than
U+02A8D									\lsime	less-than above similar or equal
U+02A8E									\gsime	greater-than above similar or equal
U+02A8F									\lsimg	less-than above similar above greater-than
U+02A90									\gsiml	greater-than above similar above less-than
U+02A91									\lgE	less-than above greater-than above double-line equal

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02A92		⤵	⤶		⤷				\g1E	greater-than above less-than above double-line equal
U+02A93		⤸	⤹		⤻				\lesges	less-than above slanted equal above greater-than above slanted equal
U+02A94		⤵	⤶		⤻				\gesles	greater-than above slanted equal above less-than above slanted equal
U+02A95	⤰	⤱	⤲		⤳	⤰	⤱	⤲	\eqslantless <sup>(a)</sup>	slanted equal to or less-than
U+02A96	⤰	⤱	⤲		⤳	⤰	⤱	⤲	\eqslantgr <sup>(a)</sup>	slanted equal to or greater-than
U+02A97		⤴	⤵		⤶				\elsdot	slanted equal to or less-than with dot inside
U+02A98		⤸	⤹		⤻				\egsdot	slanted equal to or greater-than with dot inside
U+02A99		⤵	⤶		⤷				\eqqless	double-line equal to or less-than
U+02A9A		⤵	⤶		⤷				\eqqgr	double-line equal to or greater-than
U+02A9B		⤴	⤵		⤶				\eqqlantless	double-line slanted equal to or less- than
U+02A9C		⤵	⤶		⤻				\eqqlantgr	double-line slanted equal to or greater- than
U+02A9D		⤷	⤸		⤹				\simless	similar or less-than
U+02A9E		⤷	⤸		⤹				\simgr	similar or greater- than
U+02A9F		⤵	⤶		⤷				\simLE	similar above less- than above equals sign
U+02AA0		⤷	⤸		⤹				\simGE	similar above greater-than above equals sign
U+02AA1		⤴	⤵		⤶				\Lt	double nested less-than

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AA2		➤	➤		➤				\Gt	double nested greater-than
U+02AA3		➤➤	➤➤		➤➤				\partial_meetcontraction	double less-than with underbar
U+02AA4		➤➤	➤➤		➤➤				\g1j	greater-than overlapping less-than
U+02AA5		➤➤	➤➤		➤➤				\gla	greater-than beside less-than
U+02AA6		▷	▷		▷				\ltcc	less-than closed by curve
U+02AA7		▷	▷		▷				\gtcc	greater-than closed by curve
U+02AA8		▷▷	▷▷		▷▷				\lescc	less-than closed by curve above slanted equal
U+02AA9		▷▷	▷▷		▷▷				\gescc	greater-than closed by curve above slanted equal
U+02AAA		◁	◁		◁				\smt	smaller than
U+02AAB		➢	➢		➢				\lat	larger than
U+02AAC		◁◁	◁◁		◁◁				\smte	smaller than or equal to
U+02AAD		▷▷	▷▷		▷▷				\late	larger than or equal to
U+02AAE		⠇⠇	⠇⠇		⠇⠇				\bumpreqq	equals sign with bumpy above
U+02AAF	⤒	⤒	⤒		⤒	⤒	⤒		\preceq^{(p)}	precedes above single-line equals sign
U+02AB0	⤒	⤒	⤒		⤒	⤒	⤒		\succeq^{(p)}	succeeds above single-line equals sign
U+02AB1	⤒	⤒	⤒		⤒				\precneq	precedes above single-line not equal to
U+02AB2	⤒	⤒	⤒		⤒				\succneq	succeeds above single-line not equal to
U+02AB3	⤒⤒	⤒⤒	⤒⤒		⤒⤒				\preceqq	precedes above equals sign

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AB4		॥	॥		॥				\succeqq	succeeds above equals sign
U+02AB5		٫	٫		٫				\precneqq <sup>(a)</sup>	precedes above not equal to
U+02AB6		٫.	٫.		٫.				\succcneqq <sup>(a)</sup>	succeeds above not equal to
U+02AB7		≈≈	≈≈		≈≈				\precapprox <sup>(a)</sup>	precedes above almost equal to
U+02AB8		≈≈	≈≈		≈≈				\succapprox <sup>(a)</sup>	succeeds above almost equal to
U+02AB9		≈≈	≈≈		≈≈				\precnapprox <sup>(a)</sup>	precedes above not almost equal to
U+02ABA		≈≈	≈≈		≈≈				\succcapprox <sup>(a)</sup>	succeeds above not almost equal to
U+02ABB		≪	≪		≪				\Prec	double precedes
U+02ABC		≫	≫		≫				\Succ	double succeeds
U+02ABD		⊏	⊏		⊏				\subsetdot	subset with dot
U+02ABE		⊐	⊐		⊐				\supsetdot	superset with dot
U+02ABF		⊑	⊑		⊑				\subsetplus	subset with plus sign below
U+02AC0		⊒	⊒		⊒				\supsetplus	superset with plus sign below
U+02AC1		⊔	⊔		⊔				\submult	subset with multiplication sign below
U+02AC2		⊕	⊕		⊕				\supmult	superset with multiplication sign below
U+02AC3		⊓	⊓		⊓				\subdot	subset of or equal to with dot above
U+02AC4		⊔	⊔		⊔				\supdot	superset of or equal to with dot above
U+02AC5		⊔	⊔		⊔				\subsetteqq <sup>(a)</sup>	subset of above equals sign
U+02AC6		⊒	⊒		⊒				\supsetteqq <sup>(a)</sup>	superset of above equals sign

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AC7		ꝝ	Ꝟ		ꝣ				\subsim	subset of above tilde operator
U+02AC8		ꝝ	Ꝟ		ꝣ				\supsim	superset of above tilde operator
U+02AC9		ꝝ	Ꝟ		ꝣ				\subsetapprox	subset of above almost equal to
U+02ACA		ꝝ	Ꝟ		ꝣ				\supsetapprox	superset of above almost equal to
U+02ACB		ꝫ	Ꝭ		Ꝥ				\subsetneqq <sup>(a)</sup>	subset of above not equal to
U+02ACC		ꝫ	Ꝭ		Ꝥ				\supsetneqq <sup>(a)</sup>	superset of above not equal to
U+02ACD		Ꝧ	ꝧ		ꝥ				\lsqhook	square left open box operator
U+02ACE		Ꝧ	ꝧ		ꝥ				\rsqhook	square right open box operator
U+02ACF		Ꝧ	ꝧ		ꝥ				\csub	closed subset
U+02AD0		Ꝧ	ꝧ		ꝥ				\csup	closed superset
U+02AD1		Ꝧ	ꝧ		ꝥ				\csube	closed subset or equal to
U+02AD2		Ꝧ	ꝧ		ꝥ				\csupe	closed superset or equal to
U+02AD3		Ꝧ	ꝧ		ꝥ				\subsup	subset above su- perset
U+02AD4		Ꝧ	ꝧ		ꝥ				\supsub	superset above subset
U+02AD5		Ꝧ	ꝧ		ꝥ				\subsub	subset above sub- set
U+02AD6		Ꝧ	ꝧ		ꝥ				\supsup	superset above superset
U+02AD7		Ꝧ	ꝧ		ꝥ				\suphsub	superset beside subset
U+02AD8		Ꝧ	ꝧ		ꝥ				\supdsub	superset beside and joined by dash with subset
U+02AD9		Ꝧ	ꝧ		ꝥ				\forkv	element of opening downwards



USV	M	X	S	C	A	P	D	E	Macro	Description
U+02AEF	⌚	⌚	⌚						\cirmid	vertical line with circle above
U+02AFO	⌚	⌚	⌚						\midcir	vertical line with circle below
U+02AF2	#+#+	#+#+	#+#+						\nhpar	parallel with horizontal stroke
U+02AF3	#+#+	#+#+	#+#+						\parsim	parallel with tilde operator
U+02AF7	⋘	⋘	⋘						\lllnest	stacked very much less-than
U+02AF8	⋙	⋙	⋙						\gggnest	stacked very much greater-than
U+02AF9	≤≤	≤≤	≤≤						\leqqslant	double-line slanted less-than or equal to
U+02AFa	≥≥	≥≥	≥≥						\geqqslant	double-line slanted greater-than or equal to
U+02B30	↔	↔	↔						\circleonleftarrow	left arrow with small circle
U+02B31	⤻	⤻	⤻	⤻	⤻	⤻	⤻		\leftthreearrows	three leftwards arrows
U+02B32	⤧	⤧	⤧	⤧					\leftarrowonoplus	left arrow with circled plus
U+02B33	⤵⤵⤵	⤵⤵⤵	⤵⤵⤵	⤵⤵⤵	⤵⤵⤵	⤵⤵⤵	⤵⤵⤵		\longleftsquigarrow	long leftwards squiggle arrow
U+02B34	⤨⤨	⤨⤨	⤨⤨	⤨⤨					\nvtwoheadleftarrow	leftwards two-headed arrow with vertical stroke
U+02B35	⤨⤨	⤨⤨	⤨⤨						\nVtwoheadleftarrow	leftwards two-headed arrow with double vertical stroke
U+02B36	⤨⤨	⤨⤨	⤨⤨						\twoheadmapsfrom	leftwards two-headed arrow from bar
U+02B37	⤨⤨⤨⤨	⤨⤨⤨⤨	⤨⤨⤨⤨	⤨⤨⤨⤨					\twoheadleftdbkarrow	leftwards two-headed triple-dash arrow
U+02B38	⤨⤨⤨	⤨⤨⤨	⤨⤨⤨	⤨⤨⤨					\leftdotarrow	leftwards arrow with dotted stem

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02B39		⟲	⟳		⟴				\nvleftarrowtail	leftwards arrow with tail with vertical stroke
U+02B3A		⟲	⟳		⟴				\nVleftarrowtail	leftwards arrow with tail with double vertical stroke
U+02B3B		⟲	⟳		⟴				\twoheadleftarrowtail	leftwards two-headed arrow with tail
U+02B3C		⟲	⟳		⟴				\nvtwoheadleftarrowtail	leftwards two-headed arrow with tail with vertical stroke
U+02B3D		⟲	⟳		⟴				\nVtwoheadleftarrowtail	leftwards two-headed arrow with tail with double vertical stroke
U+02B3E		⟲	⟳		⟴				\leftarrowx	leftwards arrow through x
U+02B3F		⟲	⟳		⟴				\leftcurvedarrow	wave arrow pointing directly left
U+02B40		⟲	⟳		⟴				\equalleftarrow	equals sign above leftwards arrow
U+02B41		⟲	⟳		⟴				\bsimilarleftarrow	reverse tilde operator above leftwards arrow
U+02B42		⟲	⟳		⟴				\leftarrowbackapprox	leftwards arrow above reverse almost equal to
U+02B43		⟳	⟳		⟴				\rightarrowgtr	rightwards arrow through greater-than
U+02B44		⇒	⇒		⇒				\rightarrowarrowsupset	rightwards arrow through subset
U+02B45		⟲	⟳		⟴				\LLeftarrow	leftwards quadruple arrow
U+02B46		⟲	⟳		⟴				\RRightarrow	rightwards quadruple arrow
U+02B47		⟳	⟳		⟴				\bsimilarrightarrow	reverse tilde operator above rightwards arrow
U+02B48		⟳	⟳		⟴				\rightarrowbackapprox	rightwards arrow above reverse almost equal to

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02B49		$\leftarrow\tilde{\phantom{x}}$	$\leftarrow\tilde{\phantom{x}}$		$\leftarrow\tilde{\phantom{x}}$				<code>\similarleftarrow</code>	tilde operator above leftwards arrow
U+02B4A		$\leftarrow\approx\tilde{\phantom{x}}$	$\leftarrow\approx\tilde{\phantom{x}}$		$\leftarrow\approx\tilde{\phantom{x}}$				<code>\leftarrowapprox</code>	leftwards arrow above almost equal to
U+02B4B		$\leftarrow\tilde{\phantom{x}}\leftarrow$	$\leftarrow\tilde{\phantom{x}}\leftarrow$		$\leftarrow\tilde{\phantom{x}}\leftarrow$				<code>\leftarrowbsimilar</code>	leftwards arrow above reverse tilde operator
U+02B4C		$\rightarrow\tilde{\phantom{x}}\rightarrow$	$\rightarrow\tilde{\phantom{x}}\rightarrow$		$\rightarrow\tilde{\phantom{x}}\rightarrow$				<code>\rightarrowbsimilar</code>	rightwards arrow above reverse tilde operator

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## 13 Alphabetical symbols, \mathalpha

### 13.1 Normal weight

#### 13.1.1 Upright Greek, uppercase

usv	M	X	S	C	A	P	D	E	Macro	Description
u+00391	Α	Α	Α	Α	Α	Α	Α	Α	\mupAlpha	capital alpha, greek
u+00392	Β	Β	Β	Β	Β	Β	Β	Β	\mupBeta	capital beta, greek
u+00393	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	\mupGamma	capital gamma, greek
u+00394	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	\mupDelta	capital delta, greek
u+00395	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	\mupEpsilon	capital epsilon, greek
u+00396	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	\mupZeta	capital zeta, greek
u+00397	Η	Η	Η	Η	Η	Η	Η	Η	\mupEta	capital eta, greek
u+00398	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mupTheta	capital theta, greek
u+00399	Ι	Ι	Ι	Ι	Ι	Ι	Ι	Ι	\mupIota	capital iota, greek
u+0039A	Κ	Κ	Κ	Κ	Κ	Κ	Κ	Κ	\mupKappa	capital kappa, greek
u+0039B	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	\mupLambda	capital lambda, greek
u+0039C	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	\mupMu	capital mu, greek
u+0039D	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	\mupNu	capital nu, greek
u+0039E	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	\mupXi	capital xi, greek
u+0039F	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	\mupOmicron	capital omicron, greek
u+003A0	Π	Π	Π	Π	Π	Π	Π	Π	\mupPi	capital pi, greek
u+003A1	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	\mupRho	capital rho, greek
u+003A3	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	\mupSigma	capital sigma, greek
u+003A4	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	\mupTau	capital tau, greek
u+003A5	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	\mupUpsilon	capital upsilon, greek
u+003A6	Φ	Φ	Φ	Φ	Φ	Φ	Φ	Φ	\mupPhi	capital phi, greek
u+003A7	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	\mupChi	capital chi, greek

usv	M	X	S	C	A	P	D	E	Macro	Description
u+003A8	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	\mupPsi	capital psi, greek
u+003A9	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	\mupOmega	capital omega, greek

