Symbols defined by unicode-math

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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)

L Latin Modern Math (1585)

X XITS Math (2429)

S STIX Math Two (2430)

P TeX Gyre Pagella Math (1638)

D DejaVu Math TeX Gyre (1640)

F Fira Math (1052)

N NCM Math (2430)

H GFSNeohellenicMath (1655)

E ErewhonMath (1662)

C XCharterMath (1640)

R ConcreteMath (1637)

Symbols defined in Plain T_EX are indicated with ^(p) after their macro name. L^AT_EX follows Plain T_EX, but defines a handful more, indicated with ^(l). Symbols defined in amssymb are indicated with ^(a).

Note that this list of fonts is not intended to be exhaustive but I am happy to add new fonts by request if they are distributed in T_FX Live.¹

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¹Only a single T<u>E</u>X Gyre Math font is shown here by design as they all largely have the same symbol coverage.

| | 13.2.19 Bold italic sans serif Greek, uppercase | 6 |
|------|---|---|
| | 13.2.20 Bold italic sans serif Greek, lowercase | 6 |
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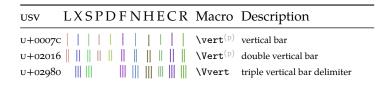
Opening symbols, \mathopen

| USV | L | X | S | Р | D | F | N | Ή | Е | C R | Macro | Description |
|------------------|----------|--------------|---------------------|-----------|-----------|---|----------------------|-------------|----|--------------------------|---|---|
| U+00028 | (| (| (| (| (| (| (| (| (| ((| \lparen | left parenthesis |
| и+0005в | [| [| [| [| [| | [| [| [| [[| \lbrack | left square bracket |
| и+0007в | { | { | { | { | { | { | { | { | { | { { | $\label{lbrace} (p)$ | left curly bracket |
| U+0221A | · √ | | | √ | √ | v | / | ′ √ | | $\sqrt{}$ | $\mathtt{ar{sqrt}}^{(p)}$ | radical |
| U+0221B | | $\sqrt[3]{}$ | 3 | r | | 3 | $\sqrt[3]{3}$ | / | 3/ | 3/3/ | \cuberoot | cube root |
| U+02210 | | 1/ | \ \{\frac{1}{4}} | r | | 4 | $\frac{1}{\sqrt{4}}$ | / | 4/ | \(\frac{4}{\sqrt{4}} \) | \fourthroot | fourth root |
| u+02308 | Γ | Ť | Ť | Γ | Γ | Ĭ | Ţ | Γ | Ť | Ϊİ | $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ | left ceiling |
| U+0230A | Ĺ | L | L | L | L | | Ĺ | Ĺ | L | ΙĹ | $\label{lfloor} \$ | left floor |
| U+02310 | Г | Γ | Г | г | г | | Г | г | Γ | ГГ | \ulcorner | upper left corner |
| U+0231E | L | L | L | L | L | | L | L | L | LL | \llcorner | lower left corner |
| u+023в0 | | ſ | ſ | | | | 5 | | ſ | | $\label{lmoustache} $$\lim che^{(p)}$$ | upper left or lower right curly bracket section |
| U+02772 | | (| (| | | | (| | | | \lbrbrak | light left tortoise shell bracket ornament |
| u+027C5 | | 2 | 2 | | | | 2 | | | | \lbag | left s-shaped bag delimiter |
| U+027CC | |) |) | | | |) | Γ | | | $\label{longdivision}$ | long division |
| u+027E6 | | | | | | | Ī | | | | \lBrack | mathematical left white square bracket |
| u+027E8 | < | < | (| < | < | < | (| < | < | ((| $\label{langle} \$ | mathematical left angle bracket |
| U+027EA | « | « | ((| ((| ((| (| (((| // | ((| // // | \lAngle | mathematical left double angle bracket |
| U+027EC | | (| (| | | | (| (| | | \Lbrbrak | mathematical left white tortoise shell bracket |
| U+027EE | (| (| (| (| (| (| (| (| (| | $\lceil \log p \rceil$ | mathematical left flattened parenthesis |
| u+02983 | | $\{$ | { | | | | { | { | | | \lBrace | left white curly bracket |
| u+02985 | | (| (| | | | (| | | | \1Paren | left white parenthesis |
| u+02987 | | | | | | | | (| | | $\label{liparenthesis}$ | z notation left image bracket |
| u+02989 | | 1 | 1 | | | | (| 4 | | | \llangle | z notation left binding bracket |
| u+0 2 98в | | [| [| | | | [| [| | | \lbrackubar | left square bracket with underbar |
| U+0298D | • | | Ĺ | | | | [| [| | | \lbrackultick | left square bracket with tick in top corner |
| u+0298f | | | | | | | | [| | | \lbracklltick | left square bracket with tick in bottom corner |
| u+0 2 991 | | (- | (· | | | | (· | (· | | | \langledot | left angle bracket with dot |
| U+02993 | | < | 4 | | | | * | * | | | \lparenless | left arc less-than bracket |
| u+02995 | | * | * | | | | * | * | | | \Lparengtr | double left arc greater-than bracket |
| U+0 2 997 | | | (| | | | (| (| | | \lblkbrbrak | left black tortoise shell bracket |
| U+0 2 9D8 | ; | * | *** | | | | w W | > | | | \lvzigzag | left wiggly fence |
| U+029DA | | *** | *** | | | | 55 | } | | | \L vzigzag | left double wiggly fence |
| u+0 2 9FC | | < | < | | | | < | ′′ | | | \lcurvyangle | left pointing curved angle bracket |
| | | | | | | | | | | | | |

2 Closing symbols, \mathclose

| USV | L> | (S | PΙ | ЭF | N | Η | E | CR | Macro | Description |
|------------------|-----------------|----------------|-----|-----------|-----------------|------------------|-----------------|---------------|----------------------------|--|
| U+00021 | !! | ! | ! | !! | ! | ļ | ! | 1.1 | \mathexclam | exclamation mark |
| U+000 2 9 |)) |) |)) |)) |) |) |) |)) | \rparen | right parenthesis |
| U+0005D | ,]] | |]] | |] |] |] |]] | \rbrack | right square bracket |
| U+0007D | }} | } | } | } } | } | } | } | } } | \rbrace ^(p) | right curly bracket |
| u+02309 |]] | -1 | 1 | П |] | 1 | 1 | 1] | $\rceil^{(p)}$ | right ceiling |
| и+0230в | | |]. | П | | | | | \rfloor ^(p) | right floor |
| U+0231D | , | 17 | 7 7 | 1 | ٦ | ٦ | ٦ | 7 7 | \urcorner | upper right corner |
| U+0231F | | L | J . | ı | ٦ | a. | ┙ | | \lrcorner | lower right corner |
| U+023B1 |) | .) | | | J | | J | | \rmoustache ^(p) | upper right or lower left curly bracket section |
| U+02773 | |) | | |) | | | | \rbrbrak | light right tortoise shell bracket ornament |
| u+027c6 | · _ S | , | | | ĺ | | | _ | \rbag | right s-shaped bag delimiter |
| U+027E7 | | |]] | | | |] | | \rBrack | mathematical right white square bracket |
| U+027E9 | , , | · | >) | › | \rangle | \rangle | > | > > | \rangle ^(p) | mathematical right angle bracket |
| u+027ев | » » | > >> |) | 〉》 | >> | >> | >> | » » | \rAngle | mathematical right double angle bracket |
| U+027ED | |) | | |) |) | | | \Rbrbrak | mathematical right white tor- toise shell bracket |
| U+027EF |)) |) |)) |)) |) |) |) | | \rgroup ^(p) | mathematical right flattened parenthesis |
| u+02984 | .] | } | | | } |]} | | | \rBrace | right white curly bracket |
| u+02986 | - 1 | | | |) | | | | \rParen | right white parenthesis |
| u+02988 | | D | | |) | D | | | \rrparenthesis | z notation right image bracket |
| u+0298a | .] | · | | |) | > | | | \rrangle | z notation right binding bracket |
| u+0298c | : <u> </u> - | _ | | | ļ |] | | | \rbrackubar | right square bracket with un- derbar |
| u+0298e | | ۷ | | | |] | | | \rbracklrtick | right square bracket with tick in bottom corner |
| U+0 2 990 |] |] | | |] |] | | | \rbrackurtick | right square bracket with tick in top corner |
| U+02992 | ; | · | | | \rangle | \langle | | | \rangledot | right angle bracket with dot |
| u+0 2 994 | .) | > > | | | > | * | | | \rparengtr | right arc greater-than bracket |
| u+02996 | → | 1 💥 | | | * | * | | | \Rparenless | double right arc less-than bracket |
| u+02998 | |) | | |) |) | | | \rblkbrbrak | right black tortoise shell bracket |
| U+0 2 9D9 |) { | *** | | | W | *** ** ** | | | \rvzigzag | right wiggly fence |
| U+029DB | | ٠ | | | \$ | *** | | | \Rvzigzag | right double wiggly fence |
| U+029FD | · > | · > | | | > | | | | \rcurvyangle | right pointing curved angle bracket |

3 Fence symbols, \mathfence



4 Punctuation symbols, \mathpunct

| | | | | | | | | _ | 11 | Macro | Description |
|-----------|-----|---|---|---|---|---|---|---|----|-----------------------------------|--------------|
| U+0002C , | , , | , | , | , | , | , | , | , | , | \mathcomma | comma |
| U+0003A: | : : | : | : | : | : | : | : | : | : | \mathcolon | colon |
| и+0003в ; | ; ; | ; | ; | ; | ; | ; | ; | ; | ; | $\mbox{\mbox{\tt mathsemicolon}}$ | semicolon p: |

5 'Over' symbols, \mathover

| USV | L | X | S | P | D | F | N | Н | E | C | R | Macro | Description |
|---------|-----------------|-------------------|---------------------|-----------------|-------------------|--------------------------|-------------------|------------------------|-----------------|-----------------|-----------------|---------------------------|--------------------------------------|
| | | | | | | | | | | | | | top square bracket |
| U+023DC | $\widehat{x+y}$ | $\widehat{x+y}$ | $\widehat{x + y}$ | $\widehat{x+y}$ | $\widehat{x+y}$ | $\widehat{x + y}$ | $\widehat{x+y}$ | x + y | $\widehat{x+y}$ | $\widehat{x+y}$ | $\widehat{x+y}$ | \overparen | top parenthesis (mathematical use) |
| U+023DE | $\widehat{x+y}$ | $\widetilde{x+y}$ | $\widetilde{c + y}$ | $\widehat{x+y}$ | $\widetilde{x+y}$ | $\overrightarrow{x + y}$ | $\widetilde{x+y}$ | $\overrightarrow{x+y}$ | $\widehat{x+y}$ | x + y | x + y | $\verb \overbrace ^{(p)}$ | top curly bracket (mathematical use) |

6 'Under' symbols, \mathunder

| U+023DF $x + yx +$ | USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|--|---------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------|--------------------|-------|--------------------|--------------------|-------|----------------------------|---|
| U+023DD $x + yx +$ | U+023B5 | x+y | x + y | x + y | x + y | x + y | x + y | x + y | x + y | x + y | x + y | x + y | \underbracket | bottom square bracket |
| U+023DF $x + yx +$ | | | | | | | | | | | | | | bottom parenthesis (mathemat- |
| matical use) | U+023DF | $\underbrace{x+y}$ | $\underbrace{x+y}$ | $\underbrace{x+y}$ | $\underbrace{x+y}$ | $\underbrace{x+y}$ | <u>x + y</u> | $\underbrace{x+y}$ | x + y | $\underbrace{x+y}$ | $\underbrace{x+y}$ | x + y | $\verb \underbrace ^{(p)}$ | 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 LXSPDFNHECR | Macro | Description |
|--|-----------------------|--------------------------------------|
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | \grave ^(p) | grave accent |
| υ+00301 \acute{x} | $\acute^{(p)}$ | acute accent |
| U+00302 \hat{x} | $\mathbf{hat}^{(p)}$ | circumflex accent |
| υ+00303 \tilde{x} | $ar{tilde}^{(p)}$ | tilde |
| $ u + oo_3o_4 \ \bar{x} \$ | \bar (p) | macron |
| $\text{U} + \text{00305} \ \overline{x} | \overbar | overbar embellishment |
| υ+00306 <u>x</u> | \breve ^(p) | breve |
| $\text{u+00307} \ \dot{x} | $\dot^{(p)}$ | dot above |
| u+00308 \ddot{x} | $\dot^{(p)}$ | dieresis |
| $ U + 00309 \ \mathring{x} $ | \ovhook | combining hook above |
| U+0030A $\mathring{x} \mathring{x} \mathring{x} \mathring{x} \mathring{x} \mathring{x} \mathring{x} \mathring{x} $ | \ocirc | ring |
| υ+0030c \check{x} | $\check^{(p)}$ | caron |
| υ+00310 <i>x x x x</i> | \candra | candrabindu (non-spacing) |
| U+00312 $\dot{x}\dot{x}$ \dot{x} $\dot{x}\dot{x}$ | \oturnedcomma | combining turned comma above |
| $u+00315$ $\overset{?}{x}\overset{?}{x}$ | \ocommatopright | combining comma above right |
| U+0031A \vec{x} \vec{x} \vec{x} | \droang | left angle above (non-spacing) |
| U+020D0 \overline{x} | \leftharpoonaccent | combining left harpoon above |
| U+020D1 \vec{x} | \rightharpoonaccent | combining right harpoon above |
| U+020D2 x x x x x x x x x x x x x | \vertoverlay | combining long vertical line overlay |
| U+020D7 \vec{x} | \vec ^(p) | combining right arrow above |
| $\text{U+O2ODB} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}} {\overrightarrow{x}}$ | \dddot | combining three dots above |
| $U+020DC \cdot | \ddddot | combining four dots above |
| $U+020E7 x \mid x x \mid x$ | \annuity | combining annuity symbol |
| $U+020E9 \stackrel{\overrightarrow{x}}{x} | \widebridgeabove | combining wide bridge above |
| U+020F0 * * * * * * * * * * * * * * * * * * | \asteraccent | combining asterisk above |
| | | |

8 Bottom accents, \mathbotaccent

| USV | LXSPDFNHECR | Macro | Description |
|--------|--|----------------|---------------------------|
| U+020E | 8 <u>x x x x x x x x x x x x x x x x x x x</u> | \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 | L | Х | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|---------------------|-----------------------------------|-----------------------------------|---------------------|----------------------------------|-----------------|--------------------------------------|---------------------|---------------------|---------------------|---------------------|--|----------------------------------|
| U+02140 | 1 0 | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \Bbbsum | double-struck n-ary summation |
| U+0 22 0F | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | 1 | \prod_{0}^{1} | \prod_{0}^{1} | \prod_{0}^{1} | \prod (p) | product operator |
| U+0 22 10 | \coprod_{0}^{1} | \coprod_{0}^{1} | \coprod_{0}^{1} | \coprod_{0}^{1} | $\underbrace{\prod_{0}^{1}}_{0}$ | \prod_{0}^{1} | \coprod_{0}^{1} | 1 | \coprod_{0}^{1} | \coprod_{0}^{1} | | $\coprod^{(p)}$ | coproduct operator |
| U+0 22 11 | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | \sum_{0}^{1} | $\operatorname{f \setminus sum}^{(p)}$ | summation operator |
| U+0222B | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | $\setminus int^{(p)}$ | integral operator |
| U+0 222 C | \int_0^1 | \int_{0}^{1} | \int_{0}^{1} | \int_{0}^{1} | \int_0^1 | \int_0^1 | \int_{0}^{1} | \iint_{0}^{1} | \int_0^1 | \int_0^1 | \int_0^1 | \iint | double integral operator |
| U+0 222 D | \iiint_0^1 | \iint_{0}^{1} | \iiint_{Q}^{1} | \iint_0^1 | \iint_0^1 | \iiint_0^1 | \iiint_0^1 | \iiint_0^1 | \iiint_0^1 | \iiint_0^1 | \iint_0^1 | \iiint | triple integral operator |
| U+0222E | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | $\mathtt{oronomedoint}^{(p)}$ | contour integral operator |
| U+0222F | \iint_0^1 | $ \oint_0^1$ | \iint_0^1 | \iint_0^1 | \iint_0^1 | \iint_0^1 | \iint_0^1 | \iint_0^1 | \iint_0^1 | $ \oint_0^1$ | $ \oint_0^1$ | \oiint | double contour integral operator |
| U+0 223 0 | \iint_0^1 | \iint_0^1 | \iint_{Q}^{1} | \iint_0^1 | \oiint_0^1 | \iint_0^1 | \iint_0^1 | \iint_0^1 | \oiint_0^1 | $ \iint_0^1$ | \iint_0^1 | \oiiint | triple contour integral operator |
| U+02231 | \int_0^1 | \int_0^1 | \int_{0}^{1} | \int_0^1 | \int_0^1 | | \int_{0}^{1} | \int_{0}^{1} | \int_0^1 | \int_0^1 | \int_0^1 | \intclockwise | clockwise integral |
| U+02232 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | | \oint_{0}^{1} | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \varointclockwise | contour integral, clockwise |
| U+02233 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | \oint_0^1 | | \oint_0^1 | \oint_{0}^{1} | \oint_0^1 | \oint_0^1 | \oint_0^1 | \ointctrclockwise | contour integral, anticlockwise |
| U+0 22 C0 | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | \bigwedge_{0}^{1} | $\verb \bigwedge ^{(p)}$ | logical and operator |
| U+0 22 C1 | \bigvee_{0}^{1} | \bigvee_{0}^{1} | \bigvee_{0}^{1} | \bigvee_{0}^{1} | \bigvee_{0}^{1} | | \bigvee_{0}^{1} | 1 | \bigvee_{0}^{1} | \bigvee_{0}^{1} | \bigvee_{0}^{1} | $\mathbf{bigvee}^{(p)}$ | logical or operator |
| U+022C2 | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | $\mathbf{bigcap}^{(p)}$ | intersection operator |
| U+022C3 | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | | \bigcup_{0}^{1} | | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | $\mathbf{bigcup}^{(p)}$ | union operator |
| U+027D5 | | $\mathop{\bowtie}\limits_{0}^{1}$ | $\mathop{\bowtie}\limits_{0}^{1}$ | | | | $\underset{0}{\overset{1}{\bowtie}}$ | 1 3× 0 | | | | \leftouterjoin | left outer join |

| USV | L | Χ | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|--|-------------------------------------|-------------------------------------|-------------------------------------|--|------------------|---|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|--|------------------------------------|
| u+027D6 | | 1 × 0 | $\mathop{\bowtie}\limits_{0}^{1}$ | | | | $\underset{0}{\bowtie}$ | 1 X C 0 | | | | \rightouterjoin | right outer join |
| u+027D7 | | \sum_{0}^{1} | \sum_{0}^{1} | | | | $\underset{0}{\overset{1}{\bowtie}}$ | 1 | | | | \fullouterjoin | full outer join |
| u+027D8 | 1 | 1 | 1 0 | 1 0 | 1 0 | | 1 0 | 1 | 1 0 | 1 <u>1</u> 0 | 1 0 | \bigbot | large up tack |
| U+027D9 | 1 0 | $\frac{1}{0}$ | $\frac{1}{\prod_{0}}$ | 1 0 | 1 0 | | $\frac{1}{0}$ | 1 | $\frac{1}{0}$ | $\frac{1}{1}$ | 1 0 | \bigtop | large down tack |
| u+0 2 9f8 | | 1 | 1 / 0 | | | | 1 / 0 | 1 | | | | \xsol | big solidus |
| u+0 2 9F9 | | 0 | 1 | | | | 1 | 1 | | | | \xbsol | big reverse solidus |
| U+02A00 | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | $ \begin{array}{c} 1\\ 0 \end{array} $ | | \bigcup_{0}^{1} | <u>1</u> | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | $\begin{tabular}{ll} \verb&\begin{tabular}{ll} $ | n-ary circled dot operator |
| U+02A01 | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | \bigoplus_{0}^{1} | $\verb \bigoplus ^{(p)}$ | n-ary circled plus operator |
| U+02A02 | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | \bigotimes_{0}^{1} | $\verb \bigotimes ^{(p)}$ | n-ary circled times operator |
| U+02A03 | \bigcup_{0}^{1} | | | \bigcup_{0}^{1} | \bigcup_{0}^{1} | | \bigcup_{0}^{1} | <u>.</u> | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcup_{0}^{1} | \bigcupdot | n-ary union operator with dot |
| U+0 2 A04 | 1 | 1 | 1 | 1 | 1+ | | 1 | 1 | 1 + 0 | 1+ | 1+ | $\verb \biguplus ^{(p)}$ | n-ary union operator with plus |
| U+02A05 | $\begin{bmatrix} 1 \\ 0 \end{bmatrix}$ | | | \bigcap_{0}^{1} | | | \bigcap_{0}^{1} | 1 | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigcap_{0}^{1} | \bigsqcap | n-ary square intersection operator |
| u+02a06 | | | | | | | | 1 | | | | $\verb \bigsqcup ^{(p)}$ | n-ary square union operator |
| U+02A07 | | \bigwedge_{0}^{1} | | | | | | 1 | | | | \conjquant | two logical and operator |
| U+02A08 | | \bigvee_{0}^{1} | \bigvee_{0}^{1} | | | | \bigvee_{0}^{1} | 1 | | | | \disjquant | two logical or operator |
| U+02A09 | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | | $\underset{0}{\overset{\circ}{\times}}$ | 1 | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | $\underset{0}{\overset{1}{\times}}$ | \bigtimes | n-ary times operator |
| U+02A0A | | | \sum_{0}^{1} | | | | \sum_{0}^{1} | 1 > 0 | | | | \modtwosum | modulo two sum |
| U+02A0B | | \int_0^1 | $\sum_{i=0}^{n}$ | | | | $\sum_{i=1}^{1}$ | $\sum_{i=1}^{n}$ | | | | \sumint | summation with integral |
| U+02A0C | \iiint_0^1 | \iiint_0^1 | | \iiint_0^1 | \iiint_0^1 | ∭ ₀ 1 | \iiint_0^1 | | \iiint_0^1 | \iiint_0^1 | \iiint_0^1 | \iiiint | quadruple integral operator |

| USV | L | Х | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|---------|------------|---|-----------------------|------------|------------|---|--|------------------------------------|-----------------------------------|--------------------|--------------------|------------------|---|
| U+02AOD | | \int_0^1 | \int_0^1 | | | | \int_{0}^{1} | f_0^1 | \int_0^1 | | | \intbar | finite part integral |
| U+02A0E | | f_0 | \int_0^1 | | | | f_0^1 | ∮ 0 | | | | \intBar | integral with double stroke |
| U+02A0F | | \int_0^1 | \int_0^1 | | | | \int_0^1 | f_0^1 | | | | \fint | integral average with slash |
| U+02A10 | | \oint_0^1 | \oint_0^1 | | | | \oint_0^1 | ∮ ₀ | | | | \cirfnint | circulation function |
| U+02A11 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | \int_0^1 | | \int_0^1 | \int_{0}^{1} | \int_0^1 | \int_0^1 | \int_0^1 | \awint | anticlockwise integration |
| U+02A12 | | \int_0^1 | \int_0^1 | | | | \int_{0}^{1} | 5 10 | | | | \rppolint | line integration with rectangular path around pole |
| U+02A13 | | \int_0^1 | \int_0^1 | | | | | ∮ ¹ ₀ | | | | \scpolint | line integration with semicircular path around pole |
| U+02A14 | | \int_0^1 | \int_0^1 | | | | | 5 ₀ | | | | \npolint | line integration not including the pole |
| U+02A15 | | \int_0^1 | \int_0^1 | | | | \oint_0^1 | ∮ ₀ | | | | \pointint | integral around a point operator |
| u+02a16 | | \int_0^1 | \oint_0^1 | | | | \int_0^1 | ∮ ¹ ₀ | | | | \sqint | quaternion integral operator |
| U+02A17 | | $ \oint_0^1 $ | $ \oint_0^1 $ | | | | \oint_0^1 | ∱ 0 | | | | \intlarhk | integral with leftwards arrow with hook |
| U+02A18 | | \int_0^1 | \oint_0^1 | | | | $ \not f_0^1$ | ≸ ¹ ₀ | | | | \intx | integral with times sign |
| U+02A19 | | \int_0^1 | \int_0^1 | | | | \int_{0}^{1} | ∫ 10 | | | | \intcap | integral with intersection |
| U+02A1A | | ${\displaystyle\iint_{0}^{1}}$ | \oint_0^1 | | | | \oint_0^1 | ∮ ¹ ₀ | | | | \intcup | integral with union |
| U+02A1B | | \int_0^1 | $\overline{\int}_0^1$ | | | | \int_{0}^{1} | \int_{0}^{-1} | | | | \upint | integral with overbar |
| U+02A1C | | $\underline{\int}_{0}^{1}$ | \int_{0}^{1} | | | | \int_{-0}^{1} | \int_{-0}^{1} | | | | \lowint | integral with underbar |
| U+02A1D | | \bigcup_{0}^{1} | | | | | \bigvee_{0}^{-0} | 1 M 0 | $\mathop{\bowtie}\limits_{0}^{1}$ | 1 M 0 | 1 M 0 | \Join | join |
| U+02A1E | | $ \stackrel{\circ}{\underset{0}{\triangleleft}} $ | | | | | $\overset{\circ}{\underset{0}{\triangleleft}}$ | 1 | | | | \bigtriangleleft | large left triangle operator |
| U+02A1F | | 1 9 0 | 1 9 0 | | | | 1 9 | - | | | | \zcmp | z notation schema composition |
| U+02A20 | | 1 >>> 0 | 1 >>> 0 | | | | 1 >>> 0 | 1 >>> 0 | | | | \zpipe | z notation schema piping |
| U+02A21 | | 1 | 1 | | | | 1 | 1 | | | | \zproject | z notation schema projection |

| USV | L | Χ | S | P | D | F | N | Н | E | C | R | Macro | Description |
|------------------|---|----|-------------|---|---|---|----------|----------------|---|---|---|----------------|--|
| U+0 2 AFC | | | 1 | | | | | 1 0 | | | | \biginterleave | large triple vertical bar operator |
| U+02AFF | | | | | | | | 1 [] O | | | | \bigtalloblong | n-ary white vertical bar |
| U+1EEFO | | 1 | 1 0 | | | | 1 | | | | | \arabicmaj | arabic mathematical operator meem with hah with tatweel |
| U+1EEF1 | | 10 | 1 1 0 | | | | <u>ا</u> | | | | | \arabichad | arabic mathematical operator hah with dal |