### 13.1.2 Upright Greek, lowercase

usv	M	X	S	C	A	P	D	E	Macro	Description
u+003B1	α	α	α	α	α	α	α	α	\mupalpha	small alpha, greek
u+003B2	β	β	β	β	β	β	β	β	\mupbeta	small beta, greek
u+003B3	γ	γ	γ	γ	γ	γ	γ	γ	\mupgamma	small gamma, greek
u+003B4	δ	δ	δ	δ	δ	δ	δ	δ	\mupdelta	small delta, greek
u+003B5	ε	ε	ε	ε	ε	ε	ε	ε	\mupvarepsilon	rounded small varepsilon, greek
u+003B6	ζ	ζ	ζ	ζ	ζ	ζ	ζ	ζ	\mupzeta	small zeta, greek
u+003B7	η	η	η	η	η	η	η	η	\mupeta	small eta, greek
u+003B8	θ	θ	θ	θ	θ	θ	θ	θ	\muptheta	straight theta, small theta, greek
u+003B9	ι	ι	ι	ι	ι	ι	ι	ι	\mupiota	small iota, greek
u+003BA	κ	κ	κ	κ	κ	κ	κ	κ	\mupkappa	small kappa, greek
u+003BB	λ	λ	λ	λ	λ	λ	λ	λ	\muplambda	small lambda, greek
u+003BC	μ	μ	μ	μ	μ	μ	μ	μ	\mupmu	small mu, greek
u+003BD	ν	ν	ν	ν	ν	ν	ν	ν	\mupnu	small nu, greek
u+003BE	ξ	ξ	ξ	ξ	ξ	ξ	ξ	ξ	\mupxi	small xi, greek
u+003BF	ο	ο	ο	ο	ο	ο	ο	ο	\mupomicron	small omicron, greek
u+003C0	π	π	π	π	π	π	π	π	\muppi	small pi, greek
u+003C1	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ	\muprho	small rho, greek
u+003C2	ς	ς	ς	ς	ς	ς	ς	ς	\mupvarsigma	terminal sigma, greek
u+003C3	σ	σ	σ	σ	σ	σ	σ	σ	\mupsigma	small sigma, greek

usv	M	X	S	C	A	P	D	E	Macro	Description
u+003c4	τ	τ	τ	τ	τ	τ	τ	τ	\muptau	small tau, greek
u+003c5	υ	υ	υ	υ	υ	υ	υ	υ	\mupupsilon	small upsilon, greek
u+003c6	φ	φ	φ	φ	φ	φ	φ	φ	\mupvarphi	curly or open small phi, greek
u+003c7	χ	χ	χ	χ	χ	χ	χ	χ	\mupchi	small chi, greek
u+003c8	ψ	ψ	ψ	ψ	ψ	ψ	ψ	ψ	\muppsi	small psi, greek
u+003c9	ω	ω	ω	ω	ω	ω	ω	ω	\mupomega	small omega, greek
u+003d1	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	\mupvartheta	/vartheta - curly or open theta
u+003d5	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	\mupphi	/straightphi - small phi, greek
u+003d6	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	\mupvarpi	rounded small pi (pomega), greek
u+003dc	F	F	F	F					\upDigamma	capital digamma
u+003dd	F	F	F	F					\updigamma	old greek small letter digamma
u+003f0	κ	κ	κ	κ	κ	κ	κ	κ	\mupvarkappa	rounded small kappa, greek
u+003f1	ϱ	ϱ	ϱ	ϱ	ϱ	ϱ	ϱ	ϱ	\mupvarrho	rounded small rho, greek
u+003f4	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mupvarTheta	greek capital theta symbol
u+003f5	€	€	€	€	€	€	€	€	\mupsilon	greek lunate varepsilon symbol

### 13.1.3 Italic, Latin, uppercase

usv	M	X	S	C	A	P	D	E	Macro	Description
u+1d434	A	A	A	A	A	A	A	A	\mitA	mathematical italic capital a
u+1d435	B	B	B	B	B	B	B	B	\mitB	mathematical italic capital b
u+1d436	C	C	C	C	C	C	C	C	\mitC	mathematical italic capital c
u+1d437	D	D	D	D	D	D	D	D	\mitD	mathematical italic capital d
u+1d438	E	E	E	E	E	E	E	E	\mitE	mathematical italic capital e
u+1d439	F	F	F	F	F	F	F	F	\mitF	mathematical italic capital f

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D43A	G	G	G	G	G	G	G		\mitG	mathematical italic capital g
U+1D43B	H	H	H	H	H	H	H		\mitH	mathematical italic capital h
U+1D43C	I	I	I	I	I	I	I		\mitI	mathematical italic capital i
U+1D43D	J	J	J	J	J	J	J		\mitJ	mathematical italic capital j
U+1D43E	K	K	K	K	K	K	K		\mitK	mathematical italic capital k
U+1D43F	L	L	L	L	L	L	L		\mitL	mathematical italic capital l
U+1D440	M	M	M	M	M	M	M		\mitM	mathematical italic capital m
U+1D441	N	N	N	N	N	N	N		\mitN	mathematical italic capital n
U+1D442	O	O	O	O	O	O	O		\mitO	mathematical italic capital o
U+1D443	P	P	P	P	P	P	P		\mitP	mathematical italic capital p
U+1D444	Q	Q	Q	Q	Q	Q	Q		\mitQ	mathematical italic capital q
U+1D445	R	R	R	R	R	R	R		\mitR	mathematical italic capital r
U+1D446	S	S	S	S	S	S	S		\mitS	mathematical italic capital s
U+1D447	T	T	T	T	T	T	T		\mitT	mathematical italic capital t
U+1D448	U	U	U	U	U	U	U		\mitU	mathematical italic capital u
U+1D449	V	V	V	V	V	V	V		\mitV	mathematical italic capital v
U+1D44A	W	W	W	W	W	W	W		\mitW	mathematical italic capital w
U+1D44B	X	X	X	X	X	X	X		\mitX	mathematical italic capital x
U+1D44C	Y	Y	Y	Y	Y	Y	Y		\mitY	mathematical italic capital y
U+1D44D	Z	Z	Z	Z	Z	Z	Z		\mitZ	mathematical italic capital z

#### 13.1.4 Italic, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D44E	a	a	a	a	a	a	a		\mita	mathematical italic small a

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D44F	b	b	b	b	b	b	b	b	\mitb	mathematical italic small b
U+1D450	c	c	c	c	c	c	c	c	\mitc	mathematical italic small c
U+1D451	d	d	d	d	d	d	d	d	\mitd	mathematical italic small d
U+1D452	e	e	e	e	e	e	e	e	\mite	mathematical italic small e
U+1D453	f	f	f	f	f	f	f	f	\mitf	mathematical italic small f
U+1D454	g	g	g	g	g	g	g	g	\mitg	mathematical italic small g
U+1D456	i	i	i	i	i	i	i	i	\miti	mathematical italic small i
U+1D457	j	j	j	j	j	j	j	j	\mitj	mathematical italic small j
U+1D458	k	k	k	k	k	k	k	k	\mitk	mathematical italic small k
U+1D459	l	l	l	l	l	l	l	l	\mitl	mathematical italic small l
U+1D45A	m	m	m	m	m	m	m	m	\mitm	mathematical italic small m
U+1D45B	n	n	n	n	n	n	n	n	\mitn	mathematical italic small n
U+1D45C	o	o	o	o	o	o	o	o	\mito	mathematical italic small o
U+1D45D	p	p	p	p	p	p	p	p	\mitp	mathematical italic small p
U+1D45E	q	q	q	q	q	q	q	q	\mitq	mathematical italic small q
U+1D45F	r	r	r	r	r	r	r	r	\mitr	mathematical italic small r
U+1D460	s	s	s	s	s	s	s	s	\mits	mathematical italic small s
U+1D461	t	t	t	t	t	t	t	t	\mitt	mathematical italic small t
U+1D462	u	u	u	u	u	u	u	u	\mitu	mathematical italic small u
U+1D463	v	v	v	v	v	v	v	v	\mitv	mathematical italic small v
U+1D464	w	w	w	w	w	w	w	w	\mitw	mathematical italic small w
U+1D465	x	x	x	x	x	x	x	x	\mitx	mathematical italic small x
U+1D466	y	y	y	y	y	y	y	y	\mity	mathematical italic small y
U+1D467	z	z	z	z	z	z	z	z	\mitz	mathematical italic small z

### 13.1.5 Italic Greek, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6E2	<i>A</i>	A	A	A	A	A	A		\mitAlpha	mathematical italic capital alpha
U+1D6E3	<i>B</i>	B	B	B	B	B	B		\mitBeta	mathematical italic capital beta
U+1D6E4	<i>G</i>	G	G	G	G	G	G		\mitGamma	mathematical italic capital gamma
U+1D6E5	<i>Δ</i>	Δ	Δ	Δ	Δ	Δ	Δ		\mitDelta	mathematical italic capital delta
U+1D6E6	<i>E</i>	E	E	E	E	E	E		\mitEpsilon	mathematical italic capital epsilon
U+1D6E7	<i>Z</i>	Z	Z	Z	Z	Z	Z		\mitZeta	mathematical italic capital zeta
U+1D6E8	<i>H</i>	H	H	H	H	H	H		\mitEta	mathematical italic capital eta
U+1D6E9	<i>Θ</i>	Θ	Θ	Θ	Θ	Θ	Θ		\mitTheta	mathematical italic capital theta
U+1D6EA	<i>I</i>	I	I	I	I	I	I		\mitIota	mathematical italic capital iota
U+1D6EB	<i>K</i>	K	K	K	K	K	K		\mitKappa	mathematical italic capital kappa
U+1D6EC	<i>Λ</i>	Λ	Λ	Λ	Λ	Λ	Λ		\mitLambda	mathematical italic capital lambda
U+1D6ED	<i>M</i>	M	M	M	M	M	M		\mitMu	mathematical italic capital mu
U+1D6EE	<i>N</i>	N	N	N	N	N	N		\mitNu	mathematical italic capital nu
U+1D6EF	<i>Ξ</i>	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ		\mitXi	mathematical italic capital xi
U+1D6F0	<i>Ο</i>	Ο	Ο	Ο	Ο	Ο	Ο		\mitOmicron	mathematical italic capital omicron
U+1D6F1	<i>Π</i>	Π	Π	Π	Π	Π	Π		\mitPi	mathematical italic capital pi
U+1D6F2	<i>Ρ</i>	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ		\mitRho	mathematical italic capital rho
U+1D6F3	<i>Θ</i>	Θ	Θ	Θ	Θ	Θ	Θ		\mitvarTheta	mathematical italic capital theta symbol
U+1D6F4	<i>Σ</i>	Σ	Σ	Σ	Σ	Σ	Σ		\mitSigma	mathematical italic capital sigma
U+1D6F5	<i>Τ</i>	Τ	Τ	Τ	Τ	Τ	Τ		\mitTau	mathematical italic capital tau
U+1D6F6	<i>Υ</i>	Υ	Υ	Υ	Υ	Υ	Υ		\mitUpsilon	mathematical italic capital upsilon
U+1D6F7	<i>Φ</i>	Φ	Φ	Φ	Φ	Φ	Φ		\mitPhi	mathematical italic capital phi
U+1D6F8	<i>Χ</i>	Χ	Χ	Χ	Χ	Χ	Χ		\mitChi	mathematical italic capital chi

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6F9	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ		\mitPsi	mathematical italic capital psi
U+1D6FA	Ω	Ω	Ω	Ω	Ω	Ω	Ω		\mitOmega	mathematical italic capital omega

### 13.1.6 Italic Greek, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6FC	α	α	α	α	α	α	α		\mitalpha	mathematical italic small alpha
U+1D6FD	β	β	β	β	β	β	β		\mitbeta	mathematical italic small beta
U+1D6FE	γ	γ	γ	γ	γ	γ	γ		\mitgamma	mathematical italic small gamma
U+1D6FF	δ	δ	δ	δ	δ	δ	δ		\mitdelta	mathematical italic small delta
U+1D700	ε	ε	ε	ε	ε	ε	ε		\mitvarepsilon	mathematical italic small varepsilon
U+1D701	ζ	ζ	ζ	ζ	ζ	ζ	ζ		\mitzeta	mathematical italic small zeta
U+1D702	η	η	η	η	η	η	η		\miteta	mathematical italic small eta
U+1D703	θ	θ	θ	θ	θ	θ	θ		\mittheta	mathematical italic small theta
U+1D704	ι	ι	ι	ι	ι	ι	ι		\mitiota	mathematical italic small iota
U+1D705	κ	κ	κ	κ	κ	κ	κ		\mitkappa	mathematical italic small kappa
U+1D706	λ	λ	λ	λ	λ	λ	λ		\mitlambda	mathematical italic small lambda
U+1D707	μ	μ	μ	μ	μ	μ	μ		\mitmu	mathematical italic small mu
U+1D708	ν	ν	ν	ν	ν	ν	ν		\mitnu	mathematical italic small nu
U+1D709	ξ	ξ	ξ	ξ	ξ	ξ	ξ		\mitxi	mathematical italic small xi
U+1D70A	ο	ο	ο	ο	ο	ο	ο		\mitomicron	mathematical italic small omicron
U+1D70B	π	π	π	π	π	π	π		\mitpi	mathematical italic small pi
U+1D70C	ρ	ρ	ρ	ρ	ρ	ρ	ρ		\mitrho	mathematical italic small rho
U+1D70D	ς	ς	ς	ς	ς	ς	ς		\mitvarsigma	mathematical italic small final sigma
U+1D70E	σ	σ	σ	σ	σ	σ	σ		\mitsigma	mathematical italic small sigma

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D70F	τ	τ	τ	τ	τ	τ	τ	τ	\mittau	mathematical italic small tau
U+1D710	υ	υ	υ	υ	υ	υ	υ	υ	\mitupsilon	mathematical italic small upsilon
U+1D711	φ	φ	φ	φ	φ	φ	φ	φ	\mitvarphi	mathematical italic small phi
U+1D712	χ	χ	χ	χ	χ	χ	χ	χ	\mitchi	mathematical italic small chi
U+1D713	ψ	ψ	ψ	ψ	ψ	ψ	ψ	ψ	\mitpsi	mathematical italic small psi
U+1D714	ω	ω	ω	ω	ω	ω	ω	ω	\mitomega	mathematical italic small omega
U+1D715	∂	∂	∂	∂	∂	∂	∂	∂	\mitpartial	mathematical italic partial differential
U+1D716	ε	ε	ε	ε	ε	ε	ε	ε	\mitepsilon	mathematical italic varepsilon symbol
U+1D717	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	\mitvartheta	mathematical italic theta symbol
U+1D718	κ	κ	κ	κ	κ	κ	κ	κ	\mitvarkappa	mathematical italic kappa symbol
U+1D719	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	ϕ	\mitphi	mathematical italic phi symbol
U+1D71A	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ	\mitvarrho	mathematical italic rho symbol
U+1D71B	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	\mitvarpi	mathematical italic pi symbol

### 13.1.7 Script, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D49C	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	\mscrA	mathematical script capital a
U+1D49E	𝒞	𝒞	𝒞	𝒞	𝒞	𝒞	𝒞	𝒞	\mscrC	mathematical script capital c
U+1D49F	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	\mscrD	mathematical script capital d
U+1D4A2	𝒢	𝒢	𝒢	𝒢	𝒢	𝒢	𝒢	𝒢	\mscrG	mathematical script capital g
U+1D4A5	𝒤	𝒤	𝒤	𝒤	𝒤	𝒤	𝒤	𝒤	\mscrJ	mathematical script capital j
U+1D4A6	𝒦	𝒦	𝒦	𝒦	𝒦	𝒦	𝒦	𝒦	\mscrK	mathematical script capital k
U+1D4A9	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	\mscrN	mathematical script capital n
U+1D4AA	𝒪	𝒪	𝒪	𝒪	𝒪	𝒪	𝒪	𝒪	\mscrO	mathematical script capital o

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4AB	𝒫	𝒬	𝒬	𝒫	𝒫	𝒫	𝒫	𝒫	\mscrP	mathematical script capital p
U+1D4AC	𝒬	𝒬	𝒬	𝒬	𝒬	𝒬	𝒬	𝒬	\mscrQ	mathematical script capital q
U+1D4AE	𝒮	𝒮	𝒮	𝒮	𝒮	𝒮	𝒮	𝒮	\mscrS	mathematical script capital s
U+1D4AF	𝒯	𝒯	𝒯	𝒯	𝒯	𝒯	𝒯	𝒯	\mscrT	mathematical script capital t
U+1D4B0	𝒰	𝒰	𝒰	𝒰	𝒰	𝒰	𝒰	𝒰	\mscrU	mathematical script capital u
U+1D4B1	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	𝒩	\mscrV	mathematical script capital v
U+1D4B2	𝒲	𝒲	𝒲	𝒲	𝒲	𝒲	𝒲	𝒲	\mscrW	mathematical script capital w
U+1D4B3	𝒳	𝒳	𝒳	𝒳	𝒳	𝒳	𝒳	𝒳	\mscrX	mathematical script capital x
U+1D4B4	𝒴	𝒴	𝒴	𝒴	𝒴	𝒴	𝒴	𝒴	\mscrY	mathematical script capital y
U+1D4B5	𝒵	𝒵	𝒵	𝒵	𝒵	𝒵	𝒵	𝒵	\mscrZ	mathematical script capital z