10 Binary relations, \mathbin

| USV | L | X | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|--------------|---|----------|--------------|-----------|------------|--------------|-----------|--|-----------|-----------|--|--|
| U+0002B | + | + | + | + | + | + | + | + | + | + | + | \mathplus | plus sign b: |
| U+000B1 | \pm | \pm | \pm | \pm | \pm | \pm | \pm | \pm | \pm | \pm | \pm | $\protect\operatorname{\mathtt{pm}}^{(p)}$ | plus-or-minus sign |
| и+000в7 | | | | | | | | | | | | $\colon cdotp^{(p)}$ | /centerdot b: middle dot |
| u+000D7 | × | × | × | × | × | × | × | × | × | × | X | $\mathtt{ar{times}}^{(\mathtt{p})}$ | multiply sign |
| u+000F7 | ÷ | ÷ | ÷ | ÷ | • | ÷ | ÷ | ÷ | * | ÷ | ÷ | $\text{\div}^{(p)}$ | divide sign |
| U+02020 | † | † | † | † | † | † | † | † | † | † | † | $\lceil dagger^{(p)} \rceil$ | dagger relation |
| U+02021 | ‡ | # | ‡ | ‡ | ‡ | ‡ | ‡ | ‡ | ‡ | ‡ | ‡ | $\delta dagger^{(p)}$ | double dagger relation |
| U+02022 | • | • | • | • | • | • | • | • | • | • | • | \smblkcircle | /bullet b: round bullet, filled |
| U+0 2 040 | | | | | | | • | | | ^ | ^ | \tieconcat | character tie, z notation sequence concatenation |
| u+02044 | / | / | / | / | / | / | / | / | / | / | / | \fracslash | fraction slash |
| U+0214B | | B | 38 | | | | 28 | 8 | B | 8 | 28 | \upand | turned ampersand |
| U+02212 | _ | _ | _ | _ | _ | - | _ | _ | _ | _ | _ | \minus | minus sign |
| U+02213 | \mp | \mp | \mp | \mp | \mp | Ŧ | \mp | 干 | Ŧ | Ŧ | Ŧ | $\mbox{\em mp}^{(\mbox{\scriptsize p})}$ | minus-or-plus sign |
| U+02214 | $\dot{+}$ | ÷ | ÷ | $\dot{+}$ | ÷ | ÷ | $\dot{+}$ | $\dot{+}$ | ÷ | ÷ | $\dot{+}$ | \dotplus ^(a) | plus sign, dot above |
| U+02215 | / | / | / | / | / | / | / | / | / | / | / | \divslash | division slash |
| u+02216 | \ | \ | \ | \ | \ | | \ | \ | \ | \ | \ | $\star{setminus}^{(p)}$ | set minus (cf. reverse solidus) |
| u+02217 | * | * | * | * | * | * | * | * | * | * | * | $\ast^{(p)}$ | centered asterisk |
| u+02218 | 0 | 0 | 0 | 0 | 0 | ٥ | 0 | 0 | 0 | 0 | 0 | \vysmwhtcircle | composite function (small circle) |
| u+0 22 19 | • | • | • | • | • | • | • | • | • | • | • | \vysmblkcircle | bullet operator |
| u+02227 | \wedge | \wedge | \wedge | \land | Λ | ٨ | \wedge | \land | Λ | Λ | Λ | $\mathbf{Wedge}^{(p)}$ | /wedge /land b: logical and |
| u+02228 | \vee | \vee | V | \vee | ٧ | ٧ | \vee | V | V | ٧ | ٧ | \vee ^(p) | /vee /lor b: logical or |
| u+02229 | \cap | \cap | \cap | \cap | \cap | $\;\cap\;$ | \cap | \cap | \cap | \cap | \cap | $\text{ar{cap}}^{(p)}$ | intersection |
| U+0222A | \bigcup | U | U | \bigcup | U | U | \bigcup | U | U | U | U | $\cup^{(p)}$ | union or logical sum |
| u+02238 | • | • | • | · | ÷ | ÷ | • | ÷ | · | ÷ | · | \dotminus | minus sign, dot above |
| U+0223E | \sim | 2 | 2 | ~ | ~ | | \sim | \sim | \sim | \sim | \sim | \invlazys | most positive [inverted lazy s] |
| u+02240 | } | S | ζ | ζ | 7 | 3 | ? | ζ | 7 | 7 | γ | \wr ^(p) | wreath product |
| u+0228c | \leftarrow | Θ | ⊌ | \leftarrow | Θ | e | \leftarrow | \forall | \blacklozenge | ⊌ | \forall | \cupleftarrow | multiset |
| U+0228D | \cup | $oldsymbol{ol}}}}}}}}}}}}}}}}}$ | ullet | \cup | \bigcup | U | \cup | \cup | $oldsymbol{oldsymbol{oldsymbol{eta}}}$ | U | U | \cupdot | union, with dot |
| u+0228e | + | \oplus | + | \forall | + | ŧ | + | \forall | + | \forall | ⊎ | $\uplus^{(p)}$ | plus sign in union |
| U+02293 | | | П | | | \Box | П | П | \Box | П | П | \sqcap ^(p) | square intersection |

| USV | L | Χ | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---|---------------------|---------------------|----------------------|---------------------|---------------------|--|---|
| U+02294 | Ц | Ш | Ц | Ц | Ц | Ц | Ц | Ц | Ц | Ц | Ц | $\sqcup^{(p)}$ | square union |
| U+02295 | \oplus | \oplus | \oplus | \oplus | \oplus | Ф | \oplus | \oplus | \oplus | \oplus | \oplus | $\operatorname{oronoon}^{(p)}$ | plus sign in circle |
| u+02296 | \ominus | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | $\operatorname{ar{o}minus}^{(p)}$ | minus sign in circle |
| U+02297 | \otimes | \otimes | \otimes | \otimes | \otimes | 8 | \otimes | \otimes | \otimes | \otimes | \otimes | $\mathtt{ordonomial}(p)$ | multiply sign in circle |
| U+02298 | \bigcirc | \bigcirc | \oslash | 0 | 0 | 0 | \bigcirc | \oslash | \oslash | 0 | \oslash | \ordownarrow | solidus in circle |
| U+0 22 99 | \odot | \odot | \odot | \odot | 0 | 0 | \odot | • | \odot | 0 | \odot | $\odot^{(p)}$ | middle dot in circle |
| U+0 22 9A | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | $\circledcirc^{(a)}$ | small circle in circle |
| U+0 22 9B | * | * | * | * | * | | * | * | * | * | * | $\circledast^{(a)}$ | asterisk in circle |
| U+0 22 9C | \Rightarrow | | | | ⊜ | | \Rightarrow | \bigcirc | \Rightarrow | | | \circledequal | equal in circle |
| U+0229D | \ominus | Θ | Θ | Θ | Θ | | \ominus | Θ | Θ | Θ | Θ | $\circleddash^{(a)}$ | hyphen in circle |
| U+0229E | \blacksquare | \blacksquare | \blacksquare | \blacksquare | \blacksquare | | \blacksquare | \blacksquare | \blacksquare | \blacksquare | \blacksquare | \boxplus ^(a) | plus sign in box |
| U+0229F | | | | | \Box | | | \Box | \Box | В | | $\operatorname{\mathtt{f boxminus}}^{(a)}$ | minus sign in box |
| U+022A0 | \boxtimes | \boxtimes | \boxtimes | \boxtimes | X | | | \boxtimes | \boxtimes | | \boxtimes | $\verb \boxtimes ^{(a)}$ | multiply sign in box |
| U+022A1 | • | · | · | • | • | | • | • | • | • | • | \boxdot (a) | /dotsquare /boxdot b: small dot in box |
| U+022BA | Т | Τ | Τ | Т | Т | | Т | Τ | Τ | Τ | Τ | \intercal ^(a) | intercal |
| U+022BB | \vee | V | \vee | \vee | V | | $\underline{\vee}$ | <u>V</u> | \vee | V | \vee | \veebar ^(a) | logical or, bar below (large vee); exclusive disjunction |
| U+022BC | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | $\overline{\wedge}$ | \barwedge ^(a) | bar, wedge (large wedge) |
| U+022BD | $\overline{\vee}$ | ∇ | $\overline{\vee}$ | $\overline{\vee}$ | $\overline{\vee}$ | | $\overline{\vee}$ | \overline{V} | \overline{V} | \overline{V} | $\overline{\vee}$ | \barvee | bar, vee (large vee) |
| U+0 22 C4 | \Diamond | \$ | \$ | \Diamond | \$ | | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \smwhtdiamond | white diamond |
| U+022C5 | | | | | | • | | | | • | • | $\cdot^{(p)}$ | small middle dot |
| u+022c6 | * | * | * | * | * | | * | \bigstar | * | * | * | $\operatorname{\mathtt{f star}}^{(p)}$ | small star, filled, low |
| U+022C7 | * | * | * | * | * | | * | * | * | * | * | $\divideontimes^{(a)}$ | division on times |
| U+022C9 | \bowtie | \bowtie | \bowtie | × | × | | \bowtie | \bowtie | \bowtie | × | × | $\$ \ltimes $^{(a)}$ | times sign, left closed |
| U+022CA | \bowtie | × | \bowtie | × | × | | × | × | × | × | × | $ackslash^{(a)}$ | times sign, right closed |
| U+022CB | \searrow | \searrow | \searrow | λ | λ | | λ | \geq | \leftthreetimes | λ | \searrow | $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $ | left semidirect product |
| U+022CC | / | / | / | ~ | X | | / | \angle | \angle | ~ | \angle | $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $ | right semidirect product |
| U+022CE | γ | γ | Υ | Υ | γ | ٧ | Υ | Υ | γ | Υ | Υ | \curlyvee ^(a) | curly logical or |
| U+022CF | 人 | Τ | Τ | 人 | Τ | ٨ | 人 | 人 | 人 | 人 | 人 | \curlywedge ^(a) | curly logical and |
| U+022D2 | \square | ⋒ | ⋒ | \bigcap | ⋒ | | \square | \square | \square | ⋒ | ⋒ | \Cap (a) | /cap /doublecap b: double intersection |
| U+022D3 | U | U | W | U | U | | U | U | U | W | W | \Cup ^(a) | /cup /doublecup b: double union |
| U+02305 | | | | | | | ^ | ~ | $\overline{\Lambda}$ | Λ | ^ | \varbarwedge | /barwedge b: logical and, bar above [projective (bar over small wedge)] |
| u+02306 | ^ | ⊼ | ⊼ | ~ | <u></u> | | ^ | <u></u> | ⊼ | ⊼ | ⊼ | \vardoublebarwedge | /doublebarwedge b: logical and, double bar above [per- spective (double bar over small wedge)] |
| U+0233D | | Φ | Φ | | | | φ | | | | | \obar | circle with vertical bar |
| U+025B3 | \triangle | \triangle | \triangle | \triangle | \triangle | | | | | | | $\verb \bigtriangleup ^{(p)}$ | big up triangle, open |
| U+025B7 | \triangleright | \triangleright | \triangleright | \triangleright | \triangleright | | \triangleright | \triangleright | \triangleright | \triangleright | \triangleright | $\verb \triangleright ^{(p)}$ | (large) right triangle, open; z notation range restriction |
| U+025C1 | \triangleleft | \triangleleft | \triangleleft | \triangleleft | \triangleleft | | \triangleleft | \triangleleft | \triangleleft | ◁ | ◁ | $triangleleft^{(p)}$ | (large) left triangle, open; z notation domain restriction |
| u+025св | \bigcirc | 0 | \circ | 0 | | 0 | \circ | \bigcirc | 0 | 0 | 0 | \mdlgwhtcircle | medium large circle |
| U+025EB | | | | | | Ш | | | | | | \boxbar | vertical bar in box |
| U+027C7 | | V | V | | | | Ÿ | \forall | | | | \veedot | or with dot inside |
| U+027D1 | | A | A | | | | \wedge | ٨ | | | | \wedgedot | and with dot |
| u+027E0 | | \Diamond | \Diamond | \Diamond | \Diamond | | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \lozengeminus | lozenge divided by horizontal rule |
| U+0 27 E1 | | \$ | \$ | \$ | \$ | | | | < | \$ | \$ | \concavediamond | white concave-sided diamond |

| USV | L | X | S | P | D | F | N | Н | E | C | R | Macro | Description |
|------------------|----------|-------------|-------------|---------|----------|---|------------------|--------------|----------|----------|-------------|--------------------------|--|
| 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+0 2 9B5 | | Θ | Θ | | | | Θ | 0 | | | | \circlehbar | circle with horizontal bar |
| u+0 2 9в6 | | Φ | Φ | | | | Φ | \bigcirc | | | | \circledvert | circled vertical bar |
| u+0 2 9B7 | , | (1) | (1) | | | | (11) | | | | | \circledparallel | circled parallel |
| u+029в8 | | \Diamond | \Diamond | | | | \bigcirc | \Diamond | | | | \obslash | circled reverse solidus |
| u+0 2 9в9 | | ⊕ | (1) | | | | | | | | | \operp | circled perpendicular |
| u+0 2 9c0 |) | \otimes | \otimes | | | | \otimes | \otimes | | | | \olessthan | circled less-than |
| u+0 2 9C1 | | \otimes | \otimes | | | | \otimes | \otimes | | | | \ogreaterthan | circled greater-than |
| u+0 2 9c4 | ļ | | | | | | | \square | | | | \boxdiag | squared rising diagonal slash |
| U+0 2 9C5 | ; | | | | | | | | | | | \boxbslash | squared falling diagonal slash |
| u+029c6 | | * | * | | | | * | * | | | | \boxast | squared asterisk |
| u+029c7 | , | 0 | 0 | | | | 0 | 0 | | | | \boxcircle | squared small circle |
| u+029c8 | 3 | | | | | | | | | | | \boxbox | squared square |
| U+029CE |) | Δ | Δ | | | | \triangle | Δ | | | | \triangleserifs | triangle with serifs at bottom |
| U+029D6 | 5 | X | X | | | | X | X | | | | \hourglass | white hourglass |
| U+029D7 | 7 | X | X | | | | X | X | | | | \blackhourglass | black hourglass |
| U+029E2 | | ш | ш | | | | ш | Ш | | | | \shuffle | shuffle product |
| U+029EB | | | | | | | • | • | • | • | • | \mdlgblklozenge | black lozenge |
| U+029F5 | | Ň | Ň | | | | \ | \ | \ | \ | Ì | \reversesolidus | reverse solidus |
| U+029F6 | | į | ż | | | | 7 | Ì | | | | \dsol | solidus with overbar |
| u+029F7 | | + | + | | | | + | 7 | | | | \rsolbar | reverse solidus with horizontal stroke |
| u+0 2 9fa | | # | # | | | | # | # | | | | \doubleplus | double plus |
| U+029FB | | # | # | | | | # | # | | | | \tripleplus | triple plus |
| U+029FE | | + | + | | | | + | 十 | | | | \tplus | tiny |
| U+0 2 9FF | | _ | _ | | | | _ | _ | | | | \tminus | miny |
| U+02A22 | 2 | ÷ | ÷ | | | | ÷ | ÷ | | | | \ringplus | plus sign with small circle above |
| U+02A23 | 3 | Ŷ | Î | | | | ÷ | Ŷ | | | | \plushat | plus sign with circumflex accent above |
| U+02A24 | ļ | Ŧ | Ŧ | | | | $\tilde{+}$ | Ť | | | | \simplus | plus sign with tilde above |
| U+02A25 | 5 | ÷ | + | | | | ÷ | + | | | | \plusdot | plus sign with dot below |
| U+02A26 | 5 | \pm | \pm | | | | $\mathring{\pm}$ | Ť | | | | \plussim | plus sign with tilde below |
| U+02A27 | 7 | +2 | +2 | | | | + | +2 | | | | \plussubtwo | plus sign with subscript two |
| U+02A28 | 3 | * | + | | | | + | + | | | | \plustrif | plus sign with black triangle |
| U+02A29 |) | <u>, , </u> | <u>, , </u> | | | | | , | | | | \commaminus | minus sign with comma above |
| U+02A2A | A | • | - | | | | • | . | | | | \minusdot | minus sign with dot below |
| U+02A2B | 3 | <u></u> | <u> </u> | | | | <u></u> | :: | | | | \minusfdots | minus sign with falling dots |
| U+02A20 | 2 | - | - | | | | <u></u> | : | | | | \minusrdots | minus sign with rising dots |
| U+02A2E |) | \oplus | \oplus | | | | (+ | \oplus | | | | \opluslhrim | plus sign in left half circle |
| U+02A2E | 3 | + | Đ | | | | + | +) | | | | \oplusrhrim | plus sign in right half circle |
| U+02A2F | | × | - | × | × | | X | | × | × | × | = | vector or cross product |
| U+02A30 | | × | × | | | | × | × | | | | \dottimes | multiplication sign with dot above |
| U+02A31 | L | × | × | | | | × | × | | | | \timesbar | multiplication sign with underbar |

| USV | L | X | S | PDF | N | Η | ECF | ? | Macro | Description |
|---------|---|-------------------|-------------------|-----|----------------------------|--------------------------|-----|---|---|--|
| U+02A32 | | × | × | | X | × | | | \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 | | $\hat{\otimes}$ | $\hat{\otimes}$ | | <u></u> | ô | | | \otimeshat | circled multiplication sign with circumflex accent |
| U+02A37 | | (S) | \otimes | | ® | \otimes | | | \Otimes | multiplication sign in double circle |
| u+02a38 | | (÷) | (±) | | \oplus | \oplus | | | \odiv | circled division sign |
| U+02A39 | | \triangle | \triangle | | \triangle | A | | | \triangleplus | plus sign in triangle |
| U+02A3A | | Δ | Δ | | \triangle | Δ | | | \triangleminus | minus sign in triangle |
| U+02A3B | | \triangle | \bigwedge | | \triangle | \triangle | | | \triangletimes | multiplication sign in triangle |
| U+02A3C | | \Box | \Box | | _ | _ | | | \intprod | interior product |
| U+02A3D | | \sqsubseteq | ш | | _ | _ | | | \intprodr | righthand interior product |
| U+02A3E | | 9 | 9 | | 9 | | | | \fcmp | z notation relational composition |
| U+02A3F | П | П | П | ШШ | П | Ц | ППГ | Ι | $\aggreen{amalg} \aggreen{amalg} ama$ | amalgamation or coproduct |
| U+02A40 | | $oldsymbol{\cap}$ | $oldsymbol{\cap}$ | | \cap | \cap | | | \capdot | intersection with dot |
| U+02A41 | | \forall | \forall | | \sqcup | \cup | | | \uminus | union with minus sign |
| U+02A42 | | Ū | Ū | | Ū | Ū | | | \barcup | union with overbar |
| U+02A43 | | ī | $\bar{\cap}$ | | $\bar{\cap}$ | $\overline{\cap}$ | | | \barcap | intersection with overbar |
| U+02A44 | | \bigcap | \bigcap | | \bigcap | \bigvee | | | \capwedge | intersection with logical and |
| U+02A45 | | \bigvee | \bigvee | | \bigvee | \forall | | | \cupvee | union with logical or |
| U+02A46 | | Ü | Ų | | X | $\overset{\smile}{\sim}$ | | | \cupovercap | union above intersection |
| U+02A47 | | U | Ü | | 0 | 0 | | | \capovercup | intersection above union |
| U+02A48 | | Ü | UU | | C | 片 | | | \cupbarcap | union above bar above intersection |
| U+02A49 | | Ü | Ü | | Θ | \Box | | | \capbarcup | intersection above bar above union |
| U+02A4A | | W | W | | w | w | | | \twocups | union beside and joined with union |
| U+02A4B | | m | m | | \sim | m | | | \twocaps | intersection beside and joined with intersection |
| U+02A4C | | U | U | | U | U | | | \closedvarcup | closed union with serifs |
| U+02A4D | | Ω | Ω | | Ω | Д | | | \closedvarcap | closed intersection with serifs |
| U+02A4E | | П | П | | П | П | | | \Sqcap | double square intersection |
| U+02A4F | | Ш | Ш | | Ш | Ш | | | \Sqcup | double square union |
| U+02A50 | | ⊌ | ⊌ | | ❈ | ⊌ | | | \closedvarcupsmashprod | closed union with serifs and smash product |
| U+02A51 | | À | ٨ | | $\dot{\wedge}$ | À | | | \wedgeodot | logical and with dot above |
| U+02A52 | | Ÿ | Ÿ | | $\dot{\lor}$ | Ÿ | | | \veeodot | logical or with dot above |
| U+02A53 | | \wedge | \wedge | | \wedge | \wedge | | | \Wedge | double logical and |
| U+02A54 | | W | W | | \forall | \forall | | | \Vee | double logical or |
| U+02A55 | | M | M | | M | Μ | | | \wedgeonwedge | two intersecting logical and |
| U+02A56 | | W | W | | W | W | | | \veeonvee | two intersecting logical or |
| U+02A57 | | V | V | | V | V | | | \bigslopedvee | sloping large or |
| U+02A58 | | 1 | 1 | | 1 | 1 | | | \bigslopedwedge | sloping large and |
| U+02A5A | | Λ | Λ | | Λ | Λ | | | \wedgemidvert | logical and with middle stem |
| U+02A5B | | V | V | | V | ٧ | | | \veemidvert | logical or with middle stem |
| U+02A5C | | A | A | | $\stackrel{\cdot}{\wedge}$ | A | | | \midbarwedge | ogical and with horizontal dash |