### 13.1.8 Script, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4B6	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	\mscra	mathematical script small a
U+1D4B7	𝒷	𝒷	𝒷	𝒷	𝒷	𝒷	𝒷	𝒷	\mscrb	mathematical script small b
U+1D4B8	𝒸	𝒸	𝒸	𝒸	𝒸	𝒸	𝒸	𝒸	\mscrc	mathematical script small c
U+1D4B9	𝒹	𝒹	𝒹	𝒹	𝒹	𝒹	𝒹	𝒹	\mscrd	mathematical script small d
U+1D4BB	𝒻	𝒻	𝒻	𝒻	𝒻	𝒻	𝒻	𝒻	\mscrf	mathematical script small f
U+1D4BD	𝒉	𝒉	𝒉	𝒉	𝒉	𝒉	𝒉	𝒉	\mscrh	mathematical script small h
U+1D4BE	𝒾	𝒾	𝒾	𝒾	𝒾	𝒾	𝒾	𝒾	\mscri	mathematical script small i
U+1D4BF	𝒿	𝒿	𝒿	𝒿	𝒿	𝒿	𝒿	𝒿	\mscrj	mathematical script small j
U+1D4C0	𝒌	𝒌	𝒌	𝒌	𝒌	𝒌	𝒌	𝒌	\mscrk	mathematical script small k
U+1D4C1	𝒍	𝒍	𝒍	𝒍	𝒍	𝒍	𝒍	𝒍	\mscrl	mathematical script small l
U+1D4C2	𝒎	𝒎	𝒎	𝒎	𝒎	𝒎	𝒎	𝒎	\mscrm	mathematical script small m

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4C3	<i>n</i>	n	n	n	n	n	n		\mscrn	mathematical script small n
U+1D4C5	<i>p</i>	p	p	p	p	p	p		\mscrp	mathematical script small p
U+1D4C6	<i>q</i>	q	q	q	q	q	q		\mscrq	mathematical script small q
U+1D4C7	<i>r</i>	r	r	r	r	r	r		\mscrr	mathematical script small r
U+1D4C8	<i>s</i>	s	s	s	s	s	s		\mscrs	mathematical script small s
U+1D4C9	<i>t</i>	t	t	t	t	t	t		\mscrt	mathematical script small t
U+1D4CA	<i>u</i>	u	u	u	u	u	u		\mscru	mathematical script small u
U+1D4CB	<i>v</i>	v	v	v	v	v	v		\mscrv	mathematical script small v
U+1D4CC	<i>w</i>	w	w	w	w	w	w		\mscrw	mathematical script small w
U+1D4CD	<i>x</i>	x	x	x	x	x	x		\mscrx	mathematical script small x
U+1D4CE	<i>y</i>	y	y	y	y	y	y		\mscry	mathematical script small y
U+1D4CF	<i>z</i>	z	z	z	z	z	z		\mscrz	mathematical script small z

### 13.1.9 Fraktur, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D504	<i>A</i>	A	A	A	A	A	A	A	\mfrakA	mathematical fraktur capital a
U+1D505	<i>B</i>	B	B	B	B	B	B	B	\mfrakB	mathematical fraktur capital b
U+1D507	<i>D</i>	D	D	D	D	D	D	D	\mfrakD	mathematical fraktur capital d
U+1D508	<i>E</i>	E	E	E	E	E	E	E	\mfrakE	mathematical fraktur capital e
U+1D509	<i>F</i>	F	F	F	F	F	F	F	\mfrakF	mathematical fraktur capital f
U+1D50A	<i>G</i>	G	G	G	G	G	G	G	\mfrakG	mathematical fraktur capital g
U+1D50D	<i>J</i>	J	J	J	J	J	J	J	\mfrakJ	mathematical fraktur capital j
U+1D50E	<i>K</i>	K	K	K	K	K	K	K	\mfrakK	mathematical fraktur capital k
U+1D50F	<i>L</i>	L	L	L	L	L	L	L	\mfrakL	mathematical fraktur capital l

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D510	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{M}	mathematical fraktur capital m
U+1D511	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{N}	mathematical fraktur capital n
U+1D512	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{O}	mathematical fraktur capital o
U+1D513	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{P}	mathematical fraktur capital p
U+1D514	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{Q}	mathematical fraktur capital q
U+1D516	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{S}	mathematical fraktur capital s
U+1D517	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{T}	mathematical fraktur capital t
U+1D518	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{U}	mathematical fraktur capital u
U+1D519	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{V}	mathematical fraktur capital v
U+1D51A	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{W}	mathematical fraktur capital w
U+1D51B	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{X}	mathematical fraktur capital x
U+1D51C	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrak{Y}	mathematical fraktur capital y

### 13.1.10 Fraktur, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D51E	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfraka	mathematical fraktur small a
U+1D51F	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakb	mathematical fraktur small b
U+1D520	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakc	mathematical fraktur small c
U+1D521	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakd	mathematical fraktur small d
U+1D522	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakte	mathematical fraktur small e
U+1D523	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakf	mathematical fraktur small f
U+1D524	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakg	mathematical fraktur small g
U+1D525	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfrakh	mathematical fraktur small h
U+1D526	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	ℳ	\mathfraki	mathematical fraktur small i

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D527	j	ј	ј	ј	ј	ј	ј	ј	\mathfrak{j}	mathematical fraktur small j
U+1D528	ќ	ќ	ќ	ќ	ќ	ќ	ќ	ќ	\mathfrak{k}	mathematical fraktur small k
U+1D529	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{l}	mathematical fraktur small l
U+1D52A	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{m}	mathematical fraktur small m
U+1D52B	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{n}	mathematical fraktur small n
U+1D52C	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{o}	mathematical fraktur small o
U+1D52D	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{p}	mathematical fraktur small p
U+1D52E	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{q}	mathematical fraktur small q
U+1D52F	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{r}	mathematical fraktur small r
U+1D530	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{s}	mathematical fraktur small s
U+1D531	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{t}	mathematical fraktur small t
U+1D532	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{u}	mathematical fraktur small u
U+1D533	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{v}	mathematical fraktur small v
U+1D534	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{w}	mathematical fraktur small w
U+1D535	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{x}	mathematical fraktur small x
U+1D536	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{y}	mathematical fraktur small y
U+1D537	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	Ѝ	\mathfrak{z}	mathematical fraktur small z

### 13.1.11 Blackboard, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D538	𝔸	𝔸	𝔸	𝔸	𝔸	𝔸	𝔸	𝔸	\mathbb{A}	mathematical double-struck capital a
U+1D539	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	\mathbb{B}	mathematical double-struck capital b
U+1D53B	𝔻	𝔻	𝔻	𝔻	𝔻	𝔻	𝔻	𝔻	\mathbb{D}	mathematical double-struck capital d
U+1D53C	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	𝔼	\mathbb{E}	mathematical double-struck capital e

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D53D	F	F	F	F	F	F	F		\BbbF	mathematical double-struck capital f
U+1D53E	G	G	G	G	G	G	G		\BbbG	mathematical double-struck capital g
U+1D540	I	I	I	I	I	I	I		\BbbI	mathematical double-struck capital i
U+1D541	J	J	J	J	J	J	J		\BbbJ	mathematical double-struck capital j
U+1D542	K	K	K	K	K	K	K		\BbbK	mathematical double-struck capital k
U+1D543	L	L	L	L	L	L	L		\BbbL	mathematical double-struck capital l
U+1D544	M	M	M	M	M	M	M		\BbbM	mathematical double-struck capital m
U+1D546	O	O	O	O	O	O	O		\BbbO	mathematical double-struck capital o
U+1D54A	S	S	S	S	S	S	S		\BbbS	mathematical double-struck capital s
U+1D54B	T	T	T	T	T	T	T		\BbbT	mathematical double-struck capital t
U+1D54C	U	U	U	U	U	U	U		\BbbU	mathematical double-struck capital u
U+1D54D	V	V	V	V	V	V	V		\BbbV	mathematical double-struck capital v
U+1D54E	W	W	W	W	W	W	W		\BbbW	mathematical double-struck capital w
U+1D54F	X	X	X	X	X	X	X		\BbbX	mathematical double-struck capital x
U+1D550	Y	Y	Y	Y	Y	Y	Y		\BbbY	mathematical double-struck capital y

### 13.1.12 Blackboard, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D552	a	a	a	a	a	a	a		\Bbba	mathematical double-struck small a
U+1D553	b	b	b	b	b	b	b		\Bbbb	mathematical double-struck small b
U+1D554	c	c	c	c	c	c	c		\Bbbc	mathematical double-struck small c
U+1D555	d	d	d	d	d	d	d		\Bbdd	mathematical double-struck small d
U+1D556	e	e	e	e	e	e	e		\Bbbe	mathematical double-struck small e
U+1D557	f	f	f	f	f	f	f		\Bbbf	mathematical double-struck small f

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D558	g	g	g	g	g	g	g	g	\Bbbg	mathematical double-struck small g
U+1D559	h	h	h	h	h	h	h	h	\Bbbh	mathematical double-struck small h
U+1D55A	i	i	i	i	i	i	i	i	\Bbbi	mathematical double-struck small i
U+1D55B	j	j	j	j	j	j	j	j	\Bbbj	mathematical double-struck small j
U+1D55C	k	k	k	k	k	k	k	k	\Bbbk <sup>(a)</sup>	mathematical double-struck small k
U+1D55D	l	l	l	l	l	l	l	l	\Bbb{l}	mathematical double-struck small l
U+1D55E	m	m	m	m	m	m	m	m	\Bbbm	mathematical double-struck small m
U+1D55F	n	n	n	n	n	n	n	n	\Bbbn	mathematical double-struck small n
U+1D560	o	o	o	o	o	o	o	o	\Bbb{o}	mathematical double-struck small o
U+1D561	p	p	p	p	p	p	p	p	\Bbbp	mathematical double-struck small p
U+1D562	q	q	q	q	q	q	q	q	\Bbbq	mathematical double-struck small q
U+1D563	r	r	r	r	r	r	r	r	\Bbb{r}	mathematical double-struck small r
U+1D564	s	s	s	s	s	s	s	s	\Bbbs	mathematical double-struck small s
U+1D565	t	t	t	t	t	t	t	t	\Bbbt	mathematical double-struck small t
U+1D566	u	u	u	u	u	u	u	u	\Bbbu	mathematical double-struck small u
U+1D567	v	v	v	v	v	v	v	v	\Bbbv	mathematical double-struck small v
U+1D568	w	w	w	w	w	w	w	w	\Bbbw	mathematical double-struck small w
U+1D569	x	x	x	x	x	x	x	x	\Bbbx	mathematical double-struck small x
U+1D56A	y	y	y	y	y	y	y	y	\Bbby	mathematical double-struck small y
U+1D56B	z	z	z	z	z	z	z	z	\Bbbz	mathematical double-struck small z

### 13.1.13 Sans serif, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5AO	A	A	A	A	A	A	A	A	\msansA	mathematical sans-serif capital a

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5A1	B	B	B	B	B	B	B	B	\msansB	mathematical sans-serif capital b
U+1D5A2	C	C	C	C	C	C	C	C	\msansC	mathematical sans-serif capital c
U+1D5A3	D	D	D	D	D	D	D	D	\msansD	mathematical sans-serif capital d
U+1D5A4	E	E	E	E	E	E	E	E	\msansE	mathematical sans-serif capital e
U+1D5A5	F	F	F	F	F	F	F	F	\msansF	mathematical sans-serif capital f
U+1D5A6	G	G	G	G	G	G	G	G	\msansG	mathematical sans-serif capital g
U+1D5A7	H	H	H	H	H	H	H	H	\msansH	mathematical sans-serif capital h
U+1D5A8	I	I	I	I	I	I	I	I	\msansI	mathematical sans-serif capital i
U+1D5A9	J	J	J	J	J	J	J	J	\msansJ	mathematical sans-serif capital j
U+1D5AA	K	K	K	K	K	K	K	K	\msansK	mathematical sans-serif capital k
U+1D5AB	L	L	L	L	L	L	L	L	\msansL	mathematical sans-serif capital l
U+1D5AC	M	M	M	M	M	M	M	M	\msansM	mathematical sans-serif capital m
U+1D5AD	N	N	N	N	N	N	N	N	\msansN	mathematical sans-serif capital n
U+1D5AE	O	O	O	O	O	O	O	O	\msansO	mathematical sans-serif capital o
U+1D5AF	P	P	P	P	P	P	P	P	\msansP	mathematical sans-serif capital p
U+1D5B0	Q	Q	Q	Q	Q	Q	Q	Q	\msansQ	mathematical sans-serif capital q
U+1D5B1	R	R	R	R	R	R	R	R	\msansR	mathematical sans-serif capital r
U+1D5B2	S	S	S	S	S	S	S	S	\msansS	mathematical sans-serif capital s
U+1D5B3	T	T	T	T	T	T	T	T	\msansT	mathematical sans-serif capital t
U+1D5B4	U	U	U	U	U	U	U	U	\msansU	mathematical sans-serif capital u
U+1D5B5	V	V	V	V	V	V	V	V	\msansV	mathematical sans-serif capital v
U+1D5B6	W	W	W	W	W	W	W	W	\msansW	mathematical sans-serif capital w
U+1D5B7	X	X	X	X	X	X	X	X	\msansX	mathematical sans-serif capital x
U+1D5B8	Y	Y	Y	Y	Y	Y	Y	Y	\msansY	mathematical sans-serif capital y

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5B9	Z	Z	Z	Z	Z	Z	Z		\msansZ	mathematical sans-serif capital z

### 13.1.14 Sans serif, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5BA	a	a	a	a	a	a	a		\msansa	mathematical sans-serif small a
U+1D5BB	b	b	b	b	b	b	b		\msansb	mathematical sans-serif small b
U+1D5BC	c	c	c	c	c	c	c		\msansc	mathematical sans-serif small c
U+1D5BD	d	d	d	d	d	d	d		\msansd	mathematical sans-serif small d
U+1D5BE	e	e	e	e	e	e	e		\msanse	mathematical sans-serif small e
U+1D5BF	f	f	f	f	f	f	f		\msansf	mathematical sans-serif small f
U+1D5C0	g	g	g	g	g	g	g		\msansg	mathematical sans-serif small g
U+1D5C1	h	h	h	h	h	h	h		\msansh	mathematical sans-serif small h
U+1D5C2	i	i	i	i	i	i	i		\msansi	mathematical sans-serif small i
U+1D5C3	j	j	j	j	j	j	j		\msansj	mathematical sans-serif small j
U+1D5C4	k	k	k	k	k	k	k		\msansk	mathematical sans-serif small k
U+1D5C5	l	l	l	l	l	l	l		\msansl	mathematical sans-serif small l
U+1D5C6	m	m	m	m	m	m	m		\msansm	mathematical sans-serif small m
U+1D5C7	n	n	n	n	n	n	n		\msansn	mathematical sans-serif small n
U+1D5C8	o	o	o	o	o	o	o		\msanso	mathematical sans-serif small o
U+1D5C9	p	p	p	p	p	p	p		\msansp	mathematical sans-serif small p
U+1D5CA	q	q	q	q	q	q	q		\msansq	mathematical sans-serif small q
U+1D5CB	r	r	r	r	r	r	r		\msansr	mathematical sans-serif small r
U+1D5CC	s	s	s	s	s	s	s		\msanss	mathematical sans-serif small s
U+1D5CD	t	t	t	t	t	t	t		\msanst	mathematical sans-serif small t

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5CE	u	u	u	u	u	u	u	u	\msansu	mathematical sans-serif small u
U+1D5CF	v	v	v	v	v	v	v	v	\msansv	mathematical sans-serif small v
U+1D5D0	w	w	w	w	w	w	w	w	\msansw	mathematical sans-serif small w
U+1D5D1	x	x	x	x	x	x	x	x	\msansx	mathematical sans-serif small x
U+1D5D2	y	y	y	y	y	y	y	y	\msansy	mathematical sans-serif small y
U+1D5D3	z	z	z	z	z	z	z	z	\msansz	mathematical sans-serif small z

### 13.1.15 Italic sans serif, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D608	A	A	A	A	A	A	A	A	\mitsansA	mathematical sans-serif italic capital a
U+1D609	B	B	B	B	B	B	B	B	\mitsansB	mathematical sans-serif italic capital b
U+1D60A	C	C	C	C	C	C	C	C	\mitsansC	mathematical sans-serif italic capital c
U+1D60B	D	D	D	D	D	D	D	D	\mitsansD	mathematical sans-serif italic capital d
U+1D60C	E	E	E	E	E	E	E	E	\mitsansE	mathematical sans-serif italic capital e
U+1D60D	F	F	F	F	F	F	F	F	\mitsansF	mathematical sans-serif italic capital f
U+1D60E	G	G	G	G	G	G	G	G	\mitsansG	mathematical sans-serif italic capital g
U+1D60F	H	H	H	H	H	H	H	H	\mitsansH	mathematical sans-serif italic capital h
U+1D610	I	I	I	I	I	I	I	I	\mitsansI	mathematical sans-serif italic capital i
U+1D611	J	J	J	J	J	J	J	J	\mitsansJ	mathematical sans-serif italic capital j
U+1D612	K	K	K	K	K	K	K	K	\mitsansK	mathematical sans-serif italic capital k
U+1D613	L	L	L	L	L	L	L	L	\mitsansL	mathematical sans-serif italic capital l
U+1D614	M	M	M	M	M	M	M	M	\mitsansM	mathematical sans-serif italic capital m
U+1D615	N	N	N	N	N	N	N	N	\mitsansN	mathematical sans-serif italic capital n
U+1D616	O	O	O	O	O	O	O	O	\mitsansO	mathematical sans-serif italic capital o

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D617	P	P	P	P	P	P	P		\mitsansP	mathematical sans-serif italic capital p
U+1D618	Q	Q	Q	Q	Q	Q	Q		\mitsansQ	mathematical sans-serif italic capital q
U+1D619	R	R	R	R	R	R	R		\mitsansR	mathematical sans-serif italic capital r
U+1D61A	S	S	S	S	S	S	S		\mitsansS	mathematical sans-serif italic capital s
U+1D61B	T	T	T	T	T	T	T		\mitsansT	mathematical sans-serif italic capital t
U+1D61C	U	U	U	U	U	U	U		\mitsansU	mathematical sans-serif italic capital u
U+1D61D	V	V	V	V	V	V	V		\mitsansV	mathematical sans-serif italic capital v
U+1D61E	W	W	W	W	W	W	W		\mitsansW	mathematical sans-serif italic capital w
U+1D61F	X	X	X	X	X	X	X		\mitsansX	mathematical sans-serif italic capital x
U+1D620	Y	Y	Y	Y	Y	Y	Y		\mitsansY	mathematical sans-serif italic capital y
U+1D621	Z	Z	Z	Z	Z	Z	Z		\mitsansZ	mathematical sans-serif italic capital z

### 13.1.16 Italic sans serif, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D622	a	a	a	a	a	a	a		\mitsansa	mathematical sans-serif italic small a
U+1D623	b	b	b	b	b	b	b		\mitsansb	mathematical sans-serif italic small b
U+1D624	c	c	c	c	c	c	c		\mitsansc	mathematical sans-serif italic small c
U+1D625	d	d	d	d	d	d	d		\mitsansd	mathematical sans-serif italic small d
U+1D626	e	e	e	e	e	e	e		\mitsanse	mathematical sans-serif italic small e
U+1D627	f	f	f	f	f	f	f		\mitsansf	mathematical sans-serif italic small f
U+1D628	g	g	g	g	g	g	g		\mitsansg	mathematical sans-serif italic small g
U+1D629	h	h	h	h	h	h	h		\mitsansh	mathematical sans-serif italic small h
U+1D62A	i	i	i	i	i	i	i		\mitsansi	mathematical sans-serif italic small i
U+1D62B	j	j	j	j	j	j	j		\mitsansj	mathematical sans-serif italic small j

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D62C	k	k	k	k	k	k	k		\mitsansk	mathematical sans-serif italic small k
U+1D62D	l	l	l	l	l	l	l		\mitsansl	mathematical sans-serif italic small l
U+1D62E	m	m	m	m	m	m	m		\mitsansm	mathematical sans-serif italic small m
U+1D62F	n	n	n	n	n	n	n		\mitsansn	mathematical sans-serif italic small n
U+1D630	o	o	o	o	o	o	o		\mitsanso	mathematical sans-serif italic small o
U+1D631	p	p	p	p	p	p	p		\mitsansp	mathematical sans-serif italic small p
U+1D632	q	q	q	q	q	q	q		\mitsansq	mathematical sans-serif italic small q
U+1D633	r	r	r	r	r	r	r		\mitsansr	mathematical sans-serif italic small r
U+1D634	s	s	s	s	s	s	s		\mitsanss	mathematical sans-serif italic small s
U+1D635	t	t	t	t	t	t	t		\mitsanst	mathematical sans-serif italic small t
U+1D636	u	u	u	u	u	u	u		\mitsansu	mathematical sans-serif italic small u
U+1D637	v	v	v	v	v	v	v		\mitsansv	mathematical sans-serif italic small v
U+1D638	w	w	w	w	w	w	w		\mitsansw	mathematical sans-serif italic small w
U+1D639	x	x	x	x	x	x	x		\mitsansx	mathematical sans-serif italic small x
U+1D63A	y	y	y	y	y	y	y		\mitsansy	mathematical sans-serif italic small y
U+1D63B	z	z	z	z	z	z	z		\mitsansz	mathematical sans-serif italic small z

### 13.1.17 Typewriter, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D670	A	A	A		A	A	A		\mttA	mathematical monospace capital a
U+1D671	B	B	B		B	B	B		\mttB	mathematical monospace capital b
U+1D672	C	C	C		C	C	C		\mttC	mathematical monospace capital c
U+1D673	D	D	D		D	D	D		\mttD	mathematical monospace capital d
U+1D674	E	E	E		E	E	E		\mttE	mathematical monospace capital e

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D675	F	F	F		F	F	F		\mttF	mathematical monospace capital f
U+1D676	G	G	G		G	G	G		\mttG	mathematical monospace capital g
U+1D677	H	H	H		H	H	H		\mttH	mathematical monospace capital h
U+1D678	I	I	I		I	I	I		\mttI	mathematical monospace capital i
U+1D679	J	J	J		J	J	J		\mttJ	mathematical monospace capital j
U+1D67A	K	K	K		K	K	K		\mttK	mathematical monospace capital k
U+1D67B	L	L	L		L	L	L		\mttL	mathematical monospace capital l
U+1D67C	M	M	M		M	M	M		\mttM	mathematical monospace capital m
U+1D67D	N	N	N		N	N	N		\mttN	mathematical monospace capital n
U+1D67E	O	O	O		O	O	O		\mttO	mathematical monospace capital o
U+1D67F	P	P	P		P	P	P		\mttP	mathematical monospace capital p
U+1D680	Q	Q	Q		Q	Q	Q		\mttQ	mathematical monospace capital q
U+1D681	R	R	R		R	R	R		\mttR	mathematical monospace capital r
U+1D682	S	S	S		S	S	S		\mttS	mathematical monospace capital s
U+1D683	T	T	T		T	T	T		\mttT	mathematical monospace capital t
U+1D684	U	U	U		U	U	U		\mttU	mathematical monospace capital u
U+1D685	V	V	V		V	V	V		\mttV	mathematical monospace capital v
U+1D686	W	W	W		W	W	W		\mttW	mathematical monospace capital w
U+1D687	X	X	X		X	X	X		\mttX	mathematical monospace capital x
U+1D688	Y	Y	Y		Y	Y	Y		\mttY	mathematical monospace capital y
U+1D689	Z	Z	Z		Z	Z	Z		\mttZ	mathematical monospace capital z

### 13.1.18 Typewriter, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D68A	a	a	a		a	a	a		\mtta	mathematical monospace small a
U+1D68B	b	b	b		b	b	b		\mttb	mathematical monospace small b
U+1D68C	c	c	c		c	c	c		\mttc	mathematical monospace small c
U+1D68D	d	d	d		d	d	d		\mttd	mathematical monospace small d
U+1D68E	e	e	e		e	e	e		\mtte	mathematical monospace small e
U+1D68F	f	f	f		f	f	f		\mttf	mathematical monospace small f
U+1D690	g	g	g		g	g	g		\mttg	mathematical monospace small g
U+1D691	h	h	h		h	h	h		\mtth	mathematical monospace small h
U+1D692	i	i	i		i	i	i		\mtti	mathematical monospace small i
U+1D693	j	j	j		j	j	j		\mttj	mathematical monospace small j
U+1D694	k	k	k		k	k	k		\mttk	mathematical monospace small k
U+1D695	l	l	l		l	l	l		\mttl	mathematical monospace small l
U+1D696	m	m	m		m	m	m		\mttm	mathematical monospace small m
U+1D697	n	n	n		n	n	n		\mttn	mathematical monospace small n
U+1D698	o	o	o		o	o	o		\mtto	mathematical monospace small o
U+1D699	p	p	p		p	p	p		\mttp	mathematical monospace small p
U+1D69A	q	q	q		q	q	q		\mttq	mathematical monospace small q
U+1D69B	r	r	r		r	r	r		\mttr	mathematical monospace small r
U+1D69C	s	s	s		s	s	s		\mtts	mathematical monospace small s
U+1D69D	t	t	t		t	t	t		\mttt	mathematical monospace small t
U+1D69E	u	u	u		u	u	u		\mttu	mathematical monospace small u
U+1D69F	v	v	v		v	v	v		\mttv	mathematical monospace small v
U+1D6AO	w	w	w		w	w	w		\mttw	mathematical monospace small w
U+1D6A1	x	x	x		x	x	x		\mttx	mathematical monospace small x

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6A2	y	y	y		y	y	y		\mathtt{y}	mathematical monospace small y
U+1D6A3	z	z	z		z	z	z		\mathtt{z}	mathematical monospace small z

## 13.2 Bold

### 13.2.1 Bold, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D400	A	A	A	A	A	A	A	A	\mathbf{A}	mathematical bold capital a
U+1D401	B	B	B	B	B	B	B	B	\mathbf{B}	mathematical bold capital b
U+1D402	C	C	C	C	C	C	C	C	\mathbf{C}	mathematical bold capital c
U+1D403	D	D	D	D	D	D	D	D	\mathbf{D}	mathematical bold capital d
U+1D404	E	E	E	E	E	E	E	E	\mathbf{E}	mathematical bold capital e
U+1D405	F	F	F	F	F	F	F	F	\mathbf{F}	mathematical bold capital f
U+1D406	G	G	G	G	G	G	G	G	\mathbf{G}	mathematical bold capital g
U+1D407	H	H	H	H	H	H	H	H	\mathbf{H}	mathematical bold capital h
U+1D408	I	I	I	I	I	I	I	I	\mathbf{I}	mathematical bold capital i
U+1D409	J	J	J	J	J	J	J	J	\mathbf{J}	mathematical bold capital j
U+1D40A	K	K	K	K	K	K	K	K	\mathbf{K}	mathematical bold capital k
U+1D40B	L	L	L	L	L	L	L	L	\mathbf{L}	mathematical bold capital l
U+1D40C	M	M	M	M	M	M	M	M	\mathbf{M}	mathematical bold capital m
U+1D40D	N	N	N	N	N	N	N	N	\mathbf{N}	mathematical bold capital n
U+1D40E	O	O	O	O	O	O	O	O	\mathbf{O}	mathematical bold capital o
U+1D40F	P	P	P	P	P	P	P	P	\mathbf{P}	mathematical bold capital p
U+1D410	Q	Q	Q	Q	Q	Q	Q	Q	\mathbf{Q}	mathematical bold capital q
U+1D411	R	R	R	R	R	R	R	R	\mathbf{R}	mathematical bold capital r

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D412	<b>S</b>	\mbf{S	S	S	S	S	S	S	\mbf{S}	mathematical bold capital s
U+1D413	<b>T</b>	\mbf{T	T	T	T	T	T	T	\mbf{T}	mathematical bold capital t
U+1D414	<b>U</b>	\mbf{U	U	U	U	U	U	U	\mbf{U}	mathematical bold capital u
U+1D415	<b>V</b>	\mbf{V	V	V	V	V	V	V	\mbf{V}	mathematical bold capital v
U+1D416	<b>W</b>	\mbf{W	W	W	W	W	W	W	\mbf{W}	mathematical bold capital w
U+1D417	<b>X</b>	\mbf{X	X	X	X	X	X	X	\mbf{X}	mathematical bold capital x
U+1D418	<b>Y</b>	\mbf{Y	Y	Y	Y	Y	Y	Y	\mbf{Y}	mathematical bold capital y
U+1D419	<b>Z</b>	\mbf{Z	Z	Z	Z	Z	Z	Z	\mbf{Z}	mathematical bold capital z

### 13.2.2 Bold, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D41A	<b>a</b>	\mbf{a	a	a	a	a	a	a	\mbf{a}	mathematical bold small a
U+1D41B	<b>b</b>	\mbf{b	b	b	b	b	b	b	\mbf{b}	mathematical bold small b
U+1D41C	<b>c</b>	\mbf{c	c	c	c	c	c	c	\mbf{c}	mathematical bold small c
U+1D41D	<b>d</b>	\mbf{d	d	d	d	d	d	d	\mbf{d}	mathematical bold small d
U+1D41E	<b>e</b>	\mbf{e	e	e	e	e	e	e	\mbf{e}	mathematical bold small e
U+1D41F	<b>f</b>	\mbf{f	f	f	f	f	f	f	\mbf{f}	mathematical bold small f
U+1D420	<b>g</b>	\mbf{g	g	g	g	g	g	g	\mbf{g}	mathematical bold small g
U+1D421	<b>h</b>	\mbf{h	h	h	h	h	h	h	\mbf{h}	mathematical bold small h
U+1D422	<b>i</b>	\mbf{i	i	i	i	i	i	i	\mbf{i}	mathematical bold small i
U+1D423	<b>j</b>	\mbf{j	j	j	j	j	j	j	\mbf{j}	mathematical bold small j
U+1D424	<b>k</b>	\mbf{k	k	k	k	k	k	k	\mbf{k}	mathematical bold small k
U+1D425	<b>l</b>	\mbf{l	l	l	l	l	l	l	\mbf{l}	mathematical bold small l
U+1D426	<b>m</b>	\mbf{m}	mathematical bold small m							

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D427	n	n	n	n	n	n	n	n	\mbfn	mathematical bold small n
U+1D428	o	o	o	o	o	o	o	o	\mbfo	mathematical bold small o
U+1D429	p	p	p	p	p	p	p	p	\mbfp	mathematical bold small p
U+1D42A	q	q	q	q	q	q	q	q	\mbfq	mathematical bold small q
U+1D42B	r	r	r	r	r	r	r	r	\mbfr	mathematical bold small r
U+1D42C	s	s	s	s	s	s	s	s	\mbfs	mathematical bold small s
U+1D42D	t	t	t	t	t	t	t	t	\mbft	mathematical bold small t
U+1D42E	u	u	u	u	u	u	u	u	\mbfu	mathematical bold small u
U+1D42F	v	v	v	v	v	v	v	v	\mbfv	mathematical bold small v
U+1D430	w	w	w	w	w	w	w	w	\mbfw	mathematical bold small w
U+1D431	x	x	x	x	x	x	x	x	\mbfx	mathematical bold small x
U+1D432	y	y	y	y	y	y	y	y	\mbfy	mathematical bold small y
U+1D433	z	z	z	z	z	z	z	z	\mbfz	mathematical bold small z