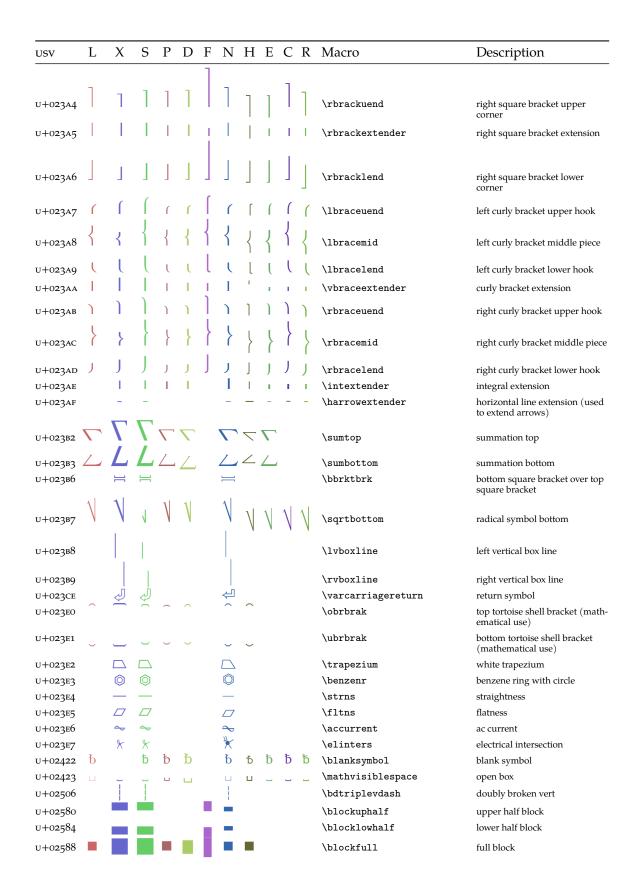
| usv L | XSPDI | FNHECR | Macro | Description |
|---------|---|---|--------------------------|--|
| U+02A5D | \forall \forall | ₩ ₩ | \midbarvee | logical or with horizontal dash |
| U+02A5E | ₹ ₹ | $\overline{\wedge}$ $\overline{\wedge}$ $\overline{\wedge}$ $\overline{\wedge}$ | $\double barwedge^{(a)}$ | logical and with double overbar |
| U+02A5F | \triangle \triangle | \wedge \wedge \wedge \wedge | \wedgebar | logical and with underbar |
| u+02A60 | \triangle | _ | \wedgedoublebar | logical and with double underbar |
| U+02A61 | <u>∨</u> <u>∨</u> | <u>×</u> <u>×</u> | \varveebar | small vee with underbar |
| U+02A62 | $\overline{\nabla}$ $\overline{\nabla}$ | $\overline{\nabla}$ $\overline{\overline{\nabla}}$ | \doublebarvee | logical or with double overbar |
| u+02a63 | $\underline{\vee}$ $\underline{\vee}$ | <u>∨</u> <u>∨</u> | \veedoublebar | logical or with double underbar |
| u+02A64 | \triangleleft | \triangleleft | \dsub | z notation domain antirestriction |
| u+02a65 | $\Rightarrow \Rightarrow$ | ⊳ ⊳ | \rsub | z notation range antirestriction |
| U+02A71 | ∓ ∓ | 〒 〒 | \eqqplus | equals sign above plus sign |
| U+02A72 | ± ± | ± ± | \pluseqq | plus sign above equals sign |
| U+02AF4 | III III | | \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 | L | X | S | P | D | F | N | Н | Е | С | R | 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 | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | ? | $\mbox{\tt mathquestion}$ | question mark |
| U+00040 | @ | <u>@</u> | @ | @ | a | @ | 0 | @ | @ | <u>@</u> | @ | \mathatsign | commercial at |
| U+0005C | \ | \ | \ | \ | \ | \ | \ | \ | \ | \ | \ | $\begin{cases} \textbf{backslash}^{(p)} \end{aligned}$ | reverse solidus |
| U+000A3 | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | £ | \mathsterling | pound sign |
| U+000A5 | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | ¥ | \mathyen | yen sign |
| U+000A7 | § | § | § | § | § | § | 8 | § | \$ | § | § | \mathsection | section symbol |
| U+000AC | \neg | \neg | \neg | \neg | \neg | \neg | \neg | \neg | \neg | \neg | \neg | $\neg^{(p)}$ | /neg /lnot not sign |
| и+ооов6 | \P | \P | \P | \P | \P | \P | \P | \P | ¶ | \P | \P | \mathparagraph | paragraph symbol |
| U+001B5 | | Z | Z | | | | Z | | Z | Z | Z | \Zbar | $\begin{array}{ll} \text{impedance (latin capital letter z} \\ \text{with stroke)} \end{array}$ |
| u+003F6 | | Э | Э | | | Э | Э | Э | Э | Э | Э | \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) |
| U+02032 | / | , | ′ | / | / | , | , | / | 1 | 1 | 1 | $\operatorname{prime}^{(p)}$ | prime or minute, not super- scripted |
| U+02033 | // | " | " | // | " | " | " | // | // | " | " | \dprime | double prime or second, not superscripted |
| U+02034 | /// | "" | /// | /// | /// | 111 | /// | /// | /// | <i>III</i> | <i>III</i> | \trprime | triple prime (not superscripted) |
| U+0 2 035 | \ | \ | \ | \ | ` | ` | \ | ١ | 1 | ١ | ١ | $\verb \backprime ^{(a)}$ | reverse prime, not super- scripted |
| u+02036 | // | " | " | 11 | ** | ** | " | 11 | " | " | " | \backdprime | double reverse prime, not su- perscripted |
| U+0 2 037 | /// | "" | <i>'''</i> | 1111 | **** | *** | "" | *** | 111 | III | 111 | \backtrprime | triple reverse prime, not super- scripted |
| u+02038 | | ^ | ^ | | | | ^ | | | | | \caretinsert | caret (insertion mark) |
| U+0203C | | !! | !! | | | | !! | ij. | | | | \Exclam | double exclamation mark |
| U+02043 | | - | - | | | | | | | | | \hyphenbullet | rectangle, filled (hyphen bullet) |
| U+02047 | | ?? | ?? | | | | ?? | | | | | \Question | double question mark |
| u+02057 | //// | "" | //// | 1111 | //// | ,,,, | //// | //// | //// | <i>IIII</i> | <i>IIII</i> | \qprime | quadruple prime, not super- scripted |
| U+020AC | € | € | € | € | € | € | € | € | € | € | € | \euro | euro sign |
| U+020DD | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \bigcirc | \enclosecircle | combining enclosing circle |
| U+020DE | | | | | | | | | | | | \enclosesquare | combining enclosing square |
| U+020DF | $\langle \rangle$ | \Diamond | \Diamond | \Diamond | \Diamond | | $\langle \rangle$ | | $\langle \rangle$ | \triangle | \triangle | \enclosediamond | combining enclosing diamond |
| U+020E4 | $\stackrel{\checkmark}{\triangle}$ | Ň | Ă | \triangle | Š | | \bigwedge | \bigwedge | Δ | $\check{\triangle}$ | $\check{\triangle}$ | \enclosetriangle | combining enclosing upward pointing triangle |
| U+02107 | 3 | 3 | 3 | 3 | 3 | | 3 | 2 | 3 | 3 | 3 | \Eulerconst | euler constant |
| U+02107 | h | h | h | h | h | h | h | h | h | h | h | \Planckconst | planck constant |
| U+0210E | \mathcal{U} | σ | $\overline{\mathbf{c}}$ | \mho | Ω | Ω | Ω | ∇ | σ | \mathcal{U} | | \mho | conductance |
| U+02127 | | E | Е | | | | Э | Ь | Е | E | Е | \Finv ^(a) | turned capital f |
| | Ш | TU | π | π | Ш | | П | _ | I | _ | _ | \Bbbpi | double-struck small pi |
| U+0213C | Ш | ПL | ПL | ٦٤ | пп | | ai | | ПIL | | | Pooht | double-struck small pr |

| USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|---------------|---|-----------------|--------------------|-------------------|---------------|--|------------------|-------------------|-------------------|-------------------|-------------------------------|--|
| U+02141 | | Э | С | | | | 9 | Э | G | G | G | \Game ^(a) | turned sans-serif capital g |
| U+02142 | | ٦ | ٦ | | | | ٦ | | | | | \sansLturned | turned sans-serif capital l |
| U+02143 | | | ┙ | | | | L | | | | | \sansLmirrored | reversed sans-serif capital l |
| U+02144 | | X | A | | | | A | | | | | \Yup | turned sans-serif capital y |
| U+02145 | \mathbb{D} | D | D | \mathbb{D} | $I\!\!D$ | | \mathbb{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 | Î | Ī | Ï | ı | ıı́ | | Î | | ĺ | | | \mitBbbi | double-struck italic small i |
| U+0 2 149 | Ĵ | j | j | j | j | | Ĵ | | j | | | \mitBbbj | double-struck italic small j |
| U+0214A | | 屯 | Þ | | | | Þ | | | | | \PropertyLine | property line |
| U+021A8 | | 1 | 1 | | | 1 | <u></u> | <u>‡</u> | | | | \updownarrowbar | up down arrow with base (perpendicular) |
| U+021B4 | \supset | \supset | \supset | → | 7 | \supset | \supset | 7 | \neg | | | \linefeed | rightwards arrow with corner downwards |
| U+021B5 | 4 | \leftarrow | \leftarrow | ↵ | ↵ | ل | 4 | Ļ | \downarrow | | | \carriagereturn | downwards arrow with corner leftward = carriage return |
| U+021B8 | | | $\overline{}$ | | | <u>~</u> | \overline{K} | 1 | | | | \barovernorthwestarrow | north west arrow to long bar |
| U+021B9 | | $\stackrel{\longmapsto}{\longleftrightarrow}$ | ₩ | | | K | l ⟨ | i ← i | | | | \barleftarrowrightarrowbar | leftwards arrow to bar over rightwards arrow to bar |
| U+021BA | Q | Q | Q | Q | U | O | Q | \heartsuit | \bigcirc | Q | Q | \acwopencirclearrow | anticlockwise open circle arrow |
| U+021BB | O | \bigcirc | \bigcirc | O | U | O | Q | Q | \bigcirc | \bigcirc | O | \cwopencirclearrow | clockwise open circle arrow |
| U+021DE | | # | ‡ | | | # | # | # | | | | \nHuparrow | upwards arrow with double stroke |
| U+021DF | | # | # | | | # | # | # | | | | \nHdownarrow | downwards arrow with double stroke |
| U+021E0 | | | < | | | < | < | | | | ← | \leftdasharrow | leftwards dashed arrow |
| U+021E1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | \updasharrow | upwards dashed arrow |
| U+021E2 | | > | > | | | > | > | > | > | > | > | \rightdasharrow | rightwards dashed arrow |
| U+021E3 | | . | . | | | ↓ | + | ‡ | . | . | 1 | \downdasharrow | downwards dashed arrow |
| U+021E6 | (| \Leftrightarrow | \Diamond | \leftarrow | \leftarrow | \Diamond | \(\begin{array}{c} \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | \Diamond | \Leftrightarrow | \Leftrightarrow | \Leftrightarrow | \leftwhitearrow | leftwards white arrow |
| U+021E7 | Î | 仓 | 仓 | Î | Î | Û | Û | ⇧ | Û | Û | Û | \upwhitearrow | upwards white arrow |
| U+021E8 | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \rightwhitearrow | rightwards white arrow |
| U+021E9 | Û | Û | Û | $\hat{\mathbb{I}}$ | Û | Û | Ţ | Ţ | Û | Û | Û | \downwhitearrow | downwards white arrow |
| U+021EA | | 企 | Ŷ | | \ / | 企 | 台 | ¢. | | | | \whitearrowupfrombar | upwards white arrow from bar |
| U+02200 | \forall | A | A | A | A | A | A | A | A | A | A | \forall(p) | for all |
| U+0 22 01 | С | C | Ü | Ü | С | С | С | C | C | C | Ú | \complement(a) | complement sign |
| U+02203 | = | ∃ → | 3 | = | 3 | 3 | 3 | ∃ | 3 | 3 | 3 | \exists ^(p) | at least one exists |
| U+02204 | ∄ | ∄ ~ | ∄ | ∄ | ∄ | # | ∄ ø | Ħ | A | ∄ ≪ | A | \nexists(a) | negated exists |
| U+02205 | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | Ø | \varnothing(a) | circle, slash |
| U+02206 | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | \increment | laplacian (delta; nabla^2) |
| U+0220E | | / | - | - | - | 1 | | - | -/ | • | • | \QED | end of proof |
| U+0221A | | V | V | √ | √ | V | | \checkmark | V | \checkmark | | \surd ^(p) | radical |
| U+0221E | ∞ | 000 | 00 | 00 | 00 | ∞ . | ∞ | ∞ | ∞ | | ∞ | \infty ^(p) | infinity |
| U+0221F | L | L | L . | | | L | | L | | L | _ | \rightangle | right (90 degree) angle |
| U+02220 | | | | | | | | 4 | | Ζ, | | \angle ^(p) | angle |
| U+02221 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | | 4 | | \measuredangle ^(a) | angle-measured |
| U+02222 | ∢ | ∢ . | ∢ . | ∢ | ∢. | ∢ . | A | 4 | ٧. | ∢ . | | \sphericalangle(a) | angle-spherical |
| U+02234 | | | | | | | | | | | : | \therefore ^(a) | therefore |
| U+02235 | : | | | : | | • | | | | | : | \because ^(a) | because |
| U+0223F | \sim | ~ + | ~ | ~ + | ~ - | | ∼ | \sim | ~ + | ~ _ | ~ | \sinewave | sine wave |
| U+022A4 | | I | - 1 | I | ı | | I | Т | I | Т | 1 | $f top^{(\mathrm{p})}$ | top |

| USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|--------------------|--------------|------------------|------------------|-------|--------|-----------|-----------------|-----|-------------|--------|--------|----------------------------|--|
| U+022A5 | T | Т | Т | Τ | Τ | | T | Τ | T | Τ | T | \bot ^(p) | bottom |
| U+022B9 | - - | + | + | +}- | + | | + | + | -}- | + | + | \hermitmatrix | hermitian conjugate matrix |
| U+022BE | ightharpoons | Ь | Ь | 7 | 4 | | 7 | Р | Ь | Ь | Ь | \measuredrightangle | right angle-measured [with arc] |
| U+022BF | | | \triangle | Δ | Δ | | Δ | Δ | \triangle | Δ | Δ | \varlrtriangle | right triangle |
| U+022EF | • • • | ••• | ••• | ••• | ••• | ••• | ••• | ••• | • • • | ••• | ••• | \unicodecdots | three dots, centered |
| U+0 2 300 | Ø | Ø | Ø | Ø | Ø | | Ø | Ø | Ø | Ø | Ø | \diameter | diameter sign |
| U+02302 | | | | | | Δ | | | | | | \house | house |
| U+02310 | | | | | | г | | _ | Г | | | \invnot | reverse not |
| U+02311 | | | | | | | | | | | | \sqlozenge | square lozenge |
| U+02312 | | \cap | \cap | | | | | | | | | \profline | profile of a line |
| U+02313 | | Д Д | T D | | | | | | | | | \profsurf | profile of a surface |
| U+02317 | | # | # | | | | # | | | | | \viewdata | viewdata square |
| U+02319 | _ | _ | c | _ | | | _ | _ | _ | | _ | \turnednot | turned not sign |
| U+02320 | <i>[</i> | ſ | - | ſ | ſ | | ſ | | ſ | ſ | ſ | \inttop | top half integral |
| U+02321 | J | J | | J | J | | J | | J | J | J | \intbottom | bottom half integral |
| U+0232C | | | | | | | | | | | | \varhexagonlrbonds | six carbon ring, corner down, double bonds lower right etc |
| U+02332 | | \triangleright | \triangleright | | | | \triangleleft | | | | | \conictaper | conical taper |
| U+02336 | | I | Ι | | | | Ι | | | | | \topbot | top and bottom |
| U+02340 | | + | + | | | | + | | | | | \APLnotbackslash | apl functional symbol backslash bar |
| U+02353 | | \land | \land | | | | \land | | | | | \APLboxupcaret | boxed up caret |
| U+02370 | | ? | ? | | | | ? | | | | | \APLboxquestion | boxed question mark |
| U+0237C | | ≰ | <u>*</u> | | | | 上 | | | | | \rangledownzigzagarrow | right angle with downwards zigzag arrow |
| U+02394 | | \bigcirc | \bigcirc | | | , | 0 | | | | | \hexagon | horizontal benzene ring [hexagon flat open] |
| u+0 2 39в | | (| (| (| (| | (| | | | | \lparenuend | left parenthesis upper hook |
| U+0239C | T | ı | ı | 1 | 1 | Ŧ | I | | I | I | T | \lparenextender | left parenthesis extension |
| U+0239D | | Ţ | Ţ | (| Į | \ | | | | | | \lparenlend | left parenthesis lower hook |
| U+0239E | |) |) |) |) | | | | | | | \rparenuend | right parenthesis upper hook |
| U+0239F | 1 | | | 1 | 1 | 1 | 1 | - | 1 | -1 | 1 | \rparenextender | right parenthesis extension |
| U+023A0 | J | J | J | J | J | | J | J | J | J | J | \rparenlend | right parenthesis lower hook |
| U+023A1 U+023A2 | [| Γ Ι | [| [| [[| | Γ | [| | [] | [[| \lbrackuend | left square bracket upper corner left square bracket extension |
| U+023A3 | L | L | L | L | L | | Ĺ | Ĺ | | L | | \lbracklend | left square bracket lower corner |



| USV | L | X | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|-------------------|------------------|------------------|-------------|------------|------------|--|------------|------------------|------------------|------------------|---|--|
| U+0258C | | | | | | | | | | | | \blocklefthalf | left half block |
| U+0 25 90 | | | | | | 1 | | | | | | \blockrighthalf | right half block |
| U+02591 | | | | | 33 | | | *** | | | | \blockqtrshaded | 25% shaded block |
| U+02592 | | | | | *** | | | *** | | | | \blockhalfshaded | 50% shaded block |
| U+02593 | | | | | 88 | | | *** | | | | \blockthreeqtrshaded | 75% shaded block |
| U+025A0 | | | | | î | | | | | | | \mdlgblksquare | square, filled |
| U+025A1 | $\overline{\Box}$ | П | П | | П | | | | | | | \mdlgwhtsquare | square, open |
| U+025A2 | | | Ō | | | 0 | 0 | | | | | \squoval | white square with rounded corners |
| U+025A3 | | | | | | ▣ | | | | | | \blackinwhitesquare | white square containing black small square |
| U+025A4 | | | | | | | | | | | | \squarehfill | square, horizontal rule filled |
| U+025A5 | | | | | | | | | | | | \squarevfill | square, vertical rule filled |
| U+025A6 | | | | | | | | | | | | \squarehvfill | square with orthogonal crosshatch fill |
| U+025A7 | | | | | | | | | | | | \squarenwsefill | square, nw-to-se rule filled |
| u+025a8 | | | | | | | ///////////////////////////////////// | | | | | \squareneswfill | square, ne-to-sw rule filled |
| U+025A9 | | | | | | | | | | | | \squarecrossfill | square with diagonal crosshatch fill |
| U+025AA | • | | | • | | | • | | • | • | • | \smblksquare | /blacksquare - sq bullet, filled |
| U+025AB | 0 | | | | | | 0 | 0 | | | | \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 | | | | | | | \Box | | | | | \parallelogram | parallelogram, open |
| U+025B2 | | | | | | | | | | | | \bigblacktriangleup | black up-pointing triangle |
| U+025B4 | | | | | | | | | | | | \blacktriangle ^(a) | up triangle, filled |
| u+025в6 | | | | | | | | | | | | $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ | (large) right triangle, filled |
| и+025в8 | | | | | | | | | | | | $\sl mallblacktriangleright$ | right triangle, filled |
| U+025B9 | | \triangleright | \triangleright | | | | \triangleright | | \triangleright | \triangleright | \triangleright | \smalltriangleright | right triangle, open |
| U+025BA | | | | | | | | | | | | \blackpointerright | black right-pointing pointer |
| U+025BB | | | \triangleright | | | | \triangleright | | | | | \whitepointerright | white right-pointing pointer |
| U+025BC | | | | | | • | | • | _ | _ | _ | \bigblacktriangledown | big down triangle, filled |
| U+025BD | ∇ | \vee | \vee | \triangle | ∇ | | \bigvee | ∇ | ∇ | ∇ | ∇ | \bigtriangledown ^(p) | big down triangle, open |
| U+025BE | | • | • | | | | • | | | • | • | \blacktriangledown(a) | down triangle, filled |
| U+025BF | | ∇ | ∇ | | | | ∇ | | ∇ | ∇ | ∇ | \triangledown ^(a) | down triangle, open |
| U+025C0 | • | | | • | | • | 1 | ◀ | • | • | • | $\begin{tabular}{ll} \verb+ blacktriangleleft+ (a) \\ \hline \end{tabular}$ | (large) left triangle, filled |
| U+025C2 | | • | • | | | | 4 | | • | • | • | \smallblacktriangleleft | left triangle, filled |
| U+025C3 | | ◁ | ◁ | | | | ٥ | | \triangleleft | ◁ | \triangleleft | \smalltriangleleft | left triangle, open |
| U+025C4 | | | | | | • | 1 | | | | | \blackpointerleft | black left-pointing pointer |
| U+025C5 | | \triangleleft | \triangleleft | | | | \triangleleft | | | | | \whitepointerleft | white left-pointing pointer |
| u+025c6 | | • | * | | | • | , | | * | • | • | \mdlgblkdiamond | black diamond |
| U+025C7 | | \Diamond | \Diamond | | | \ \ | \Diamond | | \Diamond | \Diamond | \Diamond | \mdlgwhtdiamond | white diamond; diamond, open |
| u+025c8 | | (| | | | | * | | | | | \blackinwhitediamond | white diamond containing black small diamond |
| U+025C9 | | | | | | • | | | | | | \fisheye | fisheye |
| U+025CA | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \ | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \mdlgwhtlozenge | lozenge or total mark |
| U+025CC | | 0 | 0 | | | | \circ | | | | | \dottedcircle | dotted circle |
| U+025CD | | | | | | | | | | | | \circlevertfill | circle with vertical fill |

| USV | L | X | S | P | D | F | N | Н | E | C | R | Macro | Description |
|---------|------------|------------|------------|------------|---|--------------|------------|------------|------------|---|---|--|---|
| U+025CE | | 0 | 0 | | | 0 | 0 | | | | | \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 | | \bigcirc | | | | • | \bigcirc | | | | | \circlebottomhalfblack | circle, filled bottom half |
| U+025D3 | | | | | | lacktriangle | | | | | | \circletophalfblack | circle, filled top half |
| U+025D4 | | • | • | | | | | | | | | \circleurquadblack | circle with upper right quadrant black |
| U+025D5 | | | • | | | • | • | | | | | \blackcircleulquadwhite | circle with all but upper left quadrant black |
| U+025D6 | | | | | | • | | | | | | $\begin{tabular}{ll} \textbf{blacklefthalfcircle} \end{array}$ | left half black circle |
| U+025D7 | | | | | | | | | | | | \blue{local} | right half black circle |
| U+025D8 | | | | | | | • | | | | | \inversebullet | inverse bullet |
| U+025D9 | | O | 0 | | | 0 | \bigcirc | | | | | \inversewhitecircle | inverse white circle |
| U+025DA | | | | | | | \bigcirc | | | | | \invwhiteupperhalfcircle | upper half inverse white circle |
| U+025DB | | | | | | | \bigcirc | | | | | \invwhitelowerhalfcircle | lower half inverse white circle |
| U+025DC | | | | | | - | | | | | | \ularc | upper left quadrant circular arc |
| U+025DD | |) | | | | | | | | | | \urarc | upper right quadrant circular arc |
| U+025DE | | J | ノ | | | , | J | | | | | \lrarc | lower right quadrant circular arc |
| U+025DF | | | | | | Ç. | (| | | | | \llarc | lower left quadrant circular arc |
| U+025E0 | | \bigcirc | \bigcirc | | | \circ | \cap | | | | | \topsemicircle | upper half circle |
| U+025E1 | | \cup | \cup | | | U | \cup | | | | | \botsemicircle | lower half circle |
| U+025E2 | | | | | | 4 | | | | | | \lrblacktriangle | 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 |
| U+025E6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \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 | | | | | | | | | | | | \squarelrblack | square, filled bottom right corner |
| U+025EC | | | | | | | Δ | | | | | \trianglecdot | triangle with centered dot |
| U+025ED | | | | | | | | | | | | \triangleleftblack | up-pointing triangle with left half black |
| U+025EE | | 1 | 1 | | | | 1 | | | | | \trianglerightblack | up-pointing triangle with right half black |
| U+025EF | \bigcirc | \bigcirc | | \bigcirc | | 0 | \bigcirc | \bigcirc | \bigcirc | 0 | 0 | \lgwhtcircle | large circle |
| U+025F0 | | | | | | 凹 | 凹 | | | | | \squareulquad | white square with upper left quadrant |
| U+025F1 | | ы | Ы | | | ы | 5 | | | | | \squarellquad | white square with lower left quadrant |
| U+025F2 | | | | | | G | | | | | | \squarelrquad | white square with lower right quadrant |
| U+025F3 | | | | | | • | <u> </u> | | | | | \squareurquad | white square with upper right quadrant |
| u+025F4 | | 0 | 0 | | | Ð | 0 | | | | | \circleulquad | white circle with upper left quadrant |
| U+025F5 | | 0 | 0 | | | 0 | 0 | | | | | \circlellquad | white circle with lower left quadrant |
| u+025F6 | | \bigcirc | Θ | | | G | \bigcirc | | | | | \circlelrquad | white circle with lower right quadrant |