### 13.2.3 Bold Greek, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6A8	Α	Α	Α	Α	Α	Α	Α	Α	\mbfAlpha	mathematical bold capital alpha
U+1D6A9	Β	Β	Β	Β	Β	Β	Β	Β	\mbfBeta	mathematical bold capital beta
U+1D6AA	Γ	Γ	Γ	Γ	Γ	Γ	Γ	Γ	\mbfGamma	mathematical bold capital gamma
U+1D6AB	Δ	Δ	Δ	Δ	Δ	Δ	Δ	Δ	\mbfDelta	mathematical bold capital delta
U+1D6AC	Ε	Ε	Ε	Ε	Ε	Ε	Ε	Ε	\mbfEpsilon	mathematical bold capital epsilon
U+1D6AD	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ	\mbfZeta	mathematical bold capital zeta
U+1D6AE	Η	Η	Η	Η	Η	Η	Η	Η	\mbfEta	mathematical bold capital eta
U+1D6AF	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mbfTheta	mathematical bold capital theta

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6B0	I	I	I	I	I	I	I	I	\mbfIota	mathematical bold capital iota
U+1D6B1	K	K	K	K	K	K	K	K	\mbfKappa	mathematical bold capital kappa
U+1D6B2	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	\mbfLambda	mathematical bold capital lambda
U+1D6B3	M	M	M	M	M	M	M	M	\mbfMu	mathematical bold capital mu
U+1D6B4	N	N	N	N	N	N	N	N	\mbfNu	mathematical bold capital nu
U+1D6B5	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	\mbfXi	mathematical bold capital xi
U+1D6B6	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	\mbfOmicron	mathematical bold capital omicron
U+1D6B7	Π	Π	Π	Π	Π	Π	Π	Π	\mbfPi	mathematical bold capital pi
U+1D6B8	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	\mbfRho	mathematical bold capital rho
U+1D6B9	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mbfvarTheta	mathematical bold capital theta symbol
U+1D6BA	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	\mbfSigma	mathematical bold capital sigma
U+1D6BB	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	\mbfTau	mathematical bold capital tau
U+1D6BC	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	\mbfUpsilon	mathematical bold capital upsilon
U+1D6BD	Φ	Φ	Φ	Φ	Φ	Φ	Φ	Φ	\mbfPhi	mathematical bold capital phi
U+1D6BE	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	\mbfChi	mathematical bold capital chi
U+1D6BF	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	\mbfPsi	mathematical bold capital psi
U+1D6C0	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	\mbfOmega	mathematical bold capital omega

### 13.2.4 Bold Greek, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6C2	α	α	α	α	α	α	α	α	\mbfalpha	mathematical bold small alpha
U+1D6C3	β	β	β	β	β	β	β	β	\mbfbeta	mathematical bold small beta
U+1D6C4	γ	γ	γ	γ	γ	γ	γ	γ	\mbfgamma	mathematical bold small gamma
U+1D6C5	δ	δ	δ	δ	δ	δ	δ	δ	\mbfdelta	mathematical bold small delta

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6C6	ε	ε	ε	ε	ε	ε	ε	ε	\mbf{varepsilon}	mathematical bold small varepsilon
U+1D6C7	ζ	ζ	ζ	ζ	ζ	ζ	ζ	ζ	\mbf{zeta}	mathematical bold small zeta
U+1D6C8	η	η	η	η	η	η	η	η	\mbf{eta}	mathematical bold small eta
U+1D6C9	θ	θ	θ	θ	θ	θ	θ	θ	\mbf{theta}	mathematical bold small theta
U+1D6CA	ι	ι	ι	ι	ι	ι	ι	ι	\mbf{iota}	mathematical bold small iota
U+1D6CB	κ	κ	κ	κ	κ	κ	κ	κ	\mbf{kappa}	mathematical bold small kappa
U+1D6CC	λ	λ	λ	λ	λ	λ	λ	λ	\mbf{lambda}	mathematical bold small lambda
U+1D6CD	μ	μ	μ	μ	μ	μ	μ	μ	\mbf{mu}	mathematical bold small mu
U+1D6CE	ν	ν	ν	ν	ν	ν	ν	ν	\mbf{nu}	mathematical bold small nu
U+1D6CF	ξ	ξ	ξ	ξ	ξ	ξ	ξ	ξ	\mbf{xi}	mathematical bold small xi
U+1D6D0	ο	ο	ο	ο	ο	ο	ο	ο	\mbf{omicron}	mathematical bold small omicron
U+1D6D1	π	π	π	π	π	π	π	π	\mbf{pi}	mathematical bold small pi
U+1D6D2	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ	\mbf{rho}	mathematical bold small rho
U+1D6D3	ς	ς	ς	ς	ς	ς	ς	ς	\mbf{varsigma}	mathematical bold small final sigma
U+1D6D4	σ	σ	σ	σ	σ	σ	σ	σ	\mbf{sigma}	mathematical bold small sigma
U+1D6D5	τ	τ	τ	τ	τ	τ	τ	τ	\mbf{tau}	mathematical bold small tau
U+1D6D6	υ	υ	υ	υ	υ	υ	υ	υ	\mbf{upsilon}	mathematical bold small upsilon
U+1D6D7	φ	φ	φ	φ	φ	φ	φ	φ	\mbf{varphi}	mathematical bold small phi
U+1D6D8	χ	χ	χ	χ	χ	χ	χ	χ	\mbf{chi}	mathematical bold small chi
U+1D6D9	ψ	ψ	ψ	ψ	ψ	ψ	ψ	ψ	\mbf{psi}	mathematical bold small psi
U+1D6DA	ω	ω	ω	ω	ω	ω	ω	ω	\mbf{omega}	mathematical bold small omega
U+1D6DB	∂	∂	∂	∂	∂	∂	∂	∂	\mbf{partial}	mathematical bold partial differential
U+1D6DC	ε	ε	ε	ε	ε	ε	ε	ε	\mbf{epsilon}	mathematical bold varepsilon symbol
U+1D6DD	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	\mbf{vartheta}	mathematical bold theta symbol

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D6DE	κ	χ	ξ	ι	ν	κ	κ	κ	\mbfvarkappa	mathematical bold kappa symbol
U+1D6DF	φ	Φ	Φ	Φ	φ	φ	Φ	Φ	\mbfphi	mathematical bold phi symbol
U+1D6EO	ρ	ϙ	ϙ	ϙ	ϙ	ϙ	ϙ	ϙ	\mbfvarrho	mathematical bold rho symbol
U+1D6E1	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	\mbfvarpi	mathematical bold pi symbol

### 13.2.5 Bold italic, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D468	Α	Α	Α	Α	Α	Α	Α	Α	\mbfitA	mathematical bold italic capital a
U+1D469	Β	Β	Β	Β	Β	Β	Β	Β	\mbfitB	mathematical bold italic capital b
U+1D46A	Ϲ	Ϲ	Ϲ	Ϲ	Ϲ	Ϲ	Ϲ	Ϲ	\mbfitC	mathematical bold italic capital c
U+1D46B	Ͳ	Ͳ	Ͳ	Ͳ	Ͳ	Ͳ	Ͳ	Ͳ	\mbfitD	mathematical bold italic capital d
U+1D46C	Ե	Ե	Ե	Ե	Ե	Ե	Ե	Ե	\mbfitE	mathematical bold italic capital e
U+1D46D	Ֆ	Ֆ	Ֆ	Ֆ	Ֆ	Ֆ	Ֆ	Ֆ	\mbfitF	mathematical bold italic capital f
U+1D46E	Գ	Գ	Գ	Գ	Գ	Գ	Գ	Գ	\mbfitG	mathematical bold italic capital g
U+1D46F	Հ	Հ	Հ	Հ	Հ	Հ	Հ	Հ	\mbfitH	mathematical bold italic capital h
U+1D470	Ի	Ի	Ի	Ի	Ի	Ի	Ի	Ի	\mbfitI	mathematical bold italic capital i
U+1D471	Ջ	Ջ	Ջ	Ջ	Ջ	Ջ	Ջ	Ջ	\mbfitJ	mathematical bold italic capital j
U+1D472	Կ	Կ	Կ	Կ	Կ	Կ	Կ	Կ	\mbfitK	mathematical bold italic capital k
U+1D473	Լ	Լ	Լ	Լ	Լ	Լ	Լ	Լ	\mbfitL	mathematical bold italic capital l
U+1D474	Մ	Մ	Մ	Մ	Մ	Մ	Մ	Մ	\mbfitM	mathematical bold italic capital m
U+1D475	Ն	Ն	Ն	Ն	Ն	Ն	Ն	Ն	\mbfitN	mathematical bold italic capital n
U+1D476	Օ	Օ	Օ	Օ	Օ	Օ	Օ	Օ	\mbfitO	mathematical bold italic capital o
U+1D477	Պ	Պ	Պ	Պ	Պ	Պ	Պ	Պ	\mbfitP	mathematical bold italic capital p
U+1D478	Ղ	Ղ	Ղ	Ղ	Ղ	Ղ	Ղ	Ղ	\mbfitQ	mathematical bold italic capital q

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D479	R	R	R	R	R	R	R		\mbfitR	mathematical bold italic capital r
U+1D47A	S	S	S	S	S	S	S		\mbfitS	mathematical bold italic capital s
U+1D47B	T	T	T	T	T	T	T		\mbfitT	mathematical bold italic capital t
U+1D47C	U	U	U	U	U	U	U		\mbfitU	mathematical bold italic capital u
U+1D47D	V	V	V	V	V	V	V		\mbfitV	mathematical bold italic capital v
U+1D47E	W	W	W	W	W	W	W		\mbfitW	mathematical bold italic capital w
U+1D47F	X	X	X	X	X	X	X		\mbfitX	mathematical bold italic capital x
U+1D480	Y	Y	Y	Y	Y	Y	Y		\mbfitY	mathematical bold italic capital y
U+1D481	Z	Z	Z	Z	Z	Z	Z		\mbfitZ	mathematical bold italic capital z

### 13.2.6 Bold italic, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D482	a	a	a	a	a	a	a	a	\mbfita	mathematical bold italic small a
U+1D483	b	b	b	b	b	b	b	b	\mbfitb	mathematical bold italic small b
U+1D484	c	c	c	c	c	c	c	c	\mbfitc	mathematical bold italic small c
U+1D485	d	d	d	d	d	d	d	d	\mbfitd	mathematical bold italic small d
U+1D486	e	e	e	e	e	e	e	e	\mbfite	mathematical bold italic small e
U+1D487	f	f	f	f	f	f	f	f	\mbfitf	mathematical bold italic small f
U+1D488	g	g	g	g	g	g	g	g	\mbfitg	mathematical bold italic small g
U+1D489	h	h	h	h	h	h	h	h	\mbfith	mathematical bold italic small h
U+1D48A	i	i	i	i	i	i	i	i	\mbfiti	mathematical bold italic small i
U+1D48B	j	j	j	j	j	j	j	j	\mbfitj	mathematical bold italic small j
U+1D48C	k	k	k	k	k	k	k	k	\mbfitk	mathematical bold italic small k
U+1D48D	l	l	l	l	l	l	l	l	\mbfitl	mathematical bold italic small l

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D48E	<b>m</b>		\mbfitm	mathematical bold italic small m						
U+1D48F	<b>n</b>	n	n	n	n	n	n		\mbfitn	mathematical bold italic small n
U+1D490	<b>o</b>	o	o	o	o	o	o		\mbfito	mathematical bold italic small o
U+1D491	<b>p</b>	p	p	p	p	p	p		\mbfitp	mathematical bold italic small p
U+1D492	<b>q</b>	q	q	q	q	q	q		\mbfitq	mathematical bold italic small q
U+1D493	<b>r</b>	r	r	r	r	r	r		\mbfitr	mathematical bold italic small r
U+1D494	<b>s</b>	s	s	s	s	s	s		\mbfits	mathematical bold italic small s
U+1D495	<b>t</b>	t	t	t	t	t	t		\mbfitt	mathematical bold italic small t
U+1D496	<b>u</b>	u	u	u	u	u	u		\mbfitu	mathematical bold italic small u
U+1D497	<b>v</b>	v	v	v	v	v	v		\mbfitv	mathematical bold italic small v
U+1D498	<b>w</b>	w	w	w	w	w	w		\mbfitw	mathematical bold italic small w
U+1D499	<b>x</b>	x	x	x	x	x	x		\mbfitx	mathematical bold italic small x
U+1D49A	<b>y</b>	y	y	y	y	y	y		\mbfity	mathematical bold italic small y
U+1D49B	<b>z</b>	z	z	z	z	z	z		\mbfitz	mathematical bold italic small z

### 13.2.7 Bold italic Greek, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D71C	<b>A</b>	A	A	A	A	A	A		\mbfitAlpha	mathematical bold italic capital alpha
U+1D71D	<b>B</b>	B	B	B	B	B	B		\mbfitBeta	mathematical bold italic capital beta
U+1D71E	<b>Γ</b>	Γ	Γ	Γ	Γ	Γ	Γ		\mbfitGamma	mathematical bold italic capital gamma
U+1D71F	<b>Δ</b>	Δ	Δ	Δ	Δ	Δ	Δ		\mbfitDelta	mathematical bold italic capital delta
U+1D720	<b>Ε</b>	Ε	Ε	Ε	Ε	Ε	Ε		\mbfitEpsilon	mathematical bold italic capital epsilon
U+1D721	<b>Ζ</b>	Ζ	Ζ	Ζ	Ζ	Ζ	Ζ		\mbfitZeta	mathematical bold italic capital zeta
U+1D722	<b>Η</b>	Η	Η	Η	Η	Η	Η		\mbfitEta	mathematical bold italic capital eta

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D723	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mbfitTheta	mathematical bold italic capital theta
U+1D724	I	I	I	I	I	I	I	I	\mbfitIota	mathematical bold italic capital iota
U+1D725	K	K	K	K	K	K	K	K	\mbfitKappa	mathematical bold italic capital kappa
U+1D726	Λ	Λ	Λ	Λ	Λ	Λ	Λ	Λ	\mbfitLambda	mathematical bold italic capital lambda
U+1D727	Μ	Μ	Μ	Μ	Μ	Μ	Μ	Μ	\mbfitMu	mathematical bold italic capital mu
U+1D728	Ν	Ν	Ν	Ν	Ν	Ν	Ν	Ν	\mbfitNu	mathematical bold italic capital nu
U+1D729	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	\mbfitXi	mathematical bold italic capital xi
U+1D72A	Ο	Ο	Ο	Ο	Ο	Ο	Ο	Ο	\mbfitOmicron	mathematical bold italic capital omicron
U+1D72B	Π	Π	Π	Π	Π	Π	Π	Π	\mbfitPi	mathematical bold italic capital pi
U+1D72C	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	\mbfitRho	mathematical bold italic capital rho
U+1D72D	Θ	Θ	Θ	Θ	Θ	Θ	Θ	Θ	\mbfitvarTheta	mathematical bold italic capital theta symbol
U+1D72E	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	\mbfitSigma	mathematical bold italic capital sigma
U+1D72F	Τ	Τ	Τ	Τ	Τ	Τ	Τ	Τ	\mbfitTau	mathematical bold italic capital tau
U+1D730	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	\mbfitUpsilon	mathematical bold italic capital upsilon
U+1D731	Φ	Φ	Φ	Φ	Φ	Φ	Φ	Φ	\mbfitPhi	mathematical bold italic capital phi
U+1D732	Χ	Χ	Χ	Χ	Χ	Χ	Χ	Χ	\mbfitChi	mathematical bold italic capital chi
U+1D733	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	Ψ	\mbfitPsi	mathematical bold italic capital psi
U+1D734	Ω	Ω	Ω	Ω	Ω	Ω	Ω	Ω	\mbfitOmega	mathematical bold italic capital omega

### 13.2.8 Bold italic Greek, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D736	α	α	α	α	α	α	α	α	\mbfitalpha	mathematical bold italic small alpha
U+1D737	β	β	β	β	β	β	β	β	\mbfitbeta	mathematical bold italic small beta
U+1D738	γ	γ	γ	γ	γ	γ	γ	γ	\mbfitgamma	mathematical bold italic small gamma

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D739	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	$\boldsymbol{\delta}$	<code>\mbfitdelta</code>	mathematical bold italic small delta
U+1D73A	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	$\boldsymbol{\varepsilon}$	<code>\mbfitvarepsilon</code>	mathematical bold italic small varepsilon
U+1D73B	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	$\boldsymbol{\zeta}$	<code>\mbfitzeta</code>	mathematical bold italic small zeta
U+1D73C	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	$\boldsymbol{\eta}$	<code>\mbfiteta</code>	mathematical bold italic small eta
U+1D73D	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	$\boldsymbol{\theta}$	<code>\mbfittheta</code>	mathematical bold italic small theta
U+1D73E	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	$\boldsymbol{\iota}$	<code>\mbfitiota</code>	mathematical bold italic small iota
U+1D73F	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	$\boldsymbol{\kappa}$	<code>\mbfitkappa</code>	mathematical bold italic small kappa
U+1D740	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	$\boldsymbol{\lambda}$	<code>\mbfitlambda</code>	mathematical bold italic small lambda
U+1D741	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	$\boldsymbol{\mu}$	<code>\mbfitmu</code>	mathematical bold italic small mu
U+1D742	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	$\boldsymbol{\nu}$	<code>\mbfitnu</code>	mathematical bold italic small nu
U+1D743	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	$\boldsymbol{\xi}$	<code>\mbfitxi</code>	mathematical bold italic small xi
U+1D744	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	$\boldsymbol{o}$	<code>\mbfitomicron</code>	mathematical bold italic small omicron
U+1D745	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	$\boldsymbol{\pi}$	<code>\mbfitpi</code>	mathematical bold italic small pi
U+1D746	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	$\boldsymbol{\rho}$	<code>\mbfirho</code>	mathematical bold italic small rho
U+1D747	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	$\boldsymbol{\varsigma}$	<code>\mbfitvarsigma</code>	mathematical bold italic small final sigma
U+1D748	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	$\boldsymbol{\sigma}$	<code>\mbfitsigma</code>	mathematical bold italic small sigma
U+1D749	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	$\boldsymbol{\tau}$	<code>\mbfittau</code>	mathematical bold italic small tau
U+1D74A	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	$\boldsymbol{\upsilon}$	<code>\mbfitupsilon</code>	mathematical bold italic small upsilon
U+1D74B	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	$\boldsymbol{\varphi}$	<code>\mbfitvarphi</code>	mathematical bold italic small phi
U+1D74C	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	$\boldsymbol{\chi}$	<code>\mbfitchi</code>	mathematical bold italic small chi
U+1D74D	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	$\boldsymbol{\psi}$	<code>\mbfitpsi</code>	mathematical bold italic small psi
U+1D74E	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	$\boldsymbol{\omega}$	<code>\mbfitomega</code>	mathematical bold italic small omega
U+1D74F	$\boldsymbol{\partial}$	\boldsymbol{\partial}	\boldsymbol{\partial}	\boldsymbol{\partial}	\boldsymbol{\partial}	\boldsymbol{\partial}	\boldsymbol{\partial}	\boldsymbol{\partial}	<code>\mbfitpartial</code>	mathematical bold italic partial differential
U+1D750	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	$\boldsymbol{\epsilon}$	<code>\mbfitepsilon</code>	mathematical bold italic varepsilon symbol

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D751	$\vartheta$	$\vartheta$	$\vartheta$	$\vartheta$	$\vartheta$	$\vartheta$	$\vartheta$	$\vartheta$	$\backslash\text{mbf}{\it vartheta}$	mathematical bold italic theta symbol
U+1D752	$\varkappa$	$\varkappa	\varkappa	\varkappa	\varkappa	\varkappa	\varkappa	\varkappa	\backslash\text{mbf}{\it varkappa}$	mathematical bold italic kappa symbol
U+1D753	$\phi$	$\phi$	$\phi$	$\phi$	$\phi$	$\phi$	$\phi$	$\phi$	$\backslash\text{mbf}{\it phi}$	mathematical bold italic phi symbol
U+1D754	$\varrho$	$\varrho$	$\varrho$	$\varrho$	$\varrho$	$\varrho$	$\varrho$	$\varrho$	$\backslash\text{mbf}{\it varrho}$	mathematical bold italic rho symbol
U+1D755	$\varpi$	$\varpi$	$\varpi$	$\varpi$	$\varpi$	$\varpi$	$\varpi$	$\varpi$	$\backslash\text{mbf}{\it varpi}$	mathematical bold italic pi symbol

### 13.2.9 Bold script, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4D0	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\mathcal{A}$	$\backslash\text{mbf}{\it scrA}$	mathematical bold script capital a
U+1D4D1	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\mathcal{B}$	$\backslash\text{mbf}{\it scrB}$	mathematical bold script capital b
U+1D4D2	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\mathcal{C}$	$\backslash\text{mbf}{\it scrC}$	mathematical bold script capital c
U+1D4D3	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\mathcal{D}$	$\backslash\text{mbf}{\it scrD}$	mathematical bold script capital d
U+1D4D4	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\mathcal{E}$	$\backslash\text{mbf}{\it scrE}$	mathematical bold script capital e
U+1D4D5	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\mathcal{F}$	$\backslash\text{mbf}{\it scrF}$	mathematical bold script capital f
U+1D4D6	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\mathcal{G}$	$\backslash\text{mbf}{\it scrG}$	mathematical bold script capital g
U+1D4D7	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\mathcal{H}$	$\backslash\text{mbf}{\it scrH}$	mathematical bold script capital h
U+1D4D8	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\mathcal{I}$	$\backslash\text{mbf}{\it scrI}$	mathematical bold script capital i
U+1D4D9	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\mathcal{J}$	$\backslash\text{mbf}{\it scrJ}$	mathematical bold script capital j
U+1D4DA	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\mathcal{K}$	$\backslash\text{mbf}{\it scrK}$	mathematical bold script capital k
U+1D4DB	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\mathcal{L}$	$\backslash\text{mbf}{\it scrL}$	mathematical bold script capital l
U+1D4DC	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\mathcal{M}$	$\backslash\text{mbf}{\it scrM}$	mathematical bold script capital m
U+1D4DD	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\mathcal{N}$	$\backslash\text{mbf}{\it scrN}$	mathematical bold script capital n
U+1D4DE	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\mathcal{O}$	$\backslash\text{mbf}{\it scrO}$	mathematical bold script capital o
U+1D4DF	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\mathcal{P}$	$\backslash\text{mbf}{\it scrP}$	mathematical bold script capital p

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4E0	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrQ	mathematical bold script capital q
U+1D4E1	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrR	mathematical bold script capital r
U+1D4E2	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrS	mathematical bold script capital s
U+1D4E3	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrT	mathematical bold script capital t
U+1D4E4	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrU	mathematical bold script capital u
U+1D4E5	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrV	mathematical bold script capital v
U+1D4E6	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrW	mathematical bold script capital w
U+1D4E7	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrX	mathematical bold script capital x
U+1D4E8	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrY	mathematical bold script capital y
U+1D4E9	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrZ	mathematical bold script capital z

### 13.2.10 Bold script, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4EA	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscra	mathematical bold script small a
U+1D4EB	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrb	mathematical bold script small b
U+1D4EC	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrc	mathematical bold script small c
U+1D4ED	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrd	mathematical bold script small d
U+1D4EE	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscre	mathematical bold script small e
U+1D4EF	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrf	mathematical bold script small f
U+1D4FO	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrg	mathematical bold script small g
U+1D4F1	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrh	mathematical bold script small h
U+1D4F2	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscri	mathematical bold script small i
U+1D4F3	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrj	mathematical bold script small j
U+1D4F4	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	ꝑ	\mbfscrk	mathematical bold script small k

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D4F5	ℓ	ℓ	ℓ	ℓ	ℓ	ℓ	ℓ	ℓ	\mbfscr{l}	mathematical bold script small l
U+1D4F6	m	m	m	m	m	m	m	m	\mbfscr{m}	mathematical bold script small m
U+1D4F7	n	n	n	n	n	n	n	n	\mbfscr{n}	mathematical bold script small n
U+1D4F8	o	o	o	o	o	o	o	o	\mbfscr{o}	mathematical bold script small o
U+1D4F9	p	p	p	p	p	p	p	p	\mbfscr{p}	mathematical bold script small p
U+1D4FA	q	q	q	q	q	q	q	q	\mbfscr{q}	mathematical bold script small q
U+1D4FB	r	r	r	r	r	r	r	r	\mbfscr{r}	mathematical bold script small r
U+1D4FC	s	s	s	s	s	s	s	s	\mbfscr{s}	mathematical bold script small s
U+1D4FD	t	t	t	t	t	t	t	t	\mbfscr{t}	mathematical bold script small t
U+1D4FE	u	u	u	u	u	u	u	u	\mbfscr{u}	mathematical bold script small u
U+1D4FF	v	v	v	v	v	v	v	v	\mbfscr{v}	mathematical bold script small v
U+1D500	w	w	w	w	w	w	w	w	\mbfscr{w}	mathematical bold script small w
U+1D501	x	x	x	x	x	x	x	x	\mbfscr{x}	mathematical bold script small x
U+1D502	y	y	y	y	y	y	y	y	\mbfscr{y}	mathematical bold script small y
U+1D503	z	z	z	z	z	z	z	z	\mbfscr{z}	mathematical bold script small z

### 13.2.11 Bold fraktur, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D56C	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	𝒜	\mbffrak{A}	mathematical bold fraktur capital a
U+1D56D	ℬ	ℬ	ℬ	ℬ	ℬ	ℬ	ℬ	ℬ	\mbffrak{B}	mathematical bold fraktur capital b
U+1D56E	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	𝒶	\mbffrak{C}	mathematical bold fraktur capital c
U+1D56F	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	𝒟	\mbffrak{D}	mathematical bold fraktur capital d
U+1D570	ℰ	ℰ	ℰ	ℰ	ℰ	ℰ	ℰ	ℰ	\mbffrak{E}	mathematical bold fraktur capital e
U+1D571	ℱ	ℱ	ℱ	ℱ	ℱ	ℱ	ℱ	ℱ	\mbffrak{F}	mathematical bold fraktur capital f

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D572	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakG	mathematical bold fraktur capital g
U+1D573	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakH	mathematical bold fraktur capital h
U+1D574	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakI	mathematical bold fraktur capital i
U+1D575	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakJ	mathematical bold fraktur capital j
U+1D576	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakK	mathematical bold fraktur capital k
U+1D577	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakL	mathematical bold fraktur capital l
U+1D578	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakM	mathematical bold fraktur capital m
U+1D579	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakN	mathematical bold fraktur capital n
U+1D57A	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakO	mathematical bold fraktur capital o
U+1D57B	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakP	mathematical bold fraktur capital p
U+1D57C	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakQ	mathematical bold fraktur capital q
U+1D57D	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakR	mathematical bold fraktur capital r
U+1D57E	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakS	mathematical bold fraktur capital s
U+1D57F	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakT	mathematical bold fraktur capital t
U+1D580	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakU	mathematical bold fraktur capital u
U+1D581	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakV	mathematical bold fraktur capital v
U+1D582	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakW	mathematical bold fraktur capital w
U+1D583	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakX	mathematical bold fraktur capital x
U+1D584	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakY	mathematical bold fraktur capital y
U+1D585	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffrakZ	mathematical bold fraktur capital z

### 13.2.12 Bold fraktur, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D586	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	ⓘ	\mbffraka	mathematical bold fraktur small a

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D587	ƀ	߂	߃	߄	߅	߆	߇	߈	\mbffrakb	mathematical bold fraktur small b
U+1D588	߉	ߊ	ߋ	ߌ	ߍ	ߎ	ߏ	ߐ	\mbffrakc	mathematical bold fraktur small c
U+1D589	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakd	mathematical bold fraktur small d
U+1D58A	ߙ	ߚ	ߛ	ߜ	ߝ	ߞ	ߟ	ߟ	\mbffrake	mathematical bold fraktur small e
U+1D58B	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakf	mathematical bold fraktur small f
U+1D58C	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakg	mathematical bold fraktur small g
U+1D58D	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakh	mathematical bold fraktur small h
U+1D58E	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffraki	mathematical bold fraktur small i
U+1D58F	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakj	mathematical bold fraktur small j
U+1D590	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakk	mathematical bold fraktur small k
U+1D591	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakl	mathematical bold fraktur small l
U+1D592	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakm	mathematical bold fraktur small m
U+1D593	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakn	mathematical bold fraktur small n
U+1D594	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrako	mathematical bold fraktur small o
U+1D595	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakp	mathematical bold fraktur small p
U+1D596	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakq	mathematical bold fraktur small q
U+1D597	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakr	mathematical bold fraktur small r
U+1D598	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffraks	mathematical bold fraktur small s
U+1D599	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakt	mathematical bold fraktur small t
U+1D59A	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffraku	mathematical bold fraktur small u
U+1D59B	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakv	mathematical bold fraktur small v
U+1D59C	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakw	mathematical bold fraktur small w
U+1D59D	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffrakx	mathematical bold fraktur small x
U+1D59E	ߑ	ߒ	ߓ	ߔ	ߕ	ߖ	ߗ	ߘ	\mbffraky	mathematical bold fraktur small y

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D59F	ڈ	ڈ	ڈ	ڈ	ڈ	ڈ	ڈ	ڈ	\mbffrakz	mathematical bold fraktur small z

### 13.2.13 Bold sans serif, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5D4	ା	ା	ା	ା	ା	ା	ା	ା	\mbfsansA	mathematical sans-serif bold capital a
U+1D5D5	ବ	ବ	ବ	ବ	ବ	ବ	ବ	ବ	\mbfsansB	mathematical sans-serif bold capital b
U+1D5D6	ଚ	ଚ	ଚ	ଚ	ଚ	ଚ	ଚ	ଚ	\mbfsansC	mathematical sans-serif bold capital c
U+1D5D7	ଦ	ଦ	ଦ	ଦ	ଦ	ଦ	ଦ	ଦ	\mbfsansD	mathematical sans-serif bold capital d
U+1D5D8	ଏ	ଏ	ଏ	ଏ	ଏ	ଏ	ଏ	ଏ	\mbfsansE	mathematical sans-serif bold capital e
U+1D5D9	ଫ	ଫ	ଫ	ଫ	ଫ	ଫ	ଫ	ଫ	\mbfsansF	mathematical sans-serif bold capital f
U+1D5DA	ଗ	ଗ	ଗ	ଗ	ଗ	ଗ	ଗ	ଗ	\mbfsansG	mathematical sans-serif bold capital g
U+1D5DB	ହ	ହ	ହ	ହ	ହ	ହ	ହ	ହ	\mbfsansH	mathematical sans-serif bold capital h
U+1D5DC	ି	ି	ି	ି	ି	ି	ି	ି	\mbfsansI	mathematical sans-serif bold capital i
U+1D5DD	ଜ	ଜ	ଜ	ଜ	ଜ	ଜ	ଜ	ଜ	\mbfsansJ	mathematical sans-serif bold capital j
U+1D5DE	କ	କ	କ	କ	କ	କ	କ	କ	\mbfsansK	mathematical sans-serif bold capital k
U+1D5DF	ଲ	ଲ	ଲ	ଲ	ଲ	ଲ	ଲ	ଲ	\mbfsansL	mathematical sans-serif bold capital l
U+1D5E0	ମ	ମ	ମ	ମ	ମ	ମ	ମ	ମ	\mbfsansM	mathematical sans-serif bold capital m
U+1D5E1	ନ	ନ	ନ	ନ	ନ	ନ	ନ	ନ	\mbfsansN	mathematical sans-serif bold capital n
U+1D5E2	ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	ଓ	\mbfsansO	mathematical sans-serif bold capital o
U+1D5E3	ପ	ପ	ପ	ପ	ପ	ପ	ପ	ପ	\mbfsansP	mathematical sans-serif bold capital p
U+1D5E4	କୁ	କୁ	କୁ	କୁ	କୁ	କୁ	କୁ	କୁ	\mbfsansQ	mathematical sans-serif bold capital q
U+1D5E5	ରୁ	ରୁ	ରୁ	ରୁ	ରୁ	ରୁ	ରୁ	ରୁ	\mbfsansR	mathematical sans-serif bold capital r
U+1D5E6	ସୁ	ସୁ	ସୁ	ସୁ	ସୁ	ସୁ	ସୁ	ସୁ	\mbfsansS	mathematical sans-serif bold capital s
U+1D5E7	ତୁ	ତୁ	ତୁ	ତୁ	ତୁ	ତୁ	ତୁ	ତୁ	\mbfsansT	mathematical sans-serif bold capital t