| USV | L | X | S | Р | D | F | N | Н | E | C | R | Macro | Description |
|---------|------------|------------------------------|---------------------|------------|------------|----|----------------|------------|------------|------------|--------------|-----------------------------|---|
| U+025F7 | | Ф | Ф | | | Ф | 0 | | | | | \circleurquad | white circle with upper right quadrant |
| u+025F8 | | | | | | | | | | | | \ultriangle | upper left triangle |
| U+025F9 | | \triangle | abla | | | | \triangle | | | | | \urtriangle | upper right triangle |
| U+025FA | | \triangle | \triangle | | | | \triangle | | | | | \lltriangle | lower left triangle |
| u+025fв | | | | | | | | | | | | \mdwhtsquare | white medium square |
| U+025FC | | | | | | | | | | | | \mdblksquare | black medium square |
| U+025FD | | | | | | | | | | | | \mdsmwhtsquare | white medium small square |
| U+025FE | | | | | | | | | | | | \mdsmblksquare | black medium small square |
| U+025FF | | | | | | | \triangle | | | | | \lrtriangle | lower right triangle |
| u+02605 | | * | * | | | | * | | * | * | * | $\verb \bigstar ^{(a)}$ | star, filled |
| u+02606 | | $\stackrel{\wedge}{\bowtie}$ | * | | | | * | | | | | \bigwhitestar | star, open |
| u+02609 | | • | • | | | | \odot | | | | | \astrosun | sun |
| u+02621 | | Z | Z | | | | 2 | | | | | \danger | dangerous bend (caution sign) |
| u+0263в | | | • | | | • | © | | | | | \blacksmiley | black smiling face |
| u+0263c | | ₩ | ₩ | | | * | * | | | | | \sun | white sun with rays |
| u+0263D | | | | | | | \supset | | | | | \rightmoon | first quarter moon |
| u+0263E | | | | | | | (| | | | | \leftmoon | last quarter moon |
| u+02640 | | Q | Q | | | P | Q Q | | | | | \female | venus, female |
| u+02642 | | ð | ð | | | o™ | o* | | | | | \male | mars, male |
| u+02660 | | • | • | • | • | • | | | | | | \spadesuit ^(p) | spades suit symbol |
| u+02661 | \Diamond | Ö | \Diamond | \Diamond | \Diamond | | \Diamond | Ö | \Diamond | \Diamond | \Diamond | \heartsuit ^(p) | heart suit symbol |
| u+02662 | \Diamond | . | . | \Diamond | \Diamond | | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \diamondsuit ^(p) | diamond suit symbol |
| u+02663 | * | | • | 4 | * | * | • | | • | • | À | \clubsuit ^(p) | club suit symbol |
| u+02664 | \Diamond | 4 | 4 | | ٨ | | \Diamond | \Diamond | \Diamond | \Diamond | \Diamond | \varspadesuit | spade, white (card suit) |
| υ+02665 | • | Ŷ | Ŷ | W | | ٧ | • | • | • | • | • | \varheartsuit | filled heart (card suit) |
| υ+02666 | • | • | • | • | • | • | • | • | • | • | • | \vardiamondsuit | filled diamond (card suit) |
| u+02667 | ф | Д | ф | GF) | A A | | දු | ç Ç | နှ | နှ | ب | \varclubsuit | club, white (card suit) |
| u+02669 | -1- | Ĵ | Ĵ | | | | | -1- | -1- | | | \quarternote | music note (sung text sign) |
| u+0266a | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | | | \eighthnote | eighth note |
| u+0266в | | | J | | | J | | | | | | \twonotes | beamed eighth notes |
| u+0266D | b | b | b | Ь | Ь | | b | Ь | b | b | Ь | \flat ^(p) | musical flat |
| U+0266E | 4 | 4 | þ | 4 | þ | | Ь | 4 | 4 | Ц | Ц | \natural ^(p) | music natural |
| U+0266F | Ħ | # | # | # | # | | # | Ħ | 1 | # | Ħ | \sharp ^(p) | musical sharp |
| U+0267E | Ħ | ∞ | ∞ | TI | TI | | ∞ | rı | 17 | Ħ | н | \acidfree | permanent paper sign |
| u+02680 | | | | | | | <u></u> | | | | | \dicei | die face-1 |
| u+02681 | | ·. | : | | | | | | | | | \diceii | die face-2 |
| u+02682 | | • | : | | | | | | | | | \diceiii | die face-3 |
| u+02683 | | | | | | | | | | | | \diceiv | die face-4 |
| u+02684 | | <u> </u> | × | | | | ∷ | | | | | \dicev | die face-5 |
| u+02685 | | | | | | | :: | | | | | \dicevi | die face-6 |
| u+02686 | | <u></u> | ··· | | | | · | | | | | \circledrightdot | white circle with dot right |
| u+02687 | | \odot | \odot | | | | \odot | | | | | \circledfundots | white circle with two dots |
| u+02688 | | | | | | | | | | | | \blackcircledrightdot | |
| | | • | • | | | | | | | | | \blackcircledrightdot | black circle with white dot right black circle with two white dots |
| u+02689 | | _ | _ | | | | ● | | | | | | |
| U+026A5 | | φ | φ O | | | _ | φ [*] | | | _ | ^ | \Hermaphrodite | male and female sign |
| U+026AA | | 0 | 0 | | | 0 | 0 | | 0 | 0 | 0 | \mdwhtcircle | medium white circle |
| U+026AB | | | | | | | | | - | • | • | \mdblkcircle | medium black circle |
| U+026AC | | 0 | 0 | | | 0 | 0 | | 0 | 0 | 0 | \mdsmwhtcircle | medium small white circle |
| u+026B2 | | Υ | P | | | | P | | | | | \neuter | neuter |

| USV | L | X | S | Р | D | F | N | Η | Е | C | R | Macro | Description |
|--------------------|--------------|----------------|----------------|--------------|--------------|---|---------------|--------------|----------------|----------|---|---|---|
| U+02713 | √ | 1 | √ | \checkmark | | | √ | \checkmark | √ | √ | | \checkmark | tick, check mark |
| U+02720 | \mathbf{X} | \blacksquare | \blacksquare | \mathbf{X} | \mathbf{H} | | \mathbf{X} | \times | \blacksquare | X | X | \maltese | maltese cross |
| U+0272A | | | | | | | * | | | | | \circledstar | circled white star |
| u+02736 | | * | * | | | | * | | | | | \varstar | six pointed black star |
| U+0273D | | * | * | | | | * | | | | | \dingasterisk | heavy teardrop-spoked asterisk |
| u+0279в | | → | → | | | | \rightarrow | | | | | \draftingarrow | right arrow with bold head (drafting) |
| U+027C0 | | K | K | | | | \angle | K | | | | \threedangle | three dimensional angle |
| U+0 27 C1 | | | | | | | | | | | | \whiteinwhitetriangle | white triangle containing small white triangle |
| u+027c3 | | O | 0 | | | | © | © | | | | \subsetcirc | open subset |
| u+027C4 | | 0 | 0 | | | | 0 | ೨ | | | | \supsetcirc | open superset |
| u+027св | | / | / | | | | / | / | / | / | / | extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	extstyle 	ext | mathematical rising diagonal |
| U+0 27 CD | | | | | | | \ | \ | \ | | \ | $\diagdown^{(a)}$ | mathematical falling diagonal |
| U+027D0 | | \Diamond | \Diamond | | | | ♦ | ♦ | | | | \diamondcdot | white diamond with centred dot |
| U+0292B | | X | × | | | | × | × | | | | \rdiagovfdiag | rising diagonal crossing falling diagonal |
| U+0292C | | X | × | | | | × | × | | | | \fdiagovrdiag | falling diagonal crossing rising diagonal |
| U+0292D | | X | X | | | | X | X | | | | \seovnearrow | south east arrow crossing north east arrow |
| U+0292E | | X | X | | | | \times | X | | | | \neovsearrow | north east arrow crossing south east arrow |
| U+0292F | | X | X | | | | X | X | | | | \fdiagovnearrow | falling diagonal crossing north east arrow |
| u+02930 | | X | X | | | | \times | × | | | | \rdiagovsearrow | rising diagonal crossing south east arrow |
| U+02931 | | X | X | | | | \times | X | | | | \neovnwarrow | north east arrow crossing north west arrow |
| U+02932 | | X | X | | | | \times | X | | | | \nwovnearrow | north west arrow crossing north east arrow |
| u+02934 | | ♪ | ♪ | | | | | ĵ | ٦ | | | \uprightcurvearrow | arrow pointing rightwards then curving upwards |
| U+02935 | | 7 | → | | | | \rightarrow | 1 | \supset | | | \downrightcurvedarrow | arrow pointing rightwards then curving downwards |
| u+02981 | | • | | | | | • | • | • | • | • | \mdsmblkcircle | z notation spot |
| U+02999 | | | | | | | | | | | | \fourvdots | dotted fence |
| u+0 2 99A | | } | * | | | | *** | } | | | | \vzigzag | vertical zigzag line |
| u+0299в | | A | \angle | | | | A | × | | | | \measuredangleleft | measured angle opening left |
| U+0299C | | Ł. | Ь | | | | Ł | L. | | | | \rightanglesqr | right angle variant with square |
| U+0299D | | b | b | | | | <u>L</u> | ₽ | | | | \rightanglemdot | measured right angle with dot |
| U+0299E | | <u>/s</u> | <u>/s</u> | | | | <u>∕s</u> | <u>/s</u> | | | | \angles | angle with s inside |
| U+0299F | | _ | _ | | | 2 | _ | _ | | | | \angdnr | acute angle |
| U+029A0 | | → | > | | | * | > | * | | | | \gtlpar | spherical angle opening left |
| U+029A1 | | 7 | 7 | | | ₩ | 7 | * | | | | \sphericalangleup | spherical angle opening up |
| U+029A2 | | 7 | 7 | | | 7 | 7 | 7 | | | | \turnangle | turned angle |
| U+029A3 | | | | | | | 7 | Ž | | | | \revangle | reversed angle |
| U+029A4 | | | <u>_</u> | | | _ | <u>_</u> | _ | | | | \angleubar | angle with underbar |
| U+029A4 | | <u> </u> | | | | | _ | 7 | | | | \revangleubar | reversed angle with underbar |
| | | ⇒ \ | 7 | | | \ | | = | | | | \wideangledown | oblique angle opening up |
| U+029A6 | | _ | _ | | | _ | _ | _ | | | | = | |
| U+029A7 U+029A8 | | / ∡ | / ∡ | | | | 4 | \$ | | | | \wideangleup \measanglerutone | oblique angle opening down measured angle with open arm ending in arrow pointing up |

| USV | L | X | S | Р | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|---|----------------|-------------|---|---|---|--------------------|-------------------|---|---|---|-------------------------|---|
| U+029A9 | | Ā | Ā | | | | \$ | ¥ | | | | \measanglelutonw | measured angle with open arm ending in arrow pointing up and left |
| U+029AA | | 4 | 爻 | | | | \$ | 爻 | | | | \measanglerdtose | measured angle with open arm ending in arrow pointing down and right |
| U+029AB | | ¥ | ¥ | | | | Ż | Ż | | | | \measangleldtosw | measured angle with open arm ending in arrow pointing down and left |
| U+029AC | | Þ | Þ₹ | | | | ₩ | ₩ | | | | \measangleurtone | measured angle with open arm ending in arrow pointing right and up |
| U+029AD | | A | Ø | | | | M | ≱ ∤ | | | | \measangleultonw | measured angle with open arm ending in arrow pointing left and up |
| U+0 29 AE | | Þ _s | Þsi | | | | 24 | \bowtie | | | | \measangledrtose | measured angle with open arm ending in arrow pointing right and down |
| u+0 2 9af | | 4 | 4 | | | | K | Д | | | | \measangledltosw | measured angle with open arm ending in arrow pointing left and down |
| и+029во | | Ø | Ø | | | Ø | Ø | Ø | | | | \revemptyset | reversed empty set |
| U+029B1 | | Ø | Ø | | | | Ø | Ø | | | | \emptysetobar | empty set with overbar |
| U+029B2 | | Ö | Ø | | | | Ö | å | | | | \emptysetocirc | empty set with small circle above |
| U+0 2 9B3 | | Ø = | Ø | | | | Ø | Ø | | | | \emptysetoarr | empty set with right arrow above |
| u+029B4 | | Ø | Ø | | | | Ø | Ø | | | | \emptysetoarrl | empty set with left arrow above |
| u+029ва | | \oplus | \oplus | | | | \oplus | \oplus | | | | \obot | circle divided by horizontal bar and top half divided by vertical bar |
| u+0 2 9вв | | \boxtimes | \boxtimes | | | | \boxtimes | \boxtimes | | | | \olcross | circle with superimposed x |
| u+0 2 9вс | | ② | ⊘ | | | | ② | ⊘ | | | | \odotslashdot | circled anticlockwise-rotated division sign |
| U+029BD | | Ф | Ф | | | | Ф | Φ | | | | \uparrowoncircle | up arrow through circle |
| u+029ве | | 0 | 0 | | | | 0 | \odot | | | | \circledwhitebullet | circled white bullet |
| u+029вғ | | • | | | | | • | \odot | | | | \circledbullet | circled bullet |
| U+029C2 | | 0° | 0° | | | | 0° | 0° | | | | \cirscir | circle with small circle to the right |
| U+0 2 9C3 | | 0= | 0= | | | | = | <u></u> = | | | | \cirE | circle with two horizontal strokes to the right |
| U+0 2 9C9 | | 中 | 中 | | | | 中 | 中 | | | | \boxonbox | two joined squares |
| U+029CA | | \triangle | \triangle | | | | \triangle | $\dot{\triangle}$ | | | | \triangleodot | triangle with dot above |
| U+0 2 9CB | | \triangle | \triangle | | | | \triangle | \triangle | | | | \triangleubar | triangle with underbar |
| U+0 2 9CC | | S | S | | | | Ś | A | | | | \triangles | s in triangle |
| U+029DC | | \circ | \circ | | | | ∞ | \sim | | | | \iinfin | incomplete infinity |
| U+0 2 9DD | | ∞ | ∞ | | | | $\widehat{\infty}$ | \otimes | | | | \tieinfty | tie over infinity |
| U+029DE | | \$ | \$ | | | | % | ф | | | | \nvinfty | infinity negated with vertical bar |
| U+029E0 | | | | | | | | | | | | \laplac | square with contoured outline |
| U+029E7 | | # | # | | | | # | + | | | | \thermod | thermodynamic |
| u+029E8 | | V | V | | | | V | V | | | | \downtriangleleftblack | down-pointing triangle with left half black |
| U+029E9 | | | | | | | | T | | | | \downtrianglerightblack | down-pointing triangle with right half black |
| u+0 2 9ea | | • | • | | | | * | * | | | | \blackdiamonddownarrow | black diamond with down arrow |
| U+029EC | | Q | Q | | | | 9 | Ŷ | | | | \circledownarrow | white circle with down arrow |

| USV | L | X | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|--------|-----------------------|-----------------------|---|---|---|------------------------|------------|------------|------------|------------|-----------------------|--|
| U+029ED | | • | • | | | | • | • | | | | \blackcircledownarrow | black circle with down arrow |
| U+029EE | | | | | | | Φ | 豆 | | | | \errbarsquare | error-barred white square |
| U+029EF | | • | • | | | | | Ī | | | | \errbarblacksquare | error-barred black square |
| U+0 2 9F0 | | ፟ | abla | | | | Δ | 交 | | | | \errbardiamond | error-barred white diamond |
| U+029F1 | | | | | | | $\overline{\bullet}$ | ₹ | | | | \errbarblackdiamond | error-barred black diamond |
| U+029F2 | | Φ | Φ | | | | φ | δ | | | | \errbarcircle | error-barred white circle |
| U+029F3 | | • | • | | | | $\overline{\Phi}$ | ₫ | | | | \errbarblackcircle | error-barred black circle |
| U+02AE1 | | s | s | | | | \rfloor_{S} | <u> s</u> | | | | \perps | perpendicular with s |
| U+02AF1 | | Î | Î | | | | Ŷ | Ţ | | | | \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 diago- nal half black |
| U+02B15 | | | | | | | | | | | | \squarellblack | square with lower left diagonal half black |
| U+02B16 | | lack | lack | | | | lack | • | | | | \diamondleftblack | diamond with left half black |
| U+02B17 | | | | | | | | • | | | | \diamondrightblack | diamond with right half black |
| U+02B18 | | | \rightarrow | | | | \Diamond | \$ | | | | \diamondtopblack | diamond with top half black |
| U+02B19 | | \(\rightarrow | | | | | \rightarrow | \$ | | | | \diamondbotblack | diamond with bottom half black |
| U+02B1A | \Box | Ď | Ė | 0 | | | m | \Box | | | | \dottedsquare | dotted square |
| U+02B1B | | | | | | | | | | | | \lgblksquare | black large square |
| U+02B1C | | \Box | \sqcap | | | | $\overline{\sqcap}$ | | | | | \lgwhtsquare | white large square |
| U+02B1D | | - | - | | | | - | | | | | \vysmblksquare | black very small square |
| U+02B1E | | | | | | | | | 0 | 0 | 0 | \vysmwhtsquare | white very small square |
| U+02B1F | | | | | | | | | | | | \pentagonblack | black pentagon |
| U+02B20 | | $\overline{\Diamond}$ | $\overline{\Diamond}$ | | | | \Diamond | \Diamond | | | | \pentagon | white pentagon |
| U+02B21 | | \cap | $\overline{\cap}$ | | | | $\hat{\Box}$ | Ô | | | | \varhexagon | white hexagon |
| U+02B22 | | | ě | | | | | | | | | \varhexagonblack | black hexagon |
| U+02B23 | | • | | | | | • | • | | | | \hexagonblack | horizontal black hexagon |
| U+02B24 | | | | | | | | | | | | \lgblkcircle | black large circle |
| U+02B25 | | | | | | | • | • | • | ۵ | • | \mdblkdiamond | black medium diamond |
| U+02B26 | | ♦ | ♦ | | | | \Diamond | * | \Diamond | \Diamond | \Diamond | \mdwhtdiamond | white medium diamond |
| U+02B27 | | • | • | | | | • | | • | • | Å | \mdblklozenge | black medium lozenge |
| U+02B28 | | * | ♦ | | | | ٥ | | \Diamond | \Diamond | \Diamond | \mdwhtlozenge | white medium lozenge |
| U+02B29 | | • | • | | | | • | | • | • | • | \smblkdiamond | black small diamond |
| U+02B2A | | • | Ť | | | | • | | Ť | | · | \smblklozenge | black small lozenge |
| U+02B2B | | ٥ | . | | | | ٥ | ٠ | * | · | * | \smwhtlozenge | white small lozenge |
| U+02B2C | | | | | | | | • | * | · | · | \blkhorzoval | black horizontal ellipse |
| U+02B2D | | 0 | 0 | | | | | 0 | | | | \whthorzoval | white horizontal ellipse |
| U+02B2E | | | | | | | | • | | | | \blkvertoval | • |
| U+02B2F | | 0 | 0 | | | | | 0 | | | | \whtvertoval | black vertical ellipse |
| | | ☆ | ☆ | | | | 7 | . ↔ | | | | \medwhitestar | white vertical ellipse white medium star |
| U+02B50 | | * | * | | | | * | * | | | | \medblackstar | black medium star |
| U+02B51 | | | | | | | | | | | | | |
| U+02B52 | | * | * | | | | * | * | | | | \smwhitestar | white small star |
| U+02B53 | | | | | | | | - | | | | \rightpentagonblack | black right-pointing pentagon |
| U+02B54 | | > = | | | | | ○ | \Diamond | | | | \rightpentagon | white right-pointing pentagon |
| U+03012 | | ₸ | T | | | | ₹ | | | | | \postalmark | postal mark |
| U+03030 | 0 | ~ | ∼ | 0 | ^ | _ | ~~ | _ | • | ^ | 0 | \hzigzag | zigzag |
| U+1D7CE | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfzero | mathematical bold digit o |
| U+1D7CF | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \mbfone | mathematical bold digit 1 |
| U+1D7D0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | \mbftwo | mathematical bold digit 2 |

| USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|---------|---|---|---|---|----------|---|---|---|---|---|---|---------------|---------------------------------------|
| U+1D7D1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | \mbfthree | mathematical bold digit 3 |
| U+1D7D2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | \mbffour | mathematical bold digit 4 |
| U+1D7D3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | \mbffive | mathematical bold digit 5 |
| U+1D7D4 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | \mbfsix | mathematical bold digit 6 |
| U+1D7D5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | 7 | \mbfseven | mathematical bold digit 7 |
| U+1D7D6 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | \mbfeight | mathematical bold digit 8 |
| U+1D7D7 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | \mbfnine | mathematical bold digit 9 |
| U+1D7D8 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | \Bbbzero | mathematical double-struck digit o |
| U+1D7D9 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | \Bbbone | mathematical double-struck digit 1 |
| U+1D7DA | 2 | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | 2 | \Bbbtwo | mathematical double-struck digit 2 |
| U+1D7DB | 3 | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | 3 | \Bbbthree | mathematical double-struck digit 3 |
| U+1D7DC | 4 | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | 4 | \Bbbfour | mathematical double-struck digit 4 |
| U+1D7DD | 5 | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | 5 | \Bbbfive | mathematical double-struck digit 5 |
| U+1D7DE | 6 | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | 6 | \Bbbsix | mathematical double-struck digit 6 |
| U+1D7DF | 7 | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | 7 | \Bbbseven | mathematical double-struck digit 7 |
| U+1D7E0 | 8 | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | 8 | \Bbbeight | mathematical double-struck digit 8 |
| U+1D7E1 | 9 | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | 9 | \Bbbnine | mathematical double-struck digit 9 |
| U+1D7E2 | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | \msanszero | mathematical sans-serif digit o |
| U+1D7E3 | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 1 | 1 | \msansone | mathematical sans-serif digit 1 |
| U+1D7E4 | 2 | 2 | 2 | 2 | 2 | | 2 | | 2 | 2 | 2 | \msanstwo | mathematical sans-serif digit 2 |
| U+1D7E5 | 3 | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | 3 | \msansthree | mathematical sans-serif digit 3 |
| U+1D7E6 | 4 | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | 4 | \msansfour | mathematical sans-serif digit 4 |
| U+1D7E7 | 5 | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | 5 | \msansfive | mathematical sans-serif digit 5 |
| U+1D7E8 | 6 | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | 6 | \msanssix | mathematical sans-serif digit 6 |
| U+1D7E9 | 7 | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | 7 | \msansseven | mathematical sans-serif digit 7 |
| U+1D7EA | 8 | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | 8 | \msanseight | mathematical sans-serif digit 8 |
| U+1D7EB | 9 | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | 9 | \msansnine | mathematical sans-serif digit 9 |
| U+1D7EC | 0 | 0 | 0 | 0 | 0 | | 0 | | 0 | 0 | 0 | \mbfsanszero | mathematical sans-serif bold digit o |
| U+1D7ED | 1 | 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 | 2 | \mbfsanstwo | mathematical sans-serif bold digit 2 |
| U+1D7EF | 3 | 3 | 3 | 3 | 3 | | 3 | | 3 | 3 | 3 | \mbfsansthree | mathematical sans-serif bold digit 3 |
| U+1D7F0 | 4 | 4 | 4 | 4 | 4 | | 4 | | 4 | 4 | 4 | \mbfsansfour | mathematical sans-serif bold digit 4 |
| U+1D7F1 | 5 | 5 | 5 | 5 | 5 | | 5 | | 5 | 5 | 5 | \mbfsansfive | mathematical sans-serif bold digit 5 |
| U+1D7F2 | 6 | 6 | 6 | 6 | 6 | | 6 | | 6 | 6 | 6 | \mbfsanssix | mathematical sans-serif bold digit 6 |
| U+1D7F3 | 7 | 7 | 7 | 7 | 7 | | 7 | | 7 | 7 | 7 | \mbfsansseven | mathematical sans-serif bold digit 7 |
| U+1D7F4 | 8 | 8 | 8 | 8 | 8 | | 8 | | 8 | 8 | 8 | \mbfsanseight | mathematical sans-serif bold digit 8 |
| U+1D7F5 | 9 | 9 | 9 | 9 | 9 | | 9 | | 9 | 9 | 9 | \mbfsansnine | mathematical sans-serif bold digit 9 |

| USV | L | Χ | S | P | D | F | N | Н | E | C | R | Macro | Description |
|---------|---|---|---|---|---|---|---|---|---|---|---|-----------|-----------------------------------|
| u+1D7F6 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | \mttzero | mathematical monospace digit 0 |
| U+1D7F7 | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | \mttone | mathematical monospace digit |
| U+1D7F8 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | \mtttwo | mathematical monospace digit |
| U+1D7F9 | 3 | 3 | 3 | 3 | 3 | | 3 | 3 | 3 | 3 | 3 | \mttthree | mathematical monospace digit |
| u+1d7fa | 4 | 4 | 4 | 4 | 4 | | 4 | 4 | 4 | 4 | 4 | \mttfour | mathematical monospace digit |
| U+1D7FB | 5 | 5 | 5 | 5 | 5 | | 5 | 5 | 5 | 5 | 5 | \mttfive | mathematical monospace digit |
| U+1D7FC | 6 | 6 | 6 | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | \mttsix | mathematical monospace digit |
| u+1D7FD | 7 | 7 | 7 | 7 | 7 | | 7 | 7 | 7 | 7 | 7 | \mttseven | mathematical monospace digit |
| U+1D7FE | 8 | 8 | 8 | 8 | 8 | | 8 | 8 | 8 | 8 | 8 | \mtteight | mathematical monospace digit 8 |
| u+1D7FF | 9 | 9 | 9 | 9 | 9 | | 9 | 9 | 9 | 9 | 9 | \mttnine | mathematical monospace digit 9 |

12 Relation symbols, \mathrel

| USV | L | Χ | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|-------------------------------|---|-------------------------------|-------------------------------|-------------------|-------------------------|---|-------------------|-----------------------|-------------------------------|-----------------------|--|---|
| u+0003c | < | < | < | < | < | < | < | < | < | < | < | \less | less-than sign r: |
| U+0003D | = | = | = | = | = | = | = | = | = | = | = | \equal | equals sign r: |
| U+0003E | > | > | > | > | > | > | > | > | > | > | > | \greater | greater-than sign r: |
| U+02050 | | \Box | \Box | | | | \Box | | | | | \closure | close up |
| U+0 2 190 | \leftarrow | \leftarrow | \leftarrow | \leftarrow | \leftarrow | ← | \leftarrow | ← | ← | \leftarrow | \leftarrow | $\verb leftarrow ^{(p)}$ | /leftarrow /gets a: leftward arrow |
| U+02191 | \uparrow | ↑ | 1 | 1 | 1 | 1 | \uparrow | † | 1 | 1 | ↑ | $\uparrow^{(p)}$ | upward arrow |
| U+02192 | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | $\verb \rightarrow ^{(p)}$ | /rightarrow /to a: rightward arrow |
| U+02193 | \downarrow | \downarrow | \downarrow | \downarrow | \downarrow | \downarrow | \downarrow | 1 | \downarrow | \downarrow | \downarrow | $\downarrow^{(p)}$ | downward arrow |
| U+02194 | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \leftrightarrow | \longleftrightarrow | \longleftrightarrow | \longleftrightarrow | ${f leftrightarrow}^{(p)}$ | left and right arrow |
| U+02195 | 1 | 1 | 1 | 1 | 1 | 1 | \ | ‡ | 1 | 1 | 1 | $\updownarrow^{(p)}$ | up and down arrow |
| U+02196 | _ | _ | 1 | K | | Κ, | _ | - | 1 | | ~ | \nwarrow ^(p) | nw pointing arrow |
| U+02197 | × | 7 | 1 | 7 | 7 | 7 | × | 7 | 1 | 1 | × | $\nearrow^{(p)}$ | ne pointing arrow |
| U+02198 | | | | 7 | | 7 | | | | | | \searrow ^(p) | se pointing arrow |
| U+02199 | 1 | 1 | 1 | 1 | 1 | ~ | 1 | Ì | 1 | 1 | / | \swarrow ^(p) | sw pointing arrow |
| U+0219A | // | - | - | ~ | ← | <!--</del--> | // | / | ← | ← | ⊬ | \nleftarrow ^(a) | not left arrow |
| U+0219B | <i>→</i> | \rightarrow | \rightarrow | <i>→</i> > | \rightarrow | <i>→</i> > | <i>→</i> | \rightarrow | \rightarrow | → | \rightarrow | \nrightarrow ^(a) | not right arrow |
| U+0219C | | K ~ | K | | | F∽ | K | K | | | | \leftwavearrow | left arrow-wavy |
| U+0219D | | ~7 | ~7 | | | ~7 | ~ | ~1 | | | | \rightwavearrow | right arrow-wavy |
| U+0219E | и_ | ~ | ~ | | 4 | « | « | * | | ~ | ~ | \twoheadleftarrow(a) | left two-headed arrow |
| U+0219E | 、 | ·· ↑ | ·· ↑ | * | " ↑ | ↑ | * | † | * | † | ↑ | \twoheaduparrow | up two-headed arrow |
| U+0219F | | → → | | → → | | - ≫ | → | T →>- | | - | > | \twoheadrightarrow(a) | right two-headed arrow |
| U+021A0 | | Ţ | Ţ | ı. | í | 7 | * | ¥ | i i | ¥ | ., | \twoheaddownarrow | down two-headed arrow |
| | * | * | * | * | * | * | * | ¥ | * | * | | \leftarrowtail(a) | |
| U+021A2 | | | | | | | | - | | | ← | | left arrow-tailed |
| U+021A3 | | <i>→</i> | <i>→</i> | <i>→</i> | <i>→</i> | → | \rightarrow | → | <i>→</i> | | <i>→</i> | \rightarrowtail ^(a) | right arrow-tailed |
| U+021A4 | ← | ← | ← | ← | ← | ← | \leftarrow | ← I | ← | ← | ← | \mapsfrom | maps to, leftward |
| U+021A5 | Τ | Τ | Τ | Τ | Τ | 1 | 1 | 1 | 1 | 1 | 1 | \mapsup | maps to, upward |
| U+021A6 | \rightarrow | → | → | → | → | → - | \mapsto | → | → T | → | → | \mapsto ^(p) | maps to, rightward |
| U+021A7 | + | Ţ | ↓ | 1 | Ţ | Ţ | Ţ | Ţ | Ţ | Ţ | Ţ | \mapsdown | maps to, downward |
| U+021A9 | \leftarrow | → | → | ← | \leftarrow | ↩ | \leftarrow | <i>ب</i> | ← | \leftarrow | \leftarrow | \hookleftarrow ^(p) | left arrow-hooked |
| U+021AA | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow | \hookrightarrow ^(p) | right arrow-hooked |
| U+021AB | \leftarrow | ↔ | ↔ | ↔ | ← | ←P | \leftarrow | ↔ | ↔ | ←₽ | ← P | \looparrowleft ^(a) | left arrow-looped |
| U+021AC | \rightarrow | 9→ | 4→ | 4→ | •→ | ٩> | \rightarrow | 4→ | 4 | 9→ | 4→ | \looparrowright ^(a) | right arrow-looped |
| U+021AD | <∿> | ₩ | ₩ | *v > | ↔ | ₹ \} | { \} | ~~ | ↔ | *** | *** | $\label{leftrightsquigarrow} \$ | left and right arr-wavy |
| U+021AE | $\leftrightarrow \rightarrow$ | $\leftrightarrow\!$ | $\leftrightarrow \rightarrow$ | $\leftrightarrow \rightarrow$ | \leftrightarrow | ↔ | $\leftrightarrow\!$ | ↔ | ↔ | $\leftrightarrow \rightarrow$ | \leftrightarrow | $\nleftrightarrow^{(a)}$ | not left and right arrow |
| U+021AF | | 1 | 2 | | | Z | 7 | \$ | | | | \downzigzagarrow | downwards zigzag arrow |
| U+021B0 | \forall | 1 | 1 | 4 | 4 | ٦ | \forall | 1 | 1 | 1 | ጎ | \Lsh ^(a) | /lsh a: |
| U+021B1 | ightharpoons | 7 | 7 | 1 | Þ | Þ | \vdash | r | 1 | ľ | Ļ | \Rsh (a) | /rsh a: |
| U+021B2 | \forall | \neq | 4 | J | 4 | 4 | \forall | 4 | 4 | ↲ | 4 | \Ldsh | left down angled arrow |
| U+021B3 | 4 | Ļ | Ļ | Ļ | 4 | _ج ا | 4 | Ļ | Ļ | Ļ | 4 | \Rdsh | right down angled arrow |
| U+021B6 | 5 | | | 5 | ~ | ~ | 1 | \sim | $ \wedge $ | $ \checkmark $ | | $\verb \curvearrowleft ^{(a)}$ | left curved arrow |
| U+021B7 | a | \bigcirc | \bigcirc | ~ | ~ | ~ | \sim | \sim | \bigcirc | \bigcirc | \bigcirc | $\c \c \$ | right curved arrow |
| U+021BC | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | _ | $\label{leftharpoonup}$ | left harpoon-up |
| U+021BD | | _ | _ | _ | _ | _ | _ | _ | | | | \leftharpoondown ^(p) | left harpoon-down |
| U+021BE | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | \upharpoonright(a) | /upharpoonright /restriction a: up harpoon-right |
| U+021BF | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | $\verb \upharpoonleft ^{(a)}$ | up harpoon-left |

| USV | L | X | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|-----------|--|--|---|------------------------------------|----------------------|----------------------|--|---|-------------------------|-------------------------|----------------------|---|---|
| U+021C0 | | | | | | | | | | | | $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ $\$ | right harpoon-up |
| U+021C1 | | _ | _ | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | \rightarrow | | | \rightharpoondown ^(p) | right harpoon-down |
| U+021C2 | L | l | l | l | l | l | L | l | Į | l | L | \downharpoonright (a) | down harpoon-right |
| U+021C3 | Ĺ | j | j | j | j | j | ĺ | j | j | j | ĺ | \downharpoonleft(a) | down harpoon-left |
| U+021C4 | $\stackrel{\checkmark}{\Rightarrow}$ | $\stackrel{\cdot}{\rightleftharpoons}$ | $\stackrel{\backprime}{\rightleftharpoons}$ | $\stackrel{,}{\rightleftharpoons}$ | \rightleftharpoons | ⇄ | \rightleftharpoons | $\stackrel{\backprime}{\rightleftharpoons}$ | ⇌ | \rightleftharpoons | \rightleftharpoons | \rightleftarrows(a) | right arrow over left arrow |
| U+021C5 | Ì. | † | 1↓ | ↑↓ | 1 | 1↓ | <u>`</u> | †↓ | † ↓ | 1 | 1 | \updownarrows | up arrow, down arrow |
| U+021C6 | $\stackrel{\downarrow}{\hookrightarrow}$ | ≒ | ≒ | ≒ | \leftrightarrows | | $\stackrel{\downarrow}{\Leftrightarrow}$ | ≒ | ₩ | ≒ | ⇔ | \leftrightarrows(a) | left arrow over right arrow |
| U+021C7 | <u></u> | ≠ | £ | <u></u> | ₩ | ₩ | ≠ | ⊭ | = | ⇇ | | \leftleftarrows(a) | two left arrows |
| U+021C8 | $\uparrow \uparrow$ | <u>`</u> | <u>†</u> | <u>†</u> | $\uparrow\uparrow$ | 1 | $\uparrow\uparrow$ | <u>`</u> | 1 | $\uparrow\uparrow$ | <u>`</u> | \upuparrows ^(a) | two up arrows |
| U+021C9 | $\stackrel{\cdot}{\rightarrow}$ | \Rightarrow | ⇉ | \Rightarrow | \Rightarrow | ⇉ | $\stackrel{\cdot}{\Rightarrow}$ | ⇒ | ⇒ | ⇒ | \Rightarrow | \rightrightarrows ^(a) | two right arrows |
| U+021CA | | # | ₩ | $\downarrow\downarrow$ | Ų. | # | $\downarrow \downarrow$ | # | $\downarrow \downarrow$ | $\downarrow \downarrow$ | ↓ | \downdownarrows(a) | two down arrows |
| U+021CB | * * | ** | ** | ∵ | ≠ | | ** | ** | ** | ₩ | | \leftrightharpoons(a) | left harpoon over right |
| U+021CC | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons | \rightleftharpoons() | right harpoon over left |
| U+021CD | # | # | # | # | # | # | # | # | # | # | # | \nLeftarrow ^(a) | not implied by |
| U+021CE | # | # | # | #> | # | # | * | # | \Leftrightarrow | ⇔ | ₩ | \nLeftrightarrow ^(a) | not left and right double arrows |
| U+021CF | # | # | # | ≠> | ≠ | # | ≠ > | ≠ | ≠ > | # | # | \nRightarrow ^(a) | not implies |
| U+021D0 | = | ← | <i>←</i> | <i>'</i> | ← | = | = | | ← | = | <i>←</i> | \Leftarrow ^(p) | is implied by |
| U+021D1 | ` ↑ | 1 | ↑ | 1 | 1 | 1 | ` ↑ | \uparrow | \uparrow | 1 | ` ↑ | \Uparrow ^(p) | up double arrow |
| U+021D2 | \Rightarrow | \Rightarrow | \Rightarrow | ⇒ | ⇒ | ⇒ | \Rightarrow | ⇒ | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow ^(p) | implies |
| U+021D3 | 1 | ψ | Ú. | Ų. | Ů. | 1 | | ₩ | ↓ | Ú. | Ů. | \Downarrow ^(p) | down double arrow |
| U+021D4 | * | ₩ | ⇔ | ⇔ | \Leftrightarrow | ∨ | \Leftrightarrow | ∀ | ⇔ | \Leftrightarrow | \Leftrightarrow | \Leftrightarrow ^(p) | left and right double arrow |
| U+021D5 | 1 | 1 | 1 | 1 | 1 | 1 | \$ | \$ | 1 | 1 | 1 | \Updownarrow ^(p) | up and down double arrow |
| U+021D6 | 7 | Z. | 1 | 4 | | 7 | 1 | K | | <u> </u> | <u>//</u> | \Nwarrow | nw pointing double arrow |
| U+021D7 | 7 | N | Ž | 7 | 1 | 7 | 7 | 7 | 7 | 7 | 7 | \Nearrow | ne pointing double arrow |
| U+021D8 | // | N N | No. | 7 | | 7 | // | N | 7 | 7 | <i>y</i> | \Searrow | se pointing double arrow |
| U+021D9 | // | // | 11 | 4 | | 2 | 4 | W. | 4 | <i>y</i> | и И | \Swarrow | sw pointing double arrow |
| U+021DA | | € | € | € | € | ⊭ | ₩ | ⊭ | € | € | ⊭ | \Lleftarrow ^(a) | left triple arrow |
| U+021DB | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | ⇒ | \Rightarrow | ⇒ | \Rightarrow | \Rightarrow | \Rightarrow | \Rrightarrow ^(a) | right triple arrow |
| U+021DC | ₩ | <i>→</i> | <i>→</i> | → | ← ~ | *~ | ₩ | <i>→</i> | → | → | <i>→</i> | \leftsquigarrow | * * |
| U+021DD | | →→ | →→ | √ > | ~ → | ~\^ | - √ > | ~→ | ~^* | ~~ | ~→ | \rightsquigarrow ^(a) | leftwards squiggle arrow rightwards squiggle arrow |
| U+021E4 | ٠, | 14 | I C | | | K- | ı ← | ı← | | | | \barleftarrow | leftwards arrow to bar |
| U+021E4 | | \rightarrow | | | | — | \rightarrow | → I | | | | \rightarrowbar | rightwards arrow to bar |
| • | | -0) | - 0> | | | - 0> | <i>→</i> | -> 1 | | | | \circleonrightarrow | right arrow with small circle |
| U+021F4 | ↑ | IA. | ΙΛ. | ΙΛ | ΙΛ | 1 1 | ↓ <u>↑</u> | | It | Ι↑ | ΙŤ | • | downwards arrow leftwards of |
| U+021F5 | \rightarrow | ↓ I | ↓ I | ↓ I | → | ↓ I | \rightarrow | ↓↑ → | ↓ I | ↓ I | ↓ I | \downuparrows | upwards arrow |
| U+021F6 | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | ⇉ | \Rightarrow | \Rightarrow | \rightthreearrows | three rightwards arrows |
| U+021F7 | | + | + | | | (+ | \leftarrow | + | | | | \nvleftarrow | leftwards arrow with vertical stroke |
| U+021F8 | | +> | \rightarrow | | | +> | \rightarrow | \rightarrow | | | | \nvrightarrow | rightwards arrow with vertical stroke |
| U+021F9 | | ()) | () | | | ↔ | \leftrightarrow | ()> | | | | \nvleftrightarrow | left right arrow with vertical stroke |
| U+021FA | | (| (| | | (- | (- | (- | | | | \nVleftarrow | leftwards arrow with double vertical stroke |
| U+021FB | | > | > | | | #> | ₩ | ₩ | | | | \nVrightarrow | rightwards arrow with double vertical stroke |
| U+021FC | | () | () | | | () | () | ₩ | | | | \nVleftrightarrow | left right arrow with double vertical stroke |
| U+021FD | | ← | ← | | | ← | ← | | | | | \leftarrowtriangle | leftwards open-headed arrow |
| U+021FE | | \rightarrow | \rightarrow | | | \rightarrow | → | | | | | \rightarrowtriangle | rightwards open-headed arrow |
| U+021FF | | ↔ | ↔ | | | ←→ | | | | | | \leftrightarrowtriangle | left right open-headed arrow |
| U+02208 | \in | · · | · · | \subset | \in | € | \in | ∈ | € | \in | \in | \in ^(p) | set membership, variant |
| 3 02200 | | | | | | _ | | | _ | _ | | \ | oce memocromp, variant |

| U+02209 U+0220A U+0220B U+0220C U+0220D U+0221D U+02223 | # ∈ ∋ ∌ ⊃ | ∉ | ∉ | ∉ | ∉ | 4 | | | | | | | |
|---|------------------------|-----------------------|-----------------------|----------------------|---------------|----------|-----------------------|----------------------|----------------------|------------------------|-----------------------|--|--|
| U+0220B U+0220C U+0220D U+0221D | ∌ | | € | | _ | ∉ | ∉ | ∉ | ∉ | ∉ | ∉ | $\operatorname{\setminus notin}^{()}$ | negated set membership |
| U+0220C U+0220D U+0221D | ∌ | _ | | € | \in | € | € | € | € | € | € | \smallin | set membership (small set membership) |
| U+0220D U+0221D | , | \ni | \ni | \ni | \ni | \ni | \ni | \ni | ∋ | \ni | \ni | $\ni^{(p)}$ | contains, variant |
| U+0221D | _ | ∌ | ∌ | $\not \ni$ | ∌ | ∌ | ∌ | ∌ | ∌ | ∌ | ∌ | \nni | negated contains, variant |
| | ∋ | € | € | ∋ | \ni | € | € | € | Э | € | € | \smallni | /ni /owns r: contains (small contains as member) |
| U+02223 | \propto | \propto | \propto | \propto | ox | œ | \propto | \propto | \propto | \propto | \propto | \P | is proportional to |
| | | | | | | | | | | | | $\mbox{\tt mid}^{(p)}$ | /mid r: |
| U+02224 | ł | ł | ł | ł | ł | ł | ł | ł | ł | ł | ł | $\mbox{\tt nmid}^{(a)}$ | negated mid |
| U+02225 | ĺ | | | | | | | | | | Ш | $\operatorname{\mathtt{ar{p}arallel}^{(p)}}$ | parallel |
| U+02226 | ¥ | # | # | ¥ | ¥ | ł | H | # | # | ł | ¥ | $\neq \neq \neq \neq \neq \neq \neq \neq $ | not parallel |
| U+02236 | : | : | : | : | : | : | : | : | : | : | : | \mathratio | ratio |
| U+02237 | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | :: | \Colon | two colons |
| U+02239 | -: | -: | -: | -: | -: | -: | -: | -: | -: | -: | -: | \dashcolon | excess (-:) |
| U+0223A | $ \vdots $ | $ \vdots $ | \vdash | $ \vdots $ | $ \vdots $ | Ħ | $ \mathbf{H} $ | \mapsto | $ \vdots $ | $ \mathbf{H} $ | $ \vdots $ | \dotsminusdots | minus with four dots, geometric properties |
| U+0223B | $\dot{\sim}$ | ∻ | ∻ | $\dot{\sim}$ | ÷ | ÷ | $\dot{\sim}$ | $\dot{\sim}$ | ÷ | $\dot{\sim}$ | ~ | \kernelcontraction | homothetic |
| U+0223C | \sim | ~ | ~ | ~ | ~ | ~ | ~ | \sim | ~ | ~ | ~ | $\sim^{(p)}$ | similar |
| U+0223D | <u>~</u> | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | \sim | $\begin{tabular}{ll} \begin{tabular}{ll} \beg$ | reverse similar |
| U+02241 | | × | × | 4 | 4 | * | × | × | ~ | × | 4 | \nsim ^(a) | not similar |
| U+02242 | $\overline{\sim}$ | $\overline{\sim}$ | \approx | \approx | = | ≂ | \approx | $\overline{\sim}$ | = | \approx | \approx | \eqsim ^(a) | equals, similar |
| U+02243 | \simeq | ~ | \simeq | \simeq | ~ | ~ | \simeq | \simeq | ~ | \simeq | ~ | \simeq ^(p) | similar, equals |
| U+02244 | $\not\simeq$ | ≄ | $ \sim $ | 4 | * | * | * | $\not\simeq$ | * | * | 4 | \nsime | not similar, equals |
| U+02243 | \simeq | ~ | ~ | ~ | ~ | ~ | ~ | \simeq | ~ | \simeq | \simeq | \sime | similar, equals (alias) |
| U+02244 | $\not\simeq$ | ≄ | ≄ | | | ≠ | * | $\not\simeq$ | * | 4 | 4 | \nsimeq | not similar, equals (alias) |
| U+02245 | $\stackrel{'}{\cong}$ | $\stackrel{+}{\cong}$ | $\stackrel{+}{\cong}$ | <i>,</i> ≅ | <i>.</i> ≅ | ~ | $\stackrel{'}{\cong}$ | \cong | <i>,</i> ≅ | <i>.</i> ≅ | ≅ | \cong ^() | congruent with |
| U+02246 | $\stackrel{-}{\cong}$ | — ≆ | _ ≆ | ≆ | ≆ | ≆ | ≆ | ≆ | ≆ | _ ≆ | — ≆ | \simneqq | similar, not equals [vert only for 9573 entity] |
| U+02247 | # | # | $\not\cong$ | # | ≇ | ≇ | ≇ | ≆ | ≇ | ¥ | ≇ | $ \operatorname{\cong}^{(a)} $ | not congruent with |
| U+02248 | \approx | <i>.</i> ≈ | \approx | \approx | \approx | ~ | \approx | \approx | \approx | \approx | \approx | \approx ^(p) | approximate |
| U+02249 | * | * | * | * | * | * | * | * | * | * | æ | \napprox | not approximate |
| U+0224A | \approx | ≊ | \approx | ≊ | ≊ | ≊ | ≈ | ~ ≊ | ≊ | \approx | \approx | \approxeq ^(a) | approximate, equals |
| U+0224B | \approx | ≋ | ≋ | ≋ | ≋ | ≈ | \approx | \approx | ≋ | \approx | \approx | \approxident | approximately identical to |
| U+0224C | ~ | 2 | \cong | \cong | \cong | ≅ | \leq | \cong | \cong | \cong | \cong | \backcong | all equal to |
| U+0224D | \simeq | \simeq | \simeq | \simeq | \approx | | \simeq | \simeq | \simeq | $\stackrel{-}{\simeq}$ | \simeq | $\agnumber egin{array}{c} \agnumber egin{array}{c} \agnumber \a$ | asymptotically equal to |
| U+0224E | ⇒ | = | = | \$ | == | | | ≎ | = | ≎ | ⇒ | \Bumpeq ^(a) | bumpy equals |
| U+0224F | _ | <u>~</u> | <u>~</u> | _ | <u>~</u> | | <u>~</u> | <u>~</u> | <u>~</u> | _ | | \bumpeq(a) | bumpy equals, equals |
| U+02250 | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ≐ | ÷ | ÷ | ÷ | \doteq ^() | equals, single dot above |
| U+02251 | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | ÷ | \Doteq ^(a) | /doteqdot /doteq r: equals, even dots |
| U+02252 | = | ≒ | ≒ | ≒ | ≒ | Ė | = | ≒ | ≒ | ≒ | ≒ | $\fallingdotseq^{(a)}$ | equals, falling dots |
| U+02253 | <u>:</u> | ≓. | ≓. | <u>:</u> | ≓ | .≓ | .≓ | .≓ | ≓ | ≓ | <u>:</u> | \risingdotseq ^(a) | equals, rising dots |
| U+02254 | := | := | := | := | := | := | := | := | := | := | := | \coloneq | colon, equals |
| U+02255 | =: | =: | =: | =: | =: | =: | =: | =: | =: | =: | =: | \eqcolon | equals, colon |
| U+02256 | | 0 | 0 | II | II | | | - | <u>=</u> | <u>.</u> | | \eqcirc ^(a) | circle on equals sign |
| U+02257 | <u>•</u> | <u>•</u> | 0 | 0 | 0 | | <u>•</u> | <u></u> | <u>•</u> | <u>•</u> | <u>•</u> | \circeq ^(a) | circle, equals |
| U+02259 | = | $\stackrel{-}{=}$ | $\stackrel{-}{=}$ | = | = | | = | _ ≘ | _ ≘ | <u>-</u> | $\stackrel{-}{\cong}$ | \arceq | arc, equals; corresponds to |
| U+02259 | <u>^</u> | <u>^</u> | <u>^</u> | | <u></u> | | <u>^</u> | | <u>^</u> | _ | <u></u> | \wedgeq | corresponds to (wedge, equals) |
| | <u>×</u> | <u> </u> | <u> </u> | = | = | | <u>×</u> | <u>∨</u> | <u>v</u> | <u>v</u> | <u>~</u> | | |
| U+0225A | 4 | <u>×</u> <u>*</u> | <u>∨</u> <u>*</u> | ≙ * | <u>×</u> | | <u>*</u> | = ★ | * | <u>*</u> | <u>*</u> | \veeeq | logical or, equals |
| U+0225B | Α. | = | = | <u>Δ</u> | <u> </u> | | <u></u> | ≜ | = ≜ | = | <u></u> | \stareq | star equals |
| U+0225C | $\stackrel{\Delta}{=}$ | = | = | = | = | | = | = | = | = | = | \triangleq ^(a) | triangle, equals |