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5E8	U	U	U	U	U	U	U		\mbfsansU	mathematical sans-serif bold capital u
U+1D5E9	V	V	V	V	V	V	V		\mbfsansV	mathematical sans-serif bold capital v
U+1D5EA	W	W	W	W	W	W	W		\mbfsansW	mathematical sans-serif bold capital w
U+1D5EB	X	X	X	X	X	X	X		\mbfsansX	mathematical sans-serif bold capital x
U+1D5EC	Y	Y	Y	Y	Y	Y	Y		\mbfsansY	mathematical sans-serif bold capital y
U+1D5ED	Z	Z	Z	Z	Z	Z	Z		\mbfsansZ	mathematical sans-serif bold capital z

### 13.2.14 Bold sans serif, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5EE	a	a	a	a	a	a	a		\mbfsansa	mathematical sans-serif bold small a
U+1D5EF	b	b	b	b	b	b	b		\mbfsansb	mathematical sans-serif bold small b
U+1D5F0	c	c	c	c	c	c	c		\mbfsansc	mathematical sans-serif bold small c
U+1D5F1	d	d	d	d	d	d	d		\mbfsansd	mathematical sans-serif bold small d
U+1D5F2	e	e	e	e	e	e	e		\mbfsanse	mathematical sans-serif bold small e
U+1D5F3	f	f	f	f	f	f	f		\mbfsansf	mathematical sans-serif bold small f
U+1D5F4	g	g	g	g	g	g	g		\mbfsansg	mathematical sans-serif bold small g
U+1D5F5	h	h	h	h	h	h	h		\mbfsansh	mathematical sans-serif bold small h
U+1D5F6	i	i	i	i	i	i	i		\mbfsansi	mathematical sans-serif bold small i
U+1D5F7	j	j	j	j	j	j	j		\mbfsansj	mathematical sans-serif bold small j
U+1D5F8	k	k	k	k	k	k	k		\mbfsansk	mathematical sans-serif bold small k
U+1D5F9	l	l	l	l	l	l	l		\mbfsansl	mathematical sans-serif bold small l
U+1D5FA	m	m	m	m	m	m	m		\mbfsansm	mathematical sans-serif bold small m
U+1D5FB	n	n	n	n	n	n	n		\mbfsansn	mathematical sans-serif bold small n
U+1D5FC	o	o	o	o	o	o	o		\mbfsanso	mathematical sans-serif bold small o

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D5FD	<b>p</b>	p	p	p	p	p	p		\mbfsansp	mathematical sans-serif bold small p
U+1D5FE	<b>q</b>	q	q	q	q	q	q		\mbfsansq	mathematical sans-serif bold small q
U+1D5FF	<b>r</b>	r	r	r	r	r	r		\mbfsansr	mathematical sans-serif bold small r
U+1D600	<b>s</b>	s	s	s	s	s	s		\mbfsanss	mathematical sans-serif bold small s
U+1D601	<b>t</b>	t	t	t	t	t	t		\mbfsanst	mathematical sans-serif bold small t
U+1D602	<b>u</b>	u	u	u	u	u	u		\mbfsansu	mathematical sans-serif bold small u
U+1D603	<b>v</b>	v	v	v	v	v	v		\mbfsansv	mathematical sans-serif bold small v
U+1D604	<b>w</b>	w	w	w	w	w	w		\mbfsansw	mathematical sans-serif bold small w
U+1D605	<b>x</b>	x	x	x	x	x	x		\mbfsansx	mathematical sans-serif bold small x
U+1D606	<b>y</b>	y	y	y	y	y	y		\mbfsansy	mathematical sans-serif bold small y
U+1D607	<b>z</b>	z	z	z	z	z	z		\mbfsansz	mathematical sans-serif bold small z

### 13.2.15 Bold italic sans serif, Latin, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D63C	<b>A</b>	A	A	A	A	A	A		\mbfitsansA	mathematical sans-serif bold italic capital a
U+1D63D	<b>B</b>	B	B	B	B	B	B		\mbfitsansB	mathematical sans-serif bold italic capital b
U+1D63E	<b>C</b>	C	C	C	C	C	C		\mbfitsansC	mathematical sans-serif bold italic capital c
U+1D63F	<b>D</b>	D	D	D	D	D	D		\mbfitsansD	mathematical sans-serif bold italic capital d
U+1D640	<b>E</b>	E	E	E	E	E	E		\mbfitsansE	mathematical sans-serif bold italic capital e
U+1D641	<b>F</b>	F	F	F	F	F	F		\mbfitsansF	mathematical sans-serif bold italic capital f
U+1D642	<b>G</b>	G	G	G	G	G	G		\mbfitsansG	mathematical sans-serif bold italic capital g
U+1D643	<b>H</b>	H	H	H	H	H	H		\mbfitsansH	mathematical sans-serif bold italic capital h
U+1D644	<b>I</b>	I	I	I	I	I	I		\mbfitsansI	mathematical sans-serif bold italic capital i
U+1D645	<b>J</b>	J	J	J	J	J	J		\mbfitsansJ	mathematical sans-serif bold italic capital j

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D646	<b>K</b>	K	K	K	K	K	K		\mbfitsansK	mathematical sans-serif bold italic capital k
U+1D647	<b>L</b>	L	L	L	L	L	L		\mbfitsansL	mathematical sans-serif bold italic capital l
U+1D648	<b>M</b>	M	M	M	M	M	M		\mbfitsansM	mathematical sans-serif bold italic capital m
U+1D649	<b>N</b>	N	N	N	N	N	N		\mbfitsansN	mathematical sans-serif bold italic capital n
U+1D64A	<b>O</b>	O	O	O	O	O	O		\mbfitsansO	mathematical sans-serif bold italic capital o
U+1D64B	<b>P</b>	P	P	P	P	P	P		\mbfitsansP	mathematical sans-serif bold italic capital p
U+1D64C	<b>Q</b>	Q	Q	Q	Q	Q	Q		\mbfitsansQ	mathematical sans-serif bold italic capital q
U+1D64D	<b>R</b>	R	R	R	R	R	R		\mbfitsansR	mathematical sans-serif bold italic capital r
U+1D64E	<b>S</b>	S	S	S	S	S	S		\mbfitsansS	mathematical sans-serif bold italic capital s
U+1D64F	<b>T</b>	T	T	T	T	T	T		\mbfitsansT	mathematical sans-serif bold italic capital t
U+1D650	<b>U</b>	U	U	U	U	U	U		\mbfitsansU	mathematical sans-serif bold italic capital u
U+1D651	<b>V</b>	V	V	V	V	V	V		\mbfitsansV	mathematical sans-serif bold italic capital v
U+1D652	<b>W</b>	W	W	W	W	W	W		\mbfitsansW	mathematical sans-serif bold italic capital w
U+1D653	<b>X</b>	X	X	X	X	X	X		\mbfitsansX	mathematical sans-serif bold italic capital x
U+1D654	<b>Y</b>	Y	Y	Y	Y	Y	Y		\mbfitsansY	mathematical sans-serif bold italic capital y
U+1D655	<b>Z</b>	Z	Z	Z	Z	Z	Z		\mbfitsansZ	mathematical sans-serif bold italic capital z

### 13.2.16 Bold italic sans serif, Latin, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D656	<b>a</b>	a	a	a	a	a	a		\mbfitsansa	mathematical sans-serif bold italic small a
U+1D657	<b>b</b>	b	b	b	b	b	b		\mbfitsansb	mathematical sans-serif bold italic small b
U+1D658	<b>c</b>	c	c	c	c	c	c		\mbfitsansc	mathematical sans-serif bold italic small c
U+1D659	<b>d</b>	d	d	d	d	d	d		\mbfitsansd	mathematical sans-serif bold italic small d
U+1D65A	e	e	e	e	e	e	<b>e</b>		\mbfitsanse	mathematical sans-serif bold italic small e

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D65B	f	f	f	f	f	f	f		\mbfitsansf	mathematical sans-serif bold italic small f
U+1D65C	g	g	g	g	g	g	g		\mbfitsansg	mathematical sans-serif bold italic small g
U+1D65D	h	h	h	h	h	h	h		\mbfitsansh	mathematical sans-serif bold italic small h
U+1D65E	i	i	i	i	i	i	i		\mbfitsansi	mathematical sans-serif bold italic small i
U+1D65F	j	j	j	j	j	j	j		\mbfitsansj	mathematical sans-serif bold italic small j
U+1D660	k	k	k	k	k	k	k		\mbfitsansk	mathematical sans-serif bold italic small k
U+1D661	l	l	l	l	l	l	l		\mbfitsansl	mathematical sans-serif bold italic small l
U+1D662	m	m	m	m	m	m	m		\mbfitsansm	mathematical sans-serif bold italic small m
U+1D663	n	n	n	n	n	n	n		\mbfitsansn	mathematical sans-serif bold italic small n
U+1D664	o	o	o	o	o	o	o		\mbfitsanso	mathematical sans-serif bold italic small o
U+1D665	p	p	p	p	p	p	p		\mbfitsansp	mathematical sans-serif bold italic small p
U+1D666	q	q	q	q	q	q	q		\mbfitsansq	mathematical sans-serif bold italic small q
U+1D667	r	r	r	r	r	r	r		\mbfitsansr	mathematical sans-serif bold italic small r
U+1D668	s	s	s	s	s	s	s		\mbfitsanss	mathematical sans-serif bold italic small s
U+1D669	t	t	t	t	t	t	t		\mbfitsanst	mathematical sans-serif bold italic small t
U+1D66A	u	u	u	u	u	u	u		\mbfitsansu	mathematical sans-serif bold italic small u
U+1D66B	v	v	v	v	v	v	v		\mbfitsansv	mathematical sans-serif bold italic small v
U+1D66C	w	w	w	w	w	w	w		\mbfitsansw	mathematical sans-serif bold italic small w
U+1D66D	x	x	x	x	x	x	x		\mbfitsansx	mathematical sans-serif bold italic small x
U+1D66E	y	y	y	y	y	y	y		\mbfitsansy	mathematical sans-serif bold italic small y
U+1D66F	z	z	z	z	z	z	z		\mbfitsansz	mathematical sans-serif bold italic small z

### 13.2.17 Bold sans serif Greek, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D756	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	\mbfsansAlpha	mathematical sans-serif bold capital alpha
U+1D757	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Ⓕ	Ⓖ	Ⓗ	Ⓗ	\mbfsansBeta	mathematical sans-serif bold capital beta
U+1D758	Ⓖ	Ⓗ	Ⓖ	Ⓖ	Ⓗ	Ⓖ	Ⓖ	Ⓖ	\mbfsansGamma	mathematical sans-serif bold capital gamma
U+1D759	Ⓓ	Ⓔ	Ⓓ	Ⓔ	Ⓕ	Ⓓ	Ⓔ	Ⓔ	\mbfsansDelta	mathematical sans-serif bold capital delta
U+1D75A	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	\mbfsansEpsilon	mathematical sans-serif bold capital epsilon
U+1D75B	϶	϶	϶	϶	϶	϶	϶	϶	\mbfsansZeta	mathematical sans-serif bold capital zeta
U+1D75C	Ⓗ	Ⓗ	Ⓗ	Ⓗ	Ⓗ	Ⓗ	Ⓗ	Ⓗ	\mbfsansEta	mathematical sans-serif bold capital eta
U+1D75D	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	\mbfsansTheta	mathematical sans-serif bold capital theta
U+1D75E	Ⓘ	Ⓘ	Ⓘ	Ⓘ	Ⓘ	Ⓘ	Ⓘ	Ⓘ	\mbfsansIota	mathematical sans-serif bold capital iota
U+1D75F	Ⓚ	Ⓚ	Ⓚ	Ⓚ	Ⓚ	Ⓚ	Ⓚ	Ⓚ	\mbfsansKappa	mathematical sans-serif bold capital kappa
U+1D760	Ⓛ	Ⓛ	Ⓛ	Ⓛ	Ⓛ	Ⓛ	Ⓛ	Ⓛ	\mbfsansLambda	mathematical sans-serif bold capital lambda
U+1D761	Ⓜ	Ⓜ	Ⓜ	Ⓜ	Ⓜ	Ⓜ	Ⓜ	Ⓜ	\mbfsansMu	mathematical sans-serif bold capital mu
U+1D762	Ⓝ	Ⓝ	Ⓝ	Ⓝ	Ⓝ	Ⓝ	Ⓝ	Ⓝ	\mbfsansNu	mathematical sans-serif bold capital nu
U+1D763	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	Ⓔ	\mbfsansXi	mathematical sans-serif bold capital xi
U+1D764	Ⓞ	Ⓞ	Ⓞ	Ⓞ	Ⓞ	Ⓞ	Ⓞ	Ⓞ	\mbfsansOmicron	mathematical sans-serif bold capital omicron
U+1D765	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	\mbfsansPi	mathematical sans-serif bold capital pi
U+1D766	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	Ⓟ	\mbfsansRho	mathematical sans-serif bold capital rho
U+1D767	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	\mbfsansvarTheta	mathematical sans-serif bold capital theta symbol
U+1D768	Ϻ	Ϻ	Ϻ	Ϻ	Ϻ	Ϻ	Ϻ	Ϻ	\mbfsansSigma	mathematical sans-serif bold capital sigma
U+1D769	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	Ⓣ	\mbfsansTau	mathematical sans-serif bold capital tau
U+1D76A	ϒ	ϒ	ϒ	ϒ	ϒ	ϒ	ϒ	ϒ	\mbfsansUpsilon	mathematical sans-serif bold capital upsilon
U+1D76B	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	ߠ	\mbfsansPhi	mathematical sans-serif bold capital phi
U+1D76C	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	Ӯ	\mbfsansChi	mathematical sans-serif bold capital chi
U+1D76D	Ѱ	Ѱ	Ѱ	Ѱ	Ѱ	Ѱ	Ѱ	Ѱ	\mbfsansPsi	mathematical sans-serif bold capital psi

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D76E	Ω	Ω	Ω		Ω	Ω	Ω		\mbfsansOmega	mathematical sans-serif bold capital omega