| USV | L | X | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|---|----------------------------|---|---------------|-------------|-----------------|---|--|-------------|----------------------------|-------------------|--|---------------------------------------|
| U+0225D | def | def | <u>def</u> | def | def | | def | def | def | def | def | \eqdef | equals by definition |
| U+0225E | <u>m</u> | <u>m</u> | <u>m</u> | <u>m</u> | <u>m</u> | | <u>m</u> | <u>m</u> | <u>m</u> | <u>m</u> | <u>m</u> | \measeq | measured by (m over equals) |
| U+0225F | ? | ? | ? | ? | ? | | ? | ? | <u>.</u> | ? | ? | \questeq | equal with questionmark |
| U+02260 | \neq | \neq | \neq | \neq | # | ≠ | \neq | # | # | \neq | \neq | $\ensuremath{\mathtt{ne}^{(exttt{p})}}$ | /ne /neq r: not equal |
| U+02261 | = | \equiv | \equiv | \equiv | \equiv | = | \equiv | \equiv | \equiv | \equiv | \equiv | $\mathtt{ar{equiv}^{(p)}}$ | identical with |
| U+02262 | # | \neq | \neq | \neq | # | ≢ | \neq | ≢ | # | ≢ | \neq | \nequiv | not identical with |
| U+02263 | \equiv | \equiv | \equiv | \equiv | \equiv | ≣ | \equiv | \equiv | ≡ | \equiv | \equiv | \Equiv | strict equivalence (4 lines) |
| u+02264 | \leq | \leq | \leq | \leq | \leq | ≤ | | \leq | \leq | \leq | \leq | $\lceil \log^{(p)} \rceil$ | /leq /le r: less-than-or-equal |
| u+02265 | \geq | \geq | \geq | \geq | ≥ | ≥ | ≤ ≥ | < ≥ | \geq | ≥ | \geq | $\gray \operatorname{geq}^{(p)}$ | /geq /ge r: greater-than-or- equal |
| U+02266 | \leq | \leq | \leq | \leq | \leq | ≦ | \leq | \leq | \leq | ≦ | \leq | \leqq ^(a) | less, double equals |
| u+02267 | \geq | VII | VII / II V # / # | VII ∧II V# ∧# | \geq | VII / W / * / * | V | VII | \geq | \geq | \geq | \geqq ^(a) | greater, double equals |
| U+02268 | \subseteq | ≨ | ≨ | ≨ | ≨ | ≨ | \leq | ≨ | \leq | ≨ | ≨ | \label{lneqq} | less, not double equals |
| U+02269 | \geq | ≥ | ≥ | ≥ | ≩ | ≩ | \geq | ≩ | ≩ | ≩ | ≩ | $\gray gneqq^{(a)}$ | greater, not double equals |
| U+0226A | « | « | « | « | << | « | « | « | « | « | « | \11 ^(p) | much less than, type 2 |
| U+0226B | >>> | >> | >> | >> | >> | >> | >> | >> | >> | >> | >> | \gg ^(p) | much greater than, type 2 |
| U+0226C | Ŏ | Ŏ | Ŏ | Ŏ | Ŏ | | Ŏ | Ŏ | Ŏ | Ŏ | Ŏ | \between(a) | between |
| U+0226D | Ĵ | * | * | * | * | | $\hat{\not}$ | * | * | * | $\hat{\varkappa}$ | \nasymp | not asymptotically equal to |
| U+0226E | * | * | * | \$ | * | * | * | * | ≮ | * | * | \nless ^(a) | not less-than |
| U+0226F | * | * | * | * | * | * | ≮ ≯ | * | > | * | * | $\ngtr^{(a)}$ | not greater-than |
| U+0 227 0 | ≰ | ≰ | | ≰ | ≰ | ≰ | ≰ | Ź. | ≰ | ≰ | ≰ | | not less-than-or-equal |
| u+02271 | ≱ | ≱ | ≰≱ | ≱ | ≱ | ≱ | ≯ | ¥ | ≱ | ≱ | * | \ngeq ^(a) | not greater-than-or-equal |
| u+02272 | ≲ | ≲ | ≲ | ≲ | ≲ | ≲ | ≲ | < | ≲ | ≲ | ≲ | \lesssim ^(a) | less, similar |
| U+02273 | \gtrsim | ≳ | > | ≲ ≳ | ≳ | ≳ | \gtrsim | > | \gtrsim | ≳ | ≳ | \gtrsim ^(a) | greater, similar |
| U+02274 | \$ | \$ | ~~\$\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | \$ | ≴ | \$ | \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | \$ \$ \\ \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | \$ | \$ | \$ | \nlesssim | not less, similar |
| U+02275 | ** | ≴ ≵ | <i>₹</i> | ≴ ≵ | ≵ | ≵ | Ž | <i>≈</i> ≯ | ≵ | ≵ | ≵ | \ngtrsim | not greater, similar |
| U+02276 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | <i>‰</i> | \$ | \$ | \leq | \lessgtr ^(a) | less, greater |
| U+02277 | \geq | > | > | > | \geq | ≥ | > | > | 1 | ≥ | > | \gtrless(a) | greater, less |
| U+02278 | | * | * | \$ | \$ | \$ | * | \$ | \$ | \$ | \$ | \nlessgtr | not less, greater |
| U+02279 | * | ₩ ₩₩ | * | M N ** | ≱ | W W ★ ★ | ¥ | ¥ | ≸ | ≱ | * | \ngtrless | not greater, less |
| U+0227A | \prec | ~ | ~ | ~ | ~ | < | \prec | \prec | ~ | ~ | \prec | \prec ^(p) | precedes |
| U+0227B | > | > | > | > | > | > | <u></u> | , | > | > | , _ | \succ ^(p) | succeeds |
| U+0227C | , ≼ | <i>,</i> ≼ | ≼ | \leq | ≼ | \leq | , ≼ | , ≼ | · ≼ | ≼ | , ≼ | \preccurlyeq(a) | precedes, curly equals |
| U+0227D | > | > | > | > S | ¥ | > | > | > | × | <i>ĭ</i> ≽ | \ \ | \succcurlyeq ^(a) | succeeds, curly equals |
| U+0227E | $\stackrel{\cdot }{\prec}$ | $\stackrel{\sim}{\preceq}$ | ≾ | ≾ | ≾ | , ≾ | $\stackrel{\cdot}{\precsim}$ | ≾ | ∠ | $\stackrel{\sim}{\preceq}$ | ≾ | \precsim(a) | precedes, similar |
| U+0227F | \sim | ~ ≿ | ~ ≿ | ~ ≿ | ≿ | ≿ | | ~ ≿ ≈ | | | ~ ≿ | \succsim ^(a) | succeeds, similar |
| U+02280 | \sim | ~ | $\stackrel{\sim}{\not\leftarrow}$ | ~ | ~ | ~ ≮ | <i>≿</i> | $\stackrel{\sim}{\!$ | ≿ ⊀ | ≿ ⊀ | ~ K | \nprec(a) | not precedes |
| U+02281 | ¥ | * | 7 | * | * | <i>'</i> . ≯ | <i>Y</i> | * | * | <i>X</i> | γ γ | \nsucc ^(a) | not succeeds |
| U+02282 | <i>"</i> | <i>1</i> ⊂ | <i>¹</i> ⊂ | <i>1</i> ⊂ | <i>¹</i> ⊂ | ~ C | <i>"</i> | \subset | <i>¹</i> ⊂ | <i>"</i> | <i>"</i> | \subset ^(p) | subset or is implied by |
| U+02283 | | \supset | \supset | \supset | \supset | \sim | \supset | \supset | \supset | \supset | \supset | \supset ^(p) | superset or implies |
| U+02284 | <i></i> | ⊄ | ⊄ | _ ⊄ | <i>_</i> | ⊄ | <i>_</i> | ⊄ | <i>_</i> | | _ ⊄ | \nsubset | not subset, variant [slash nega- |
| U+02285 | ∀ | ≠ <i>⊅</i> | ≠ <i>⊅</i> | <i>y</i> | <i>≠</i> | ≠ | <i>y</i> - | ⊬ ⊅ | <i>∓</i> | ≠ | ≠ | \nsupset | tion] not superset, variant [slash |
| U+02286 | Ψ — | | | | _ | | | | | | | \subseteq ^(p) | negation] |
| | 7 | \subseteq | 7 | \subseteq | \subseteq | _ | \subseteq | J L | \subseteq | \subseteq | \subseteq | =, , | subset, equals |
| U+02287 | $\stackrel{\scriptstyle \sim}{\scriptscriptstyle \leftarrow}$ | ∠ | <u> </u> | _ | <u>_</u> | ≟ | $\stackrel{ ightharpoonup}{\leftarrow}$ | ∠ | 2 ₫ | ⊇ | \supseteq | \supseteq ^(p) | superset, equals |
| U+02288 | - | ⊭ | ⊭ | ⊭ | ≠ | ¥ | \neq | ¥ | ⊈ | ⊈ | ⊈ | \nsubseteq ^(a) | not subset, equals |
| U+02289 | | | | | | | | ₽ | ⊉ | ⊉ | ⊉ | \nsupseteq(a) | not superset, equals |
| U+0228A | <u>_</u> | <u> </u> | 7 | <u> </u> | 7 | <u>_</u> | <u> </u> | <u> </u> | ⊊ | ⊊ | ⊊ | \subsetneq(a) | subset, not equals |
| U+0228B | \neq | | 7 | \neq | \neq | | \neq | | ⊋ | ⊋ | ⊋ | \supsetneq(a) | superset, not equals |
| U+0228F | | | | | | | | | | | | \sqsubset | square subset |

| | т | 37 | | | | | 3 T | ** | | | | | D |
|------------------|----------------------------------|----------------------------|----------------------------|--------------------|------------------|-----------------------|-------------------------|---|---------------------|---------------------|---------------------|---------------------------------------|---|
| USV | L | X | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
| U+0 22 90 | | | | | | | | \supset | \Box | | \Box | \sqsupset | square superset |
| U+02291 | | | | | | | | ⊑ | | | | \sqsubseteq ^(p) | square subset, equals |
| U+02292 | | \Box | \Box | \supseteq | | ⊒ | | \supseteq | \Box | \Box | \Box | $\sqsupseteq^{(p)}$ | square superset, equals |
| U+022A2 | \vdash | \vdash | \vdash | \vdash | \vdash | | \vdash | \vdash | \vdash | \vdash | \vdash | $Vdash^{(p)}$ | vertical, dash |
| U+022A3 | \dashv | \dashv | \dashv | \dashv | \dashv | | \dashv | \dashv | \dashv | \dashv | \dashv | $\operatorname{\mathtt{dashv}}^{(p)}$ | dash, vertical |
| U+022A6 | H | Н | F | \vdash | H | | F | F | F | F | F | \assert | assertion (vertical, short dash) |
| U+022A7 | F | F | F | F | F | | F | F | F | þ | ŧ | ${\tt m{models}}^{(p)}$ | models (vertical, short double dash) |
| U+022A8 | F | Ħ | F | F | F | | F | F | F | F | F | $\vDash^{(a)}$ | vertical, double dash |
| U+022A9 | \Vdash | ⊩ | ⊩ | \parallel | ⊩ | | ⊩ | ⊩ | \Vdash | \Vdash | ⊩ | ${f Vdash}^{(a)}$ | double vertical, dash |
| U+022AA | $\parallel \vdash$ | III | $\parallel \vdash$ | $\parallel \vdash$ | \parallel | | III- | $\parallel \vdash$ | $\parallel \vdash$ | \parallel | $\parallel \vdash$ | $\Vvdash^{(a)}$ | triple vertical, dash |
| U+022AB | ⊫ | ⊫ | ⊫ | ⊫ | ⊫ | | l⊨ | ⊫ | ⊫ | ⊫ | Ι⊨ | \VDash | double vert, double dash |
| U+022AC | ¥ | $\not\vdash$ | $\not\vdash$ | ¥ | H | | ¥ | ¥ | $\not\vdash$ | ¥ | ¥ | $\nvdash^{(a)}$ | not vertical, dash |
| U+022AD | ¥ | × | ¥ | × | Ħ | | $\not\models$ | × | ¥ | ¥ | ¥ | $\nvDash^{(a)}$ | not vertical, double dash |
| U+022AE | \mathbb{X} | \mathbb{H} | \mathbb{F} | <u> </u> | Ϊ / | | X- | ¥ | } | ¥ | \mathbb{F} | $\nVdash^{(a)}$ | not double vertical, dash |
| U+022AF | Æ | ¥ | ¥ | Æ | i# | | Æ | ¥ | ¥ | ⊯ | ¥ | $\nVDash^{(a)}$ | not double vert, double dash |
| U+022B0 | | 7 | 3 | | | | \prec | | | | | \prurel | element precedes under relation |
| U+022B1 | | 2 | ے | | | | <u> </u> | | | | | \scurel | succeeds under relation |
| U+022B2 | \triangleleft | 4 | 4 | \triangleleft | \triangleleft | | \triangleleft | ⊲ | \triangleleft | \triangleleft | ◁ | \vartriangleleft(a) | left triangle, open, variant |
| U+022B3 | \triangleright | > | → | > | \triangleright | | \triangleright | , ⊳ | \triangleright | \triangleright | > | \vartriangleright ^(a) | right triangle, open, variant |
| U+022B4 | \leq | ⊴ | ⊴ | ⊴ | ⊴ | | ⊴ | ⊴ | ⊴ | ⊴ | ⊴ | \trianglelefteq(a) | left triangle, equals |
| U+022B5 | \triangleright | <u></u> | | \triangleright | \triangleright | | | | | ≥ | 1 ≥ | \trianglerighteq(a) | right triangle, equals |
| U+022B6 | <u>∽</u> | <u>−</u> | <u>−</u> | 0-0 | <u> </u> | | <u>_</u> | <u>_</u> | <u>~</u> | <u>−</u> | <u>⊬</u> | \origof | original of |
| U+022B7 | ••• | ••• | ••• | -0 | ••• | | ••• | ••• | ••• | ••• | ••• | \imageof | image of |
| U+022B7 | - ○ | → | ⊸ | - ○ | - ○ | | ⊸ | ⊸ | ⊸ | ⊸ | ⊸ | \multimap(a) | /multimap a: |
| U+022C8 | M | M | M | M | M | | M | M | M | M | M | \bowtie ^(p) | bowtie |
| U+022CD | 2 | > | ~ ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | \backsimeq(a) | reverse similar, equals |
| | — © | _ @ | _ @ | _ © | _ © | | _ © | <u> </u> | _ @ | − | <u> </u> | \Subset(a) | double subset |
| U+022D0 | © | © | © | | | | <u></u> | | | ⋑ | | \Supset ^(a) | |
| U+022D1 | ٧ | | | | | | | ф | | <u></u> | ф | | double superset |
| U+022D4 | ш | Т | Щ | ш | ш | | Щ | | ф | | | \pitchfork(a) | pitchfork |
| U+022D5 | # | # | # | # | # | | # | # | # | # | # | \equalparallel | parallel, equal; equal or parallel |
| U+022D6 | < | < . | < | < | < | < . | < | < | < . | < . | < | \lessdot ^(a) | less than, with dot |
| U+022D7 | > | > | > | > | > | > | > | > | > | > | > | \gtrdot(a) | greater than, with dot |
| U+022D8 | | | | *** | <<< | *** | *** | *** | *** | *** | ~ | \111 ^(a) | /ll /lll /llless r: triple less-than |
| U+022D9 | <i>>>></i> | | | | | | <i>>>></i> | >>> | >>> | <i>>>></i> | <i>>>></i> | \ggg(a) | /ggg /gg /gggtr r: triple greater-than |
| U+022DA | \geq | \geq | \leq | \geq | \geq | ⋛ | \geq | ⋛ | \geq | \geq | ⋛ | \lesseqgtr ^(a) | less, equals, greater |
| U+022DB | \leq | VI VIV VIV | VI AI AIVVIA | AI AIV VIA | AI AIV VIA | VI VI VIV VIV | VI NINVIN | VI AIAIVVIA | VIVVIV | AI AIV VIA | VI VIV VIV | \gtreqless ^(a) | greater, equals, less |
| U+022DC | \leq | < | < | \leq | | < | \leq | < | | | | \eqless | equal-or-less |
| U+022DD | \geq | > | | > | \equiv | > | \geq | > | > | > | > | \eqgtr | equal-or-greater |
| U+022DE | \Rightarrow | \neq | \neq | \neq | \neq | < | \Rightarrow | $\stackrel{\scriptstyle <}{\prec}$ | $ \leqslant $ | \neq | \Rightarrow | \curlyeqprec(a) | curly equals, precedes |
| U+022DF | \succ | \geqslant | \geqslant | \geqslant | \geqslant | > | \succeq | \succ | \geqslant | \geqslant | \succcurlyeq | \curlyeqsucc ^(a) | curly equals, succeeds |
| U+022E0 | \neq | ≭≭ | ≭≭ | * | ≰ | ≰ | * | \sharp | ≰ | ≰ | \neq | \npreccurlyeq | not precedes, curly equals |
| U+022E1 | \neq | $\not\succeq$ | * | * * | * | * | $\not =$ | * | * | * | $\not\equiv$ | \nsucccurlyeq | not succeeds, curly equals |
| U+022E2 | $\not\sqsubseteq$ | ⊭ | ⊭ | ⋢ | ⋢ | ⊭ | ⊭ | ⊭ | ⋢ | ⊈ | ⊭ | \nsqsubseteq | not, square subset, equals |
| U+022E3 | ⊉ | ⊉ | ⊉ | ⊉ | | ⊉ | $\not\equiv$ | \overline{A} | ⊉ | ⊉ | ≠ | \nsqsupseteq | not, square superset, equals |
| U+022E4 | Ţ | Ţ | Ţ | Ę | Ţ | Ţ | Ę | Ę | 二 | Ę | - | \sqsubsetneq | square subset, not equals |
| U+022E5 | $\stackrel{\leftarrow}{\supset}$ | ₩ ₩ ₩ ₩ ₩ | まるされます | | ₽₽₽₩≈ | ≠ ∓ ∓ ∴ ∴ | M M M III II II II | *************************************** | ⊋ | ⊋ | ≠ | \sqsupsetneq | square superset, not equals |
| U+022E6 | <i>\(\left\)</i> | <i>\(\frac{\pi}{2} \)</i> | <i>\(\frac{\pi}{2} \)</i> | <u></u> | ≠ ≤ | ≤ | <i>\(\frac{1}{5}\)</i> | <u></u> | ⋦ | ≠ ≲ | ≠ ≲ | \lnsim ^(a) | less, not similar |
| U+022E7 | ∻ ≥ | <i>≁</i> > | <i>≁</i> > | > | ~ > | > | ~ > | <i>≯</i> > | ≉ | ≈ >≈ | <i>∓</i> ⋧ | \gnsim ^(a) | greater, not similar |
| U+022E7 | <i>≈</i> ≾ | ≁ ≺ | ≁ ≺ | * * | <i>∓</i> ≴ | <i>≈</i> ≾ | $\overset{\sim}{\prec}$ | $^{\sim}$ | ≉≾ | ≈ ≾ | ≈ ⋨ | \precnsim ^(a) | precedes, not similar |
| C UZZEU | × | N | γ ⁱ | N | 40 | AU. | × | N. | <i>~</i> ≥ | ~∪ | ~ | ,L100HD1H | precedes, not similar |

| | L | X | S | P | D | F | N | Н | | C | R | Macro | Description |
|--------------------|-----------------|-----------------|-----------------------|-----------------|---------------|---------|------------------------|----------------|----------------|----------------|------------------|--------------------------|--|
| USV | | | | | | | | | | | | | * |
| U+022E9 | \(\times_{\pi} | } | <i>≯</i> ⁴ | <i>≈</i> | <i></i> ≈ | \$ | ≈ | 7 | ⋧ | ≿ | ⋩ | \succnsim ^(a) | succeeds, not similar |
| U+022EA | $\not \Delta$ | A | A | \triangleleft | 4 | | $\not \Delta$ | A | ≠ | 4 | A | \nvartriangleleft | not left triangle |
| U+022EB | > | × | × | \not | ½ | | > | × | ₩. | > | \triangleright | \nvartriangleright | not right triangle |
| U+022EC | \$ | ⊉ | ⊉ | ⊉ | ⊉ | | \$ | ⊉ | ⊉ | ⊉ | ≰ | \ntrianglelefteq(a) | not left triangle, equals |
| U+022ED | ⊭ | ⊭ | ⋭ | ⊭ | ⋭ | | ⊭ | ≱ | ⊭ | ⊉ | ⊭ | \ntrianglerighteq(a) | not right triangle, equals |
| U+022EE | | | | | | | : | : | : | | | \vdots ^(p) | vertical ellipsis |
| U+022F0 | | | | | ••• | | \mathcal{L}^{\prime} | | | | | \adots | three dots, ascending |
| U+022F1 | ** | *. | *. | ٠. | • | | 14. | ٠. | ٠. | ٠. | • | \ddots ^(p) | three dots, descending |
| U+022F2 | | € | € | | | | \in | € | | | | \disin | element of with long horizontal stroke |
| U+022F3 | | ⋳ | ⋳ | | | | \in | ⋳ | | | | \varisins | element of with vertical bar at end of horizontal stroke |
| U+022F4 | | e | ⋳ | | | | ⋳ | ⋳ | | | | \isins | small element of with vertical bar at end of horizontal stroke |
| U+022F5 | | Ė | Ė | | | | Ė | Ė | | | | \isindot | element of with dot above |
| U+022F6 | | ⋷ | ⋶ | | | | \equiv | ⋶ | | | | \varisinobar | element of with overbar |
| U+022F7 | | € | € | | | | ⋷ | ⋷ | | | | \isinobar | small element of with overbar |
| U+022F8 | | ⋸ | ⋸ | | | | \subseteq | \subseteq | | | | \isinvb | element of with underbar |
| U+022F9 | | € | € | | | | € | € | | | | \isinE | element of with two horizontal strokes |
| U+022FA | | ⋺ | ⋺ | | | | ⋺ | \Rightarrow | | | | \nisd | contains with long horizontal stroke |
| U+O22FB | | Ð | Ð | | | | ∋ | Ð | | | | \varnis | contains with vertical bar at end of horizontal stroke |
| U+022FC | | Ð | Ð | | | | Ð | Ð | | | | \nis | small contains with vertical bar at end of horizontal stroke |
| U+022FD | | ⋾ | ⋾ | | | | ⋽ | ⋾ | | | | \varniobar | contains with overbar |
| U+022FE | | ⋾ | ⋾ | | | | ⋾ | ⋾ | | | | \niobar | small contains with overbar |
| U+022FF | | | Е | | | | Е | Е | | | | \bagmember | z notation bag membership |
| U+02322 | $\overline{}$ | $\widehat{}$ | | $\overline{}$ | $\overline{}$ | | $\overline{}$ | $\overline{}$ | | $\overline{}$ | | $\frac{p}{}$ | down curve |
| U+02323 | $\overline{}$ | $\overline{}$ | $\overline{}$ | $\overline{}$ | $\overline{}$ | | $\overline{}$ | \cup |) | $\overline{}$ | $\overline{}$ | $\sl_p(p)$ | up curve |
| U+0233F | | + | + | | | | + | | | | | \APLnotslash | solidus, bar through (apl functional symbol slash bar) |
| U+025B5 | | Δ | Δ | | | | Δ | | Δ | Δ | Δ | $\vartriangle^{(a)}$ | /triangle - up triangle, open |
| U+027C2 | \perp | \perp | \perp | \perp | \perp | \perp | \perp | \perp | \perp | \perp | \perp | \perp ^(p) | perpendicular |
| u+027c8 | | \C | \C | | | | $\$ | <u>/</u> ⊂ | | | | \bsolhsub | reverse solidus preceding sub- set |
| U+0 27 C9 | |) / | \supset / | | | | \supset / | $\supset /$ | | | | \suphsol | superset preceding solidus |
| U+027D2 | | Ψ | Ψ | | | | Ψ | Ψ | | | | \upin | element of opening upwards |
| U+027D3 | | <u></u> | _ | | | | | 4 | | | | \pullback | lower right corner with dot |
| U+027D4 | | • | • | | | | · | F | | | | \pushout | upper left corner with dot |
| U+027DA | ≠⊨ | $\dashv \vDash$ | $\Rightarrow \models$ | ≠ | # | | ≓ | ≓ | ⊭ | ⊭ | # | \DashVDash | left and right double turnstile |
| U+027DB | $\dashv\vdash$ | $\dashv\vdash$ | $\dashv\vdash$ | $\dashv\vdash$ | + | | $\dashv\vdash$ | $\dashv\vdash$ | $\dashv\vdash$ | $\dashv\vdash$ | + | \dashVdash | left and right tack |
| U+027DC | <u> </u> | o — | <u> </u> | 0— | 0— | | 0— | <u> </u> | 0— | 0— | 0— | \multimapinv | left multimap |
| u+027DD | \vdash | | <u> </u> | <u> </u> | <u> </u> | | - | \vdash | <u> </u> | <u> </u> | <u> </u> | \vlongdash | long left tack |
| u+027DE | $\overline{+}$ | | | \dashv | \rightarrow | | _ | \dashv | \neg | - | \rightarrow | \longdashv | long right tack |
| U+027DF | | Ŷ | Ŷ | | | | ያ ່ | ĵ' | | | | \cirbot | up tack with circle above |
| U+027F0 | | 1 | 1 | | | ⋒ | <u> </u> | 1 | | | | \UUparrow | upwards quadruple arrow |
| U+027F1 | | ₩ | 1 | | | ₩ | ₩ | ∰ !!!! | | | | \DDownarrow | downwards quadruple arrow |
| U+027F2 | | C | Č | | | 5 | 9 | 4 | | | | \acwgapcirclearrow | anticlockwise gapped circle arrow |
| H+0255 | | C | a | | | C | 0 | (7 | | | | \cwgapcirclearrow | |
| U+027F3 U+027F4 | \oplus | ⊕ | → | \oplus | ⊕ → | ↔ | ⊕ | ⊕ | ⊕ | ⊕ → | \bigoplus | \rightarrowonoplus | clockwise gapped circle arrow right arrow with circled plus |
| | | | | | | | | _ | | | | = | • |

| USV | L | Χ | S | Р | D | F | N | Н | E | С | R | Macro | Description |
|------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------------|---|
| U+027F5 | \leftarrow | | | ← | \leftarrow | ← | \leftarrow | ← | ← | \leftarrow | | \longleftarrow ^(p) | long leftwards arrow |
| U+027F6 | \longrightarrow | $\label{longright} \$ | long rightwards arrow |
| U+027F7 | \longleftrightarrow | $\verb \longleftrightarrow ^{(p)}$ | long left right arrow |
| U+027F8 | \Leftarrow | $\Longleftarrow^{(p)}$ | long leftwards double arrow |
| U+027F9 | \Longrightarrow | $\Longrightarrow^{(p)}$ | long rightwards double arrow |
| U+027FA | \iff | \Leftrightarrow | \iff | \iff | \iff | $\Longleftrightarrow^{(p)}$ | long left right double arrow |
| U+027FB | \leftarrow | \leftarrow | \leftarrow | \leftarrow | \leftarrow | \leftarrow | \longleftarrow | \leftarrow | \leftarrow | ←— | \leftarrow | \longmapsfrom | long leftwards arrow from bar |
| U+027FC | \longmapsto | \longmapsto | \longmapsto | \longmapsto | \longmapsto | \longrightarrow | \longmapsto | \longmapsto | \longmapsto | \longmapsto | \longmapsto | $\label{longmapsto} \$ | long rightwards arrow from bar |
| U+027FD | \iff | \iff | \iff | \iff | ı ← | \iff | \iff | \rightleftarrows | \leftarrow | \iff | \iff | \Longmapsfrom | long leftwards double arrow from bar |
| U+027FE | \Longrightarrow | \Longrightarrow | \Longrightarrow | \Longrightarrow | \mapsto | \Longrightarrow | \Longrightarrow | \Rightarrow | \Longrightarrow | \Longrightarrow | \Longrightarrow | \Longmapsto | long rightwards double arrow from bar |
| U+027FF | ₩ | ~~~ | ~~~ | -vv> | ~~ > | ^ww > | ₩ | ~~ | ~^^ | ~~ | ~~ | \longrightsquigarrow | long rightwards squiggle arrow |
| U+02900 | | - >> | +>> | | | +>> | +>> | - >> | | | | \nvtwoheadrightarrow | rightwards two-headed arrow with vertical stroke |
| U+0 2 901 | | >> | 1 >> | | | #>> | #* | >> | | | | \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 | \rightleftarrows | \rightleftarrows | \rightleftarrows | \rightleftarrows | \rightleftarrows | Ħ | \rightleftarrows | ⇍ | \Box | \rightleftarrows | \Leftrightarrow | \Mapsfrom | leftwards double arrow from bar |
| U+02907 | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | ⊨ | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Rightarrow | \Mapsto | rightwards double arrow from bar |
| U+02908 | | ‡ | ‡ | | | ‡ | ‡ | ‡ | | | | \downarrowbarred | downwards arrow with horizontal stroke |
| U+0 2 909 | | | | | | | | † | | | | \uparrowbarred | upwards arrow with horizontal stroke |
| U+0290A | | 1 | \blacksquare | | | 1 | $\uparrow \uparrow$ | $\uparrow \uparrow$ | | | | \Uuparrow | upwards triple arrow |
| U+0290B | | ₩ | Ψ | | | ₩ | \Downarrow | # | | | | \Ddownarrow | downwards triple arrow |
| U+0290C | | ←- | ←- | | | | < | ← - | | | | \leftbkarrow | leftwards double dash arrow |
| U+0290D | | \rightarrow | \rightarrow | | | | \rightarrow | -> | | | | \rightbkarrow | rightwards double dash arrow |
| U+0290E | | ← | ← | | | | < | | | | | \leftdbkarrow | leftwards triple dash arrow |
| U+0290F | | > | > | | | | > | > | | | | \dbkarrow | rightwards triple dash arrow |
| U+0 29 10 | | > » | > » | | | | ≻-* | >->> | | | | \drbkarrow | rightwards two-headed triple dash arrow |
| U+0 2 911 | | > | > | | | | ···> | ••••> | | | | \rightdotarrow | rightwards arrow with dotted stem |
| U+02912 | | T | T | | | ₹ | T | Ť | | | | \baruparrow | upwards arrow to bar |
| U+02913 | | \downarrow | \downarrow | | | $\overline{\uparrow}$ | $\overline{\uparrow}$ | $\overline{\uparrow}$ | | | | \downarrowbar | downwards arrow to bar |
| U+02914 | | > → | → | | | ₩ | \rightarrowtail | ₩ | | | | \nvrightarrowtail | rightwards arrow with tail with vertical stroke |
| U+0 2 915 | | / > | > > | | | >H> | \ | ₩ | | | | \nVrightarrowtail | rightwards arrow with tail with double vertical stroke |
| U+0 2 916 | | >>> | >>> | | | >>> | >>> | >>> | | | | \twoheadrightarrowtail | rightwards two-headed arrow with tail |
| U+02917 | | } } > | } >> | | | > +>> | \ > | \ » | | | | \nvtwoheadrightarrowtail | rightwards two-headed arrow with tail with vertical stroke |
| U+02918 | | } > | > > | | | >H>> | \ \\ | > > | | | | \nVtwoheadrightarrowtail | rightwards two-headed arrow with tail with double vertical stroke |
| U+02919 | | \prec | \prec | | | \prec | \prec | \prec | | | | \lefttail | leftwards arrow-tail |

| USV | L | Χ | S | P | D | F | N | Н | E | С | R | Macro | Description |
|------------------|---|--|--|---|---|-------------|---|--|---------------|---|---|---------------------------|--|
| U+0291A | | — | — | | | > | \succ | > | | | | \righttail | rightwards arrow-tail |
| U+0291B | | ≪ | ≪ | | | ≪ | | | | | | \leftdbltail | leftwards double arrow-tail |
| U+0291C | | > | > | | | > | > — | > | | | | \rightdbltail | rightwards double arrow-tail |
| U+0 2 91D | | •← | •← | | | | •← | * ← | | | | \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+0 292 0 | | →• | →• | | | | →• | → • | | | | \barrightarrowdiamond | rightwards arrow from bar to black diamond |
| U+02921 | | 1 | 1 | | | | 7 | 1/2 | | | | \nwsearrow | north west and south east arrow |
| U+02922 | | 1 | | | | | Z | Z | | | | \neswarrow | north east and south west arrow |
| U+02923 | | 5 | 5 | | | | 5 | 5 | | | | \hknwarrow | north west arrow with hook |
| U+02924 | | 7 | 7 | | | | 7 | 2 | | | | \hknearrow | north east arrow with hook |
| U+02925 | | 5 | 2 | | | | S ₂ | 2 | | | | \hksearrow | south east arrow with hook |
| U+02926 | | 2 | 2 | | | | | | | | | \hkswarrow | south west arrow with hook |
| U+02927 | | X | X | | | | X | X | | | | \tona | north west arrow and north east arrow |
| U+02928 | | X | X | | | | X | X | | | | \toea | north east arrow and south east arrow |
| U+02929 | | X | X | | | | \times | X | | | | \tosa | south east arrow and south west arrow |
| U+0292A | | X | X | | | | \boxtimes | × | | | | \towa | south west arrow and north west arrow |
| U+02933 | | \rightarrow | \rightarrow | | | | \rightarrow | \rightarrow | \rightarrow | | | \rightcurvedarrow | wave arrow pointing directly right |
| U+02936 | | ₽ | Ų | | | | ↓ | \leftarrow | ل | | | \leftdowncurvedarrow | arrow pointing downwards then curving leftwards |
| U+02937 | | 4 | 4 | | | | \ | \hookrightarrow | <u>_</u> | | | \rightdowncurvedarrow | arrow pointing downwards then curving rightwards |
| u+02938 | | 2 | 2 | | | | Ų | Ş | | | | \cwrightarcarrow | right-side arc clockwise arrow |
| U+02939 | | (| (| | | | ý | Ç | | | | \acwleftarcarrow | left-side arc anticlockwise arrow |
| U+0293A | | | | | | | 1 | ~ | | | | \acwoverarcarrow | top arc anticlockwise arrow |
| и+0293в | | 9 | 9 | | | | G | Ų. | | | | \acwunderarcarrow | bottom arc anticlockwise arrow |
| U+0 2 93C | | ~ | ~ | | | | ~ | ~ | | | | \curvearrowrightminus | top arc clockwise arrow with minus |
| U+0293D | | P | P | | | | A | 乎 | | | | \curvearrowleftplus | top arc anticlockwise arrow with plus |
| U+0293E | | D | N | | | | N | رپ | | | | \cwundercurvearrow | lower right semicircular clock- wise arrow |
| U+0293F | | G | G | | | | G | (4 | | | | \ccwundercurvearrow | lower left semicircular anti- clockwise arrow |
| u+0 2 940 | | 0 | 0 | | | | Ó | Q | | | | \acwcirclearrow | anticlockwise closed circle arrow |
| U+0 2 941 | | \Diamond | \Diamond | | | | Q | Φ | | | | \cwcirclearrow | clockwise closed circle arrow |
| U+02942 | | $ \leftarrow $ | $ \leftarrow $ | | | | \rightleftharpoons | ⇄ | | | | \rightarrowshortleftarrow | rightwards arrow above short leftwards arrow |
| U+02943 | | $\stackrel{\longleftarrow}{\rightarrow}$ | $\stackrel{\longleftarrow}{\rightarrow}$ | | | | $\stackrel{\longleftarrow}{\leftarrow}$ | $\stackrel{\longleftarrow}{\rightarrow}$ | | | | \leftarrowshortrightarrow | leftwards arrow above short rightwards arrow |
| U+0 2 944 | | $\stackrel{\rightarrow}{\leftarrow}$ | $\stackrel{\rightarrow}{\leftarrow}$ | | | | $\stackrel{\longleftarrow}{\leftarrow}$ | $\stackrel{\Rightarrow}{\leftarrow}$ | | | | \shortrightarrowleftarrow | short rightwards arrow above leftwards arrow |
| U+02945 | | + > | + > | | | | + > | ∓ | | | | \rightarrowplus | rightwards arrow with plus below |
| u+02946 | | | | | | | + | + | | | | \leftarrowplus | leftwards arrow with plus below |

| USV | L | Χ | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|---|----------------|----------------|---|---|---------------|----------------------|---------------|---|---|---|---------------------------|---|
| U+02947 | | ** | ** | | | | *> | | | | | \rightarrowx | rightwards arrow through x |
| u+02948 | | ↔ | ↔ | | | | <0> | ↔ | | | | \leftrightarrowcircle | left right arrow through small circle |
| u+02949 | | \$ | \$ | | | | * | \$ | | | | \twoheaduparrowcircle | upwards two-headed arrow from small circle |
| u+0294A | | \leftarrow | | | | 4 | / | | | | | \leftrightharpoonupdown | left barb up right barb down harpoon |
| U+0294B | | | | | | 4 | \leftarrow | ← | | | | \leftrightharpoondownup | left barb down right barb up harpoon |
| U+0 2 94C | | 1 | 1 | | | 1 | 1 | 1 | | | | \updownharpoonrightleft | up barb right down barb left harpoon |
| U+0 2 94D | | 1 | 1 | | | 1 | 1 | 1 | | | | \updownharpoonleftright | up barb left down barb right harpoon |
| U+0294E | | _ | | | | 4 | ightharpoonup | 4 | | | | \leftrightharpoonupup | left barb up right barb up har- poon |
| u+0294f | | t | t | | | t | | ţ | | | | \updownharpoonrightright | up barb right down barb right harpoon |
| u+02950 | | $\overline{}$ | $\overline{}$ | | | $\overline{}$ | $\overline{}$ | $\overline{}$ | | | | \leftrightharpoondowndown | left barb down right barb down harpoon |
| U+02951 | | 1 | 1 | | | 1 | 1 | 1 | | | | \updownharpoonleftleft | up barb left down barb left harpoon |
| U+02952 | | | | | | | | I— | | | | \barleftharpoonup | leftwards harpoon with barb up to bar |
| U+02953 | | \ I | \ I | | | | | <u> </u> | | | | \rightharpoonupbar | rightwards harpoon with barb up to bar |
| u+02954 | | Ŧ | 7 | | | | 下 | 1 | | | | \barupharpoonright | upwards harpoon with barb right to bar |
| U+02955 | | Ţ | Ţ | | | | <u> </u> | <u>}</u> | | | | \downharpoonrightbar | downwards harpoon with barb right to bar |
| u+02956 | | ₩ | | | | | | I— | | | | \barleftharpoondown | leftwards harpoon with barb down to bar |
| u+02957 | | → | | | | | → | →I | | | | \rightharpoondownbar | rightwards harpoon with barb down to bar |
| u+02958 | | 1 | 1 | | | | 1 | 1 | | | | \barupharpoonleft | upwards harpoon with barb left to bar |
| U+02959 | | 1 | 1 | | | | 1 | 1 | | | | \downharpoonleftbar | downwards harpoon with barb left to bar |
| u+0295A | | 4 | 4 | | | 4 | 4 | \leftarrow | | | | \leftharpoonupbar | leftwards harpoon with barb up from bar |
| U+0295B | | \vdash | \vdash | | | ⊨ | \vdash | ightharpoonup | | | | \barrightharpoonup | rightwards harpoon with barb up from bar |
| U+0295C | | 1 | 1 | | | 1 | 1 | 1 | | | | \upharpoonrightbar | upwards harpoon with barb right from bar |
| U+0295D | | Ţ | Ţ | | | Ţ | T | Ţ | | | | \bardownharpoonright | downwards harpoon with barb right from bar |
| U+0295E | | $\overline{}$ | $\overline{}$ | | | \forall | \leftarrow | \leftarrow | | | | \leftharpoondownbar | leftwards harpoon with barb down from bar |
| U+0295F | | \vdash | \vdash | | | \vdash | \vdash | \vdash | | | | \barrightharpoondown | rightwards harpoon with barb down from bar |
| u+0 2 960 | | 1 | 1 | | | 1 | 1 | 1 | | | | \upharpoonleftbar | upwards harpoon with barb left from bar |
| u+02961 | | 1 | 1 | | | 1 | 1 | 1 | | | | \bardownharpoonleft | downwards harpoon with barb left from bar |
| U+02962 | | = | = | | | | | = | | | | \leftharpoonsupdown | leftwards harpoon with barb up above leftwards harpoon with barb down |
| u+02963 | | 1 | 1 | | | | 1 | 1 | | | | \upharpoonsleftright | upwards harpoon with barb left beside upwards harpoon with barb right |

| USV | L | X | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|------------------|---|----------------------|-------------------------------|---|---|----|------------------------------------|-----------------|---|---|---|--------------------------|--|
| u+02964 | | \Rightarrow | \Rightarrow | | | | \Rightarrow | \Rightarrow | | | | \rightharpoonsupdown | rightwards harpoon with barb up above rightwards harpoon with barb down |
| u+02965 | | # | # | | | | ₩ | 1 | | | | \downharpoonsleftright | downwards harpoon with barb left beside downwards harpoon with barb right |
| u+02966 | | = | $\stackrel{\longleftarrow}{}$ | | | | | = | | | | \leftrightharpoonsup | leftwards harpoon with barb up above rightwards harpoon with barb up |
| u+02967 | | | | | | | <u></u> | <u>=</u> | | | | \leftrightharpoonsdown | leftwards harpoon with barb down above rightwards har- poon with barb down |
| u+02968 | | = | = | | | | | 立 | | | | \rightleftharpoonsup | rightwards harpoon with barb up above leftwards harpoon with barb up |
| u+02969 | | = | = | | | | $\overline{\leftarrow}$ | = | | | | \rightleftharpoonsdown | rightwards harpoon with barb down above leftwards harpoon with barb down |
| u+0 2 96a | | = | = | | | | <u></u> | = | | | | \leftharpoonupdash | leftwards harpoon with barb up above long dash |
| u+0296в | | = | = | | | | $\overline{}$ | = | | | | \dashleftharpoondown | leftwards harpoon with barb down below long dash |
| u+0 2 96c | | <u></u> | \Rightarrow | | | | $\stackrel{\rightharpoonup}{=}$ | \Rightarrow | | | | \rightharpoonupdash | rightwards harpoon with barb up above long dash |
| U+0 2 96D | | = | = | | | | = | \Rightarrow | | | | \dashrightharpoondown | rightwards harpoon with barb down below long dash |
| u+0296E | | 11 | 11 | | | 11 | 1 | 11 | | | | \updownharpoonsleftright | upwards harpoon with barb left beside downwards harpoon with barb right |
| u+0296f | | 11 | 1 | | | 11 | 1 | 11 | | | | \downupharpoonsleftright | downwards harpoon with barb left beside upwards harpoon with barb right |
| U+0 2 970 | | _ | _ | | | | _ | \supset | | | | \rightimply | right double arrow with rounded head |
| U+02971 | | ⇒ | ⇒ | | | | \Longrightarrow | ⇛ | | | | \equalrightarrow | equals sign above rightwards arrow |
| U+02972 | | $\xrightarrow{\sim}$ | $\xrightarrow{\sim}$ | | | | $\stackrel{\sim}{\longrightarrow}$ | ~→ | | | | \similarrightarrow | tilde operator above rightwards |
| U+0 2 973 | | <= | < ~ | | | | \leftarrow | ←~ | | | | \leftarrowsimilar | leftwards arrow above tilde operator |
| U+0 2 974 | | \Rightarrow | \Rightarrow | | | | \Rightarrow | ~ → | | | | \rightarrowsimilar | rightwards arrow above tilde operator |
| U+0 2 975 | | ≈ | ≈ | | | | \approx | ≅→ | | | | \rightarrowapprox | rightwards arrow above almost equal to |
| u+02976 | | ≨ | ≨ | | | | < | ≼ | | | | \ltlarr | less-than above leftwards arrow |
| U+02977 | | \ | \(| | | | \leftarrow | ₩ | | | | \leftarrowless | leftwards arrow through less- than |
| u+02978 | | ≥ | ≥ | | | | \Rightarrow | \geq | | | | \gtrarr | greater-than above rightwards |
| u+02979 | | \subseteq | \subseteq | | | | \hookrightarrow | \subseteq | | | | \subrarr | subset above rightwards arrow |
| | | € | ← | | | | ← | € | | | | \leftarrowsubset | leftwards arrow through subset |
| U+0297A | | | | | | | √⊃ | ₽ | | | | | - |
| U+0297B | | ⊋ | ₹ | | | | • | | | | | \suplarr | superset above leftwards arrow |
| U+0297C | | | , — | | | | _ | | | | | \leftfishtail | left fish tail |
| U+0297D | | → | → | | | | 3 | 7 | | | | \rightfishtail | right fish tail |
| U+0297E | | Τ | Υ | | | | Υ | T | | | | \upfishtail | up fish tail |
| U+0297F | | T | T | | | | 7 | Ψ | | | | \downfishtail | down fish tail |
| u+02982 | | 8 | 8 | | | | 00 / | 00 | | | | \typecolon | z notation type colon |
| U+029CE | | | \triangleright | | | | | \triangleleft | | | | \rtriltri | right triangle above left triangle |
| U+029CF | | \triangleleft | \triangleleft | | | | \triangleleft | \triangleleft | | | | \ltrivb | left triangle beside vertical bar |