### 13.2.18 Bold sans serif Greek, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D770	α	α	α		α	α	α		\mbfsansalpha	mathematical sans-serif bold small alpha
U+1D771	β	β	β		β	β	β		\mbfsansbeta	mathematical sans-serif bold small beta
U+1D772	γ	γ	γ		γ	γ	γ		\mbfsansgamma	mathematical sans-serif bold small gamma
U+1D773	δ	δ	δ		δ	δ	δ		\mbfsansdelta	mathematical sans-serif bold small delta
U+1D774	ε	ε	ε		ε	ε	ε		\mbfsansvarepsilon	mathematical sans-serif bold small varepsilon
U+1D775	ζ	ζ	ζ		ζ	ζ	ζ		\mbfsanszeta	mathematical sans-serif bold small zeta
U+1D776	η	η	η		η	η	η		\mbfsanseta	mathematical sans-serif bold small eta
U+1D777	θ	θ	θ		θ	θ	θ		\mbfsantheta	mathematical sans-serif bold small theta
U+1D778	ι	ι	ι		ι	ι	ι		\mbfsansiota	mathematical sans-serif bold small iota
U+1D779	κ	κ	κ		κ	κ	κ		\mbfsanskappa	mathematical sans-serif bold small kappa
U+1D77A	λ	λ	λ		λ	λ	λ		\mbfsanslambda	mathematical sans-serif bold small lambda
U+1D77B	μ	μ	μ		μ	μ	μ		\mbfsansmu	mathematical sans-serif bold small mu
U+1D77C	ν	ν	ν		ν	ν	ν		\mbfsansnu	mathematical sans-serif bold small nu
U+1D77D	ξ	ξ	ξ		ξ	ξ	ξ		\mbfsansxi	mathematical sans-serif bold small xi
U+1D77E	ο	ο	ο		ο	ο	ο		\mbfsansomicron	mathematical sans-serif bold small omicron
U+1D77F	π	π	π		π	π	π		\mbfsanspi	mathematical sans-serif bold small pi
U+1D780	ρ	ρ	ρ		ρ	ρ	ρ		\mbfsansrho	mathematical sans-serif bold small rho
U+1D781	ς	ς	ς		ς	ς	ς		\mbfsansvarsigma	mathematical sans-serif bold small final sigma
U+1D782	σ	σ	σ		σ	σ	σ		\mbfsanssigma	mathematical sans-serif bold small sigma
U+1D783	τ	τ	τ		τ	τ	τ		\mbfsanstau	mathematical sans-serif bold small tau

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D784	υ	υ	υ		υ	υ	υ		\mbfsansupsilon	mathematical sans-serif bold small upsilon
U+1D785	φ	φ	φ		φ	φ	φ		\mbfsansvarphi	mathematical sans-serif bold small phi
U+1D786	χ	χ	χ		χ	χ	χ		\mbfsanschi	mathematical sans-serif bold small chi
U+1D787	ψ	ψ	ψ		ψ	ψ	ψ		\mbfsanspsi	mathematical sans-serif bold small psi
U+1D788	ω	ω	ω		ω	ω	ω		\mbfsansomega	mathematical sans-serif bold small omega
U+1D789	∂	∂	∂		∂	∂	∂		\mbfsanspartial	mathematical sans-serif bold partial differential
U+1D78A	ε	ε	ε		ε	ε	ε		\mbfsansepislon	mathematical sans-serif bold varepsilon symbol
U+1D78B	ϑ	ϑ	ϑ		ϑ	ϑ	ϑ		\mbfsansvartheta	mathematical sans-serif bold theta symbol
U+1D78C	κ	κ	κ		κ	κ	κ		\mbfsansvarkappa	mathematical sans-serif bold kappa symbol
U+1D78D	ϕ	ϕ	ϕ		ϕ	ϕ	ϕ		\mbfsansphi	mathematical sans-serif bold phi symbol
U+1D78E	ρ	ρ	ρ		ρ	ρ	ρ		\mbfsansvarrho	mathematical sans-serif bold rho symbol
U+1D78F	ϖ	ϖ	ϖ		ϖ	ϖ	ϖ		\mbfsansvarpi	mathematical sans-serif bold pi symbol

### 13.2.19 Bold italic sans serif Greek, uppercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D790	Α	Α	Α		Α	Α	Α		\mbfitsansAlpha	mathematical sans-serif bold italic capital alpha
U+1D791	Β	Β	Β		Β	Β	Β		\mbfitsansBeta	mathematical sans-serif bold italic capital beta
U+1D792	Γ	Γ	Γ		Γ	Γ	Γ		\mbfitsansGamma	mathematical sans-serif bold italic capital gamma
U+1D793	Δ	Δ	Δ		Δ	Δ	Δ		\mbfitsansDelta	mathematical sans-serif bold italic capital delta
U+1D794	Ε	Ε	Ε		Ε	Ε	Ε		\mbfitsansEpsilon	mathematical sans-serif bold italic capital epsilon
U+1D795	Ζ	Ζ	Ζ		Ζ	Ζ	Ζ		\mbfitsansZeta	mathematical sans-serif bold italic capital zeta
U+1D796	Η	Η	Η		Η	Η	Η		\mbfitsansEta	mathematical sans-serif bold italic capital eta
U+1D797	Θ	Θ	Θ		Θ	Θ	Θ		\mbfitsansTheta	mathematical sans-serif bold italic capital theta

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D798	I	I	I		I	I	I		\mbfitsansIota	mathematical sans-serif bold italic capital iota
U+1D799	K	K	K		K	K	K		\mbfitsansKappa	mathematical sans-serif bold italic capital kappa
U+1D79A	L	L	L		L	L	L		\mbfitsansLambda	mathematical sans-serif bold italic capital lambda
U+1D79B	M	M	M		M	M	M		\mbfitsansMu	mathematical sans-serif bold italic capital mu
U+1D79C	N	N	N		N	N	N		\mbfitsansNu	mathematical sans-serif bold italic capital nu
U+1D79D	Ξ	Ξ	Ξ		Ξ	Ξ	Ξ		\mbfitsansXi	mathematical sans-serif bold italic capital xi
U+1D79E	O	O	O		O	O	O		\mbfitsansOmicron	mathematical sans-serif bold italic capital omicron
U+1D79F	Π	Π	Π		Π	Π	Π		\mbfitsansPi	mathematical sans-serif bold italic capital pi
U+1D7AO	P	P	P		P	P	P		\mbfitsansRho	mathematical sans-serif bold italic capital rho
U+1D7A1	Θ	Θ	Θ		Θ	Θ	Θ		\mbfitsansvarTheta	mathematical sans-serif bold italic capital theta symbol
U+1D7A2	Σ	Σ	Σ		Σ	Σ	Σ		\mbfitsansSigma	mathematical sans-serif bold italic capital sigma
U+1D7A3	Τ	Τ	Τ		Τ	Τ	Τ		\mbfitsansTau	mathematical sans-serif bold italic capital tau
U+1D7A4	Υ	Υ	Υ		Υ	Υ	Υ		\mbfitsansUpsilon	mathematical sans-serif bold italic capital upsilon
U+1D7A5	Φ	Φ	Φ		Φ	Φ	Φ		\mbfitsansPhi	mathematical sans-serif bold italic capital phi
U+1D7A6	Χ	Χ	Χ		Χ	Χ	Χ		\mbfitsansChi	mathematical sans-serif bold italic capital chi
U+1D7A7	Ψ	Ψ	Ψ		Ψ	Ψ	Ψ		\mbfitsansPsi	mathematical sans-serif bold italic capital psi
U+1D7A8	Ω	Ω	Ω		Ω	Ω	Ω		\mbfitsansOmega	mathematical sans-serif bold italic capital omega

### 13.2.20 Bold italic sans serif Greek, lowercase

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D7AA	α	α	α		α	α	α		\mbfitsansalpha	mathematical sans-serif bold italic small alpha
U+1D7AB	β	β	β		β	β	β		\mbfitsansbeta	mathematical sans-serif bold italic small beta

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D7AC	γ	γ	γ	τ	γ	γ			\mbfitsansgamma	mathematical sans-serif bold italic small gamma
U+1D7AD	δ	δ	δ	δ	δ	δ			\mbfitsansdelta	mathematical sans-serif bold italic small delta
U+1D7AE	ε	ε	ε	ε	ε	ε			\mbfitsansvarepsilon	mathematical sans-serif bold italic small varepsilon
U+1D7AF	ζ	ζ	ζ	ζ	ζ	ζ			\mbfitsanszeta	mathematical sans-serif bold italic small zeta
U+1D7B0	η	η	η	η	η	η			\mbfitsanseta	mathematical sans-serif bold italic small eta
U+1D7B1	θ	θ	θ	θ	θ	θ			\mbfitsansthe	mathematical sans-serif bold italic small theta
U+1D7B2	ι	ι	ι	ι	ι	ι			\mbfitsansiota	mathematical sans-serif bold italic small iota
U+1D7B3	κ	κ	κ	κ	κ	κ			\mbfitsanskappa	mathematical sans-serif bold italic small kappa
U+1D7B4	λ	λ	λ	λ	λ	λ			\mbfitsanslambda	mathematical sans-serif bold italic small lambda
U+1D7B5	μ	μ	μ	μ	μ	μ			\mbfitsansmu	mathematical sans-serif bold italic small mu
U+1D7B6	ν	ν	ν	ν	ν	ν			\mbfitsansnu	mathematical sans-serif bold italic small nu
U+1D7B7	ξ	ξ	ξ	ξ	ξ	ξ			\mbfitsansxi	mathematical sans-serif bold italic small xi
U+1D7B8	ο	ο	ο	ο	ο	ο			\mbfitsansomicron	mathematical sans-serif bold italic small omicron
U+1D7B9	π	π	π	π	π	π			\mbfitsanspi	mathematical sans-serif bold italic small pi
U+1D7BA	ρ	ρ	ρ	ρ	ρ	ρ			\mbfitsansrho	mathematical sans-serif bold italic small rho
U+1D7BB	ς	ς	ς	ς	ς	ς			\mbfitsansvarsigma	mathematical sans-serif bold italic small final sigma
U+1D7BC	σ	σ	σ	σ	σ	σ			\mbfitsanssigma	mathematical sans-serif bold italic small sigma
U+1D7BD	τ	τ	τ	τ	τ	τ			\mbfitsanstau	mathematical sans-serif bold italic small tau
U+1D7BE	υ	υ	υ	υ	υ	υ			\mbfitsansupsilon	mathematical sans-serif bold italic small upsilon
U+1D7BF	φ	φ	φ	φ	φ	φ			\mbfitsansvarphi	mathematical sans-serif bold italic small phi
U+1D7C0	χ	χ	χ	χ	χ	χ			\mbfitsanschi	mathematical sans-serif bold italic small chi
U+1D7C1	ψ	ψ	ψ	ψ	ψ	ψ			\mbfitsanspsi	mathematical sans-serif bold italic small psi

USV	M	X	S	C	A	P	D	E	Macro	Description
U+1D7C2	ω	ω	ω	ω	ω	ω	ω	ω	\mbfitsansomega	mathematical sans-serif bold italic small omega
U+1D7C3	δ	δ	δ	δ	δ	δ	δ	δ	\mbfitsanspartial	mathematical sans-serif bold italic partial differential
U+1D7C4	ε	ε	ε	ε	ε	ε	ε	ε	\mbfitsansepsilon	mathematical sans-serif bold italic varepsilon symbol
U+1D7C5	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	ϑ	\mbfitsansvartheta	mathematical sans-serif bold italic theta symbol
U+1D7C6	κ	κ	κ	κ	κ	κ	κ	κ	\mbfitsansvarkappa	mathematical sans-serif bold italic kappa symbol
U+1D7C7	φ	φ	φ	φ	φ	φ	φ	φ	\mbfitsansphi	mathematical sans-serif bold italic phi symbol
U+1D7C8	ρ	ρ	ρ	ρ	ρ	ρ	ρ	ρ	\mbfitsansvarrho	mathematical sans-serif bold italic rho symbol
U+1D7C9	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	ϖ	\mbfitsansvarpi	mathematical sans-serif bold italic pi symbol

### 13.3 Miscellaneous

USV	M	X	S	C	A	P	D	E	Macro	Description
U+000FO	ð	ð	ð	ð	ð	ð	ð	ð	\matheth	eth
U+02102	ϲ	ϲ	ϲ	ϲ	ϲ	ϲ	ϲ	ϲ	\BbbC	/bbb c, open face c
U+0210A	ȝ	ȝ	ȝ	ȝ	ȝ	ȝ	ȝ	ȝ	\mscrg	/scr g, script letter g
U+0210B	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\mscrH	hamiltonian (script capital h)
U+0210C	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\mfrakH	/frak h, upper case h
U+0210D	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\BbbH	/bbb h, open face h
U+0210F	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\hslash^{(a)}	/hslash - variant planck's over 2pi
U+02110	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\mscrI	/scr i, script letter i
U+02111	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\Im^{(p)}	imaginary part
U+02112	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\mscrL	lagrangian (script capital l)
U+02113	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	Ȣ	\ell^{(p)}	cursive small l

USV	M	X	S	C	A	P	D	E	Macro	Description
U+02115	𠁥	𠁦	𠁧	𠁨	𠁩	𠁪	𠁫	𠁬	\BbbN	/bbb n, open face n
U+02118	ߵ	߶	߷	߸	߹	ߺ	߻	߻	\wp^{(p)}	weierstrass p
U+02119	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\BbbP	/bbb p, open face p
U+0211A	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\BbbQ	/bbb q, open face q
U+0211B	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscrR	/scr r, script letter r
U+0211C	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\Re^{(p)}	real part
U+0211D	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\BbbR	/bbb r, open face r
U+02124	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\BbbZ	/bbb z, open face z
U+02128	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mfrakZ	/frak z, upper case z
U+02129	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\turnediota	turned iota
U+0212B	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\Angstrom	angstrom capital a, ring
U+0212C	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscrB	bernoulli function (script capital b)
U+0212D	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mfrakC	black-letter capital c
U+0212F	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscre	/scr e, script letter e
U+02130	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscrE	/scr e, script letter e
U+02131	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscrF	/scr f, script letter f
U+02133	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscrM	physics m-matrix (script capital m)
U+02134	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\mscro	order of (script small o)
U+02135	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\aleph^{(p)}	aleph, hebrew
U+02136	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\beth^{(a)}	beth, hebrew
U+02137	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\gimel^{(a)}	gimel, hebrew
U+02138	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\daleth^{(a)}	daleth, hebrew
U+0213D	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\Bbbgamma	double-struck small gamma
U+0213E	߱	߲	߳	ߴ	ߵ	߶	߷	߷	\BbbGamma	double-struck capital gamma

USV	M	X	S	C	A	P	D	E	Macro	Description
U+0213F	Π	Π	Π	Π	Π	Π	Π	Π	\BbbPi	double-struck capital pi
U+02202	∂	∂	∂	∂	∂	∂	∂	∂	\partial^{(p)}	partial differential
U+02207	▽	▽	▽	▽	▽	▽	▽	▽	\nabla^{(p)}	nabla, del, hamilton operator
U+1D6A4	ı	ı	ı	ı	ı	ı	ı	ı	\imath^{(p)}	mathematical italic small dotless i
U+1D6A5	Ȉ	Ȉ	Ȉ	Ȉ	Ȉ	Ȉ	Ȉ	Ȉ	\jmath^{(p)}	mathematical italic small dotless j
U+1D6C1	▽	▽	▽	▽	▽	▽	▽	▽	\mbfnabla	mathematical bold nabla
U+1D6FB	▽	▽	▽	▽	▽	▽	▽	▽	\mitnabla	mathematical italic nabla
U+1D735	▽	▽	▽	▽	▽	▽	▽	▽	\mbfitnabla	mathematical bold italic nabla
U+1D76F	▽	▽	▽		▽	▽	▽	▽	\mbfsansnabla	mathematical sans-serif bold nabla
U+1D7A9	▽	▽	▽		▽	▽	▽	▽	\mbfitsansnabla	mathematical sans-serif bold italic nabla
U+1D7CA	F			F					\mbfDigamma	mathematical bold capital digamma
U+1D7CB	F			F					\mbfdigamma	mathematical bold small digamma