| USV | L | Χ | S | Р | D | F | N | Н | E | С | R | Macro | Description |
|------------------|-------------|---------------------------|---------------------------|-------------|-------------|-----------|----------------------------|---------------------------|-------------|-------------|-------------|--|--|
| U+029D0 | | \triangleright | \triangleright | | | | \triangleright | \triangleright | | | | \vbrtri | vertical bar beside right triangle |
| U+029D1 | | M | M | | | | M | M | | | | \lfbowtie | left black bowtie |
| U+029D2 | | M | M | | | | M | M | | | | \rfbowtie | right black bowtie |
| U+029D3 | | H | M | | | | H | H | | | | \fbowtie | black bowtie |
| U+029D4 | | K | K | | | | K | K | | | | \lftimes | left black times |
| U+029D5 | | × | × | | | | × | × | | | | \rftimes | right black times |
| U+029DF | | ○ | ○ | | | | 0—0 | ○ | | | | \dualmap | double-ended multimap |
| U+029E1 | | 4 | 4 | | | | \leq | \triangle | | | | $\label{limits} \$ | increases as |
| U+029E3 | | # | # | | | | # | # | | | | \epars1 | equals sign and slanted parallel |
| U+0 2 9E4 | | <i></i> | # | | | | # | # | | | | \smepars1 | equals sign and slanted parallel with tilde above |
| U+029E5 | | # | # | | | | # | # | | | | \eqvpars1 | identical to and slanted parallel |
| u+029E6 | | Ħ | Ħ | | | | H | Ħ | | | | \gleichstark | gleich stark |
| u+029F4 | | \Rightarrow | \Rightarrow | | | | \Rightarrow | :→ | | | | \ruledelayed | rule-delayed |
| U+02A59 | | × | Ж | | | | X | Ж | | | | \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 dou- ble vertical stroke |
| u+02A69 | | # | # | | | | # | # | | | | \equivVvert | triple horizontal bar with triple vertical stroke |
| U+02A6A | | ~ | \sim | | | | \sim | \sim | | | | \dotsim | tilde operator with dot above |
| U+02A6B | | ∻ | ∻ | | | | \sim | $\dot{\sim}$ | | | | \simrdots | tilde operator with rising dots |
| U+02A6C | | \approx | \approx | | | | \approx | \approx | | | | \simminussim | similar minus similar |
| U+02A6D | | $\stackrel{{}_{\sim}}{=}$ | $\stackrel{{}_{\sim}}{=}$ | | | | $\stackrel{\centerdot}{=}$ | $\stackrel{\cdot}{\cong}$ | | | | \congdot | congruent with dot above |
| U+02A6E | | * | * | | | | * | * | | | | \asteq | equals with asterisk |
| U+02A6F | | ê | â | | | | ê | ê | | | | \hatapprox | almost equal to with circumflex accent |
| U+02A70 | | \cong | \cong | | | | \cong | \cong | | | | \approxeqq | approximately equal or equal to |
| U+02A73 | | \equiv | \equiv | | | | \equiv | \equiv | | | | \eqqsim | equals sign above tilde operator |
| U+02A74 | | ::= | ::= | | | | ::= | := | | | | \Coloneq | double colon equal |
| U+02A75 | | == | == | | | | == | == | | | | \eqeq | two consecutive equals signs |
| u+02A76 | | === | === | | | | === | === | | | | \eqeqeq | three consecutive equals signs |
| U+02A77 | | :: | :: | | | | Ħ | ∺ | | | | \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 | \leq | \leq | \leq | \leq | \leq | \$ | \leq | \leq | \leq | < | \leq | $\lceil \log (a) \rceil$ | less-than or slanted equal to |
| U+02A7E | \geqslant | \geqslant | \geqslant | \geqslant | \geqslant | ≥ | \geqslant | \geqslant | \geqslant | \geqslant | \geqslant | $\gen{array}{l} \gen{array}{l} \gen$ | greater-than or slanted equal to |
| U+02A7F | | € | € | | | | € | € | | | | \lesdot | less-than or slanted equal to with dot inside |
| u+02A80 | | \geqslant | ≽ | | | | ≽ | \geqslant | | | | \gesdot | greater-than or slanted equal to with dot inside |
| u+02a81 | | < | ≼ | | | | € | ≷ | | | | \lesdoto | less-than or slanted equal to with dot above |
| u+02a82 | | ≽ | ≽ | | | | ≽ | ≽ | | | | \gesdoto | greater-than or slanted equal to with dot above |
| U+02A83 | | € | € | | | | € | $\dot{\leqslant}$ | | | | \lesdotor | less-than or slanted equal to with dot above right |

| USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|---------|--------------|-----------------------|---------------------|-----------------------|-------------|---|-----------------------|-----------------------|-----------------------|----------|-------------|--|--|
| U+02A84 | | ≽ | ≽ | | | | ≽ | ≽ | | | | \gesdotol | greater-than or slanted equal to with dot above left |
| u+02a85 | ≲ | ≨ | ≨ | ≨ | ≋ | | ≨ | ≲ | ≨ | ≨ | ≨ | ${\tt lessapprox}^{({\tt a})}$ | less-than or approximate |
| u+02a86 | \gtrapprox | V≋∧≋ V∔ | V≋∧≋ V I | V≅ ∧≅ V † | ₩ № | | V≋ ∧≋ ∨+ | V≈ ∧≈ v+ | V≈ ∧≈ ∨+ | V≈ ∧≈ | ≷ | \gtrapprox ^(a) | greater-than or approximate |
| u+02a87 | ≨ | ≨ | ≨ | ≨ | ≨ | | ≨ | ≨ | ≨ | ≨ | ≨ | \label{lneq} | less-than and single-line not equal to |
| u+02A88 | \geq | ≥ | ≥ | \geq | ≥ | | \geq | ≥ | ≥ | ≥ | ≥ | $\gray \gray \gra$ | greater-than and single-line not equal to |
| u+02a89 | ≈ | ≨ | ≨ | ≨ | ≨ | | V % / % | * | ≨ | ≨ | ≨ | $\label{lnapprox}$ | less-than and not approximate |
| u+02a8a | ≈ | V % ∧ % | V%/% | V ₩ / ₩ | ≉ | | | V % ∧ % | \ # \ # | ≈ | ≩ | \gnapprox ^(a) | greater-than and not approximate |
| U+02A8B | \leq | \ <u>\</u> | <u>\</u> | \leq | \leq | | \leq | \ <u> </u> | \leq | ≦ | \leq | ${f lesseqqgtr}^{(a)}$ | less-than above double-line equal above greater-than |
| U+02A8C | \geq | \ <u> </u> | <u>></u> | \geq | N | | \geq | > ∨ | \geq | ≥ | \geq | $\verb \gtreqqless ^{(\texttt{a})}$ | greater-than above double-line equal above less-than |
| U+02A8D | | V2 ∧2 | \\ \\\ | | | | V2I /\2I | V2 \\ \2 | | | | \lsime | less-than above similar or equal |
| U+02A8E | | | | | | | | | | | | \gsime | greater-than above similar or equal |
| U+02A8F | | X ≥ | ≈ | | | | \approx | X ≥ | | | | \lsimg | less-than above similar above greater-than |
| U+02A90 | | \ <u>\</u> | ≥ | | | | > ≥< | \?\ | | | | \gsiml | greater-than above similar above less-than |
| U+02A91 | | \leq | \leq | | | | \leq | \leq | | | | \lgE | less-than above greater-than above double-line equal |
| U+02A92 | | \geqq | \geqq | | | | \geqq | \geq | | | | \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 | | /// | //// | | | | | \mathbb{N} | | | | \gesles | greater-than above slanted equal above less-than above slanted equal |
| U+02A95 | < | < | < | < | \leq | | < | < | < | \leq | \leq | $\verb \eqslantless ^{(a)}$ | slanted equal to or less-than |
| u+02a96 | \geqslant | \geqslant | \geqslant | \geqslant | \geqslant | | \geqslant | \geqslant | \geqslant | ≽ | \geqslant | $\verb \eqslantgtr ^{(a)}$ | 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 | | | | | | | <u>=</u> | | | | | \eqqless | double-line equal to or less-than |
| U+02A9A | | > | > | | | | 5 | | | | | \eqqgtr | double-line equal to or greater-than |
| U+02A9B | | | 1 | | | | | | - | | € | \eqqslantless | double-line slanted equal to or less-than |
| U+02A9C | | \ | \geqslant | | | | > | | \geqslant | \ | > | \eqqslantgtr | double-line slanted equal to or greater-than |
| U+02A9D | | \approx | \approx | | | | \lesssim | \leq | | | | \simless | similar or less-than |
| U+02A9E | | W W W | ~> ~VIII | | | | SN SV SVII | INSV2 AS | | | | \simgtr | similar or greater-than |
| U+02A9F | | | | | | | | | | | | \simlE | similar above less-than above equals sign |
| U+02AA0 | | \approx | \cong | | | | <u> </u> | \ | | | | \simgE | similar above greater-than above equals sign |
| U+02AA1 | | « | « | | | | « | \ll | | | | \Lt | double nested less-than |
| U+02AA2 | | ≽ | ≽ | | | | ≫ | ≫ | | | | \Gt | double nested greater-than |
| U+02AA3 | | \leq | \leq | | | | \leq | \leq | | | | $\verb \partialmeetcontraction \\$ | double less-than with underbar |
| U+02AA4 | | × | × | | | | × | × | | | | \glj | greater-than overlapping less- than |
| U+02AA5 | | >< | >< | | | | >< | >< | | | | \gla | greater-than beside less-than |

| U+02AA9 | USV | L | X | S | P | D | F | N | Н | Е | С | R | Macro | Description |
|--|---------|-----------|----------------------|-------------------------|--------|--------|---|-----------------------------------|------------------|-------------|----------------|----------------|--------------------------------|----------------------------------|
| U+02AA8 | U+02AA6 | | \triangleleft | \triangleleft | _ | | | \triangleleft | \Diamond | | | | \ltcc | less-than closed by curve |
| U+O2AAB | U+02AA7 | | \triangleright | \triangleright | | | | \triangleright | \Diamond | | | | \gtcc | greater-than closed by curve |
| H-02AAA | U+02AA8 | | \triangleleft | \triangleleft | | | | \triangleleft | \geqslant | | | | \lescc | |
| U+02AAB | U+02AA9 | | | \triangleright | | | | | \triangleright | | | | \gescc | |
| U+02AAC ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≤ ≥< | U+02AAA | | < | < | | | | \leq | \leq | | | | \smt | smaller than |
| U+02AAD | U+02AAB | | > | > | | | | \geq | \Rightarrow | | | | \lat | larger than |
| U+02AAD | U+02AAC | | \leq | \leq | | | | \leq | \leq | | | | \smte | smaller than or equal to |
| U+02ABB | U+02AAD | | \geq | \geq | | | | \geq | \geq | | | | \late | larger than or equal to |
| Hoolang | U+02AAE | | ≘ | ≘ | | | | $\stackrel{\frown}{=}$ | \cong | | | | \bumpeqq | equals sign with bumpy above |
| U+O2AB1 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ | U+02AAF | \preceq | \leq | \leq | \leq | \leq | | \preceq | \preceq | \preceq | \preceq | \preceq | $\preceq^{(p)}$ | |
| U+02AB2 | U+02AB0 | \succeq | ≥ | ≥ | \geq | ≥ | | \succeq | ≻ | ≥ | ≥ | ≽ | $\scalebox{succeq}^{(p)}$ | _ |
| U+02AB3 | U+02AB1 | | ⋨ | ≠ | | | | \preceq | ⋨ | ⋨ | \preceq | ⋨ | \precneq | |
| U+02ABA | U+02AB2 | | ≯ | ≯ | | | | ≽ | | ≽ | ≽ | ≽ | \succneq | |
| U+02ABA | U+02AB3 | | \leq | \leq | | | | \preceq | \preceq | \leq | \leq | \preceq | \preceqq | precedes above equals sign |
| U+02ABA | U+02AB4 | | \succeq | \succeq | | | | \succeq | ≽ | | \succeq | \succeq | \succeqq | succeeds above equals sign |
| U+02ABA | U+02AB5 | | \neq | $\not \equiv$ | | | | $\not \equiv$ | ≨ | ≨ | ≨ | $\not\equiv$ | $\verb \precneqq ^{(a)}$ | precedes above not equal to |
| U+02ABA | U+02AB6 | | $\not\geq$ | $\not\supseteq$ | | | | \neq | ≽ | \geq | ≱ | ≽ | $\scalebox{succneqq}^{(a)}$ | succeeds above not equal to |
| U+02ABA | U+02AB7 | | ≋ | \lessapprox | | | | \lessapprox | \approx | ≨ | ≨ | ≾ | $\precapprox^{(a)}$ | precedes above almost equal to |
| U+02ABA | u+02ab8 | | ≲ | ≳ | | | | ≿ | \gtrapprox | ≿ | ≿≋ | ≿ | $\scapprox^{(a)}$ | succeeds above almost equal to |
| U+02ABB W+02ABB W+02AC2 W+02AC2 W+02AC2 W+02AC2 W+02AC2 W+02AC3 W+02AC4 W+02AC4 W+02AC4 W+02AC5 W+02AC5 W+02AC6 | U+02AB9 | | ¥ | ¥≈ | | | | $\underset{\approx}{\not\approx}$ | ₹ | ≨ | ∀ ≋ | | $\verb \precnapprox ^{(a)}$ | * . |
| U+02ABC → → → → → → → → → → → → → → → → → → | U+02ABA | | X ≉ | / ≉ | | | | | ≵ | ≿≉ | ∕ ≋ | ∕ ≉ | $\scalebox{succnapprox}^{(a)}$ | |
| U+O2ABB U+O2ABB U+O2ABB U+O2ABB U+O2ABB U+O2ACO U+O2AC | U+02ABB | | \ll | \ll | | | | $\prec\!\!\prec$ | $\prec \prec$ | | | | \Prec | double precedes |
| U+O2ACC U+O2AC | U+02ABC | | \gg | \gg | | | | \Rightarrow | $\succ \succ$ | | | | \Succ | double succeeds |
| U+02AC1 | U+02ABD | | $\overline{\bullet}$ | $\overline{\mathbf{C}}$ | | | | $\overline{\mathbf{C}}$ | \subseteq | | | | \subsetdot | subset with dot |
| U+02AC2 | U+02ABE | | ∍ | • | | | | \odot | \supset | | | | \supsetdot | superset with dot |
| U+02AC2 | U+02ABF | | \subsetneq | \subsetneq | | | | \subsetneq | \subsetneq | | | | \subsetplus | subset with plus sign below |
| U+02AC2 | U+02AC0 | | \supseteq | \supseteq | | | | \supseteq | \supseteq | | | | \supsetplus | superset with plus sign below |
| U+02AC3 | U+02AC1 | | × | × | | | | × | × | | | | \submult | |
| U+02AC4 D+02AC5 U+02AC5 U+02AC6 D+02AC7 U+02AC7 U+02AC8 U+02AC9 U+02ACA D+02ACA D+02ACA U+02ACA D+02ACA U+02ACA U+02ACB U+0 | U+02AC2 | | × | × | | | | | | | | | \supmult | . 1 1 |
| U+02AC5 U+02AC6 U+02AC7 U+02AC7 U+02AC8 U+02AC8 U+02ACA U+02ACB U+02AC | U+02AC3 | | ≐ | | | | | | | | | | \subedot | |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC4 | | | | | | | ⊇ | | | | | - | |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC5 | | \subseteq | \subseteq | | | | \subseteq | \subseteq | \subseteq | | \subseteq | $\sl subseteqq^{(a)}$ | subset of above equals sign |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC6 | | \supseteq | \supseteq | | | | \supseteq | \supseteq | \supseteq | \supseteq | \supseteq | $\verb \supseteqq ^{(a)}$ | superset of above equals sign |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC7 | | \subseteq | \subseteq | | | | \subseteq | \simeq | | | | \subsim | subset of above tilde operator |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC8 | | \gtrsim | \gtrsim | | | | \gtrsim | \gtrsim | | | | \supsim | superset of above tilde operator |
| $\begin{array}{cccccccccccccccccccccccccccccccccccc$ | U+02AC9 | | \approx | \cong | | | | \approx | \subseteq | | | | \subsetapprox | subset of above almost equal to |
| U+02ACD \tag\square left open box operator | U+02ACA | | \approx | \approx | | | | ∩≋ | | | | | \supsetapprox | |
| U+02ACD \tag\square left open box operator | U+02ACB | | ⊊ | \subsetneq | | | | ⊊ | ⊊ | \subseteq | ⊊ | ⊊ | $\verb \subsetneqq ^{(a)}$ | subset of above not equal to |
| U+02ACD \tag\square left open box operator | U+02ACC | | \supseteq | \supseteq | | | | ⊋ | ⊋ | \supseteq | ⊋ | | $\verb \supsetneqq ^{(a)}$ | superset of above not equal to |
| U+02ACE | U+02ACD | | | | | | | | | | | | \lsqhook | square left open box operator |
| | U+02ACE | | \neg | | | | | | | | | | \rsqhook | square right open box operator |

| U+02ADC | USV | L | X | S | P | D | F | N | Н | E | С | R | Macro | Description |
|---|---------|--------------|-----------------|-----------------|--|----------|----------------|----------------------|---------------|-------------|-------------|-------------|--------------------|--|
| U+02ADD D D Cesup Closed superset Closed subset or equal to Compared to the closed subset or equal to Closed subset or equal to Compared to the closed subset or equal to Compared to the closed subset or equal to Compared to the closed superset or equal to Compared to the closed superset or equal to Compared to the closed superset or equal to Compared to the closed subset of equal to Compared to the closed superset or equal to Compared to the closed superset of the closed superset closed s | U+02ACF | | a | | | | | | | | | | \csub | |
| U+02AD1 U+02AD2 U+02AD2 U+02AD3 U+02AD3 U+02AD4 U+02AD5 U+02AD5 U+02AD5 U+02AD5 U+02AD6 U+02AD7 U+02AD8 U+02AD7 U+02AD8 U+02AD9 U+02AD8 U+02AB8 U+ | | | | | | | | | | | | | | |
| U+02AD2 | | | | | | | | | | | | | - | • |
| U+02AD2 | | | | | | | | | | | | | | • |
| U+02AD7 OC OC DC DC DC DC Suphsub superset beside and joined by das superset beside and joined by dash with subset U+02AD9 | | | \subseteq | \subseteq | | | | \subseteq | 5 | | | | · . | |
| U+02AD7 OC OC DC DC DC DC Suphsub superset beside and joined by das superset beside and joined by dash with subset U+02AD9 | | | 9 | 2 | | | | \geq | 5 | | | | · . | • |
| U+02AD7 OC OC Suphsub superset beside subset u+02AD8 OC OC Suphsub superset beside and joined by dish subset u+02AD9 | | | | \subseteq | | | | | ٦ | | | | - | • |
| U+02AD7 OC OC DC DC DC DC Suphsub superset beside and joined by das superset beside and joined by dash with subset U+02AD9 | | | \subseteq | \subseteq | | | | \leq | | | | | | |
| U+02AD8 DE D | | | | | | | | | | | | | | |
| U+02ADA | | | | € | | | | ∋∈ | | | | | | superset beside and joined by |
| U+02ADB | U+02AD9 | | Ш | Ш | | | | lacksquare | Ш | | | | \forkv | element of opening downwards |
| U+02ADB | U+02ADA | | Т | Т | | | | π | Ф | | | | \topfork | • • |
| U+02ADC U+02ADD U+02ADD U+02ADD U+02ADD U+02ADC U+ | U+02ADB | | ф | 100 | | | | ф | | | | | - | • |
| U+02ADD | U+02ADC | | 业 | ъĽ | | | | 业 | | | | | - | forking |
| U+02ADE -1 < | U+02ADD | | Ψ | Ψ | | | | Ψ | уĽ | | | | \forksnot | o de la companya de l |
| U+O2AEO ⊥ ⊥ ⊥ ⊥ \lambda shortuptack short up tack U+O2AE2 ≡ ≡ ≡ ≡ k \vDdash vertical bar triple right turnst U+O2AE3 ¬ <td< td=""><td>U+02ADE</td><td></td><td>Н</td><td>4</td><td></td><td></td><td></td><td>4</td><td></td><td></td><td></td><td></td><td>\shortlefttack</td><td>-</td></td<> | U+02ADE | | Н | 4 | | | | 4 | | | | | \shortlefttack | - |
| U+02AE2 | U+02ADF | | _ | \pm | | | | _ | Т | | | | \shortdowntack | short down tack |
| U+02AE2 | U+02AE0 | | | | | | | | 丄 | | | | \shortuptack | short up tack |
| U+02AE3 - - - - - - - - - - | U+02AE2 | | Ħ | Ħ | | | | Ħ | ⊨ | | | | - | vertical bar triple right turnstile |
| U+02AE4 | U+02AE3 | | $\exists I$ | \dashv I | | | | \dashv | \dashv I | | | | \dashV | double vertical bar left turnstile |
| U+02AE5 = | • | | = | = | | | | = | = | | | | \Dashv | vertical bar double left turnstile |
| Comparison of the comparison | • | | ∄ | ⊨ا | | | | ╡ | ╡ | | | | \DashV | double vertical bar double left turnstile |
| U+02AE8 | U+02AE6 | | ⊬ | ⊬ | | | | ⊬ | ⊬ | | | | \varVdash | long dash from left member of double vertical |
| U+02AE9 | U+02AE7 | | \pm | = | | | | = | 〒 | | | | \Barv | short down tack with overbar |
| U+O2AEA T <td>U+02AE8</td> <td></td> <td>_</td> <td>\pm</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>\vBar</td> <td>short up tack with underbar</td> | U+02AE8 | | _ | \pm | | | | | | | | | \vBar | short up tack with underbar |
| U+02AEB | U+02AE9 | | ÷ | ÷ | | | | + | 十 | | | | \vBarv | short up tack above short down tack |
| U+02AEC | U+02AEA | | П | П | | | | Т | Т | | | | \barV | double down tack |
| U+02AED F F F F F NbNot reversed double stroke not si U+02AEE | U+O2AEB | | Ш | Ш | | | | Ш | Ш | | | | \Vbar | double up tack |
| U+02AEE Image: Comparison of the comparison of | U+02AEC | | \exists | \exists | | | | \Rightarrow | \exists | | | | \Not | double stroke not sign |
| U+02AFF ↑ ↑ ↑ ↑ \cirmid vertical line with circle above U+02AF0 ↓ ↓ ↓ \midcir vertical line with circle below U+02AF2 ‡ ‡ ‡ † \midcir vertical line with circle below U+02AF3 ‡ ‡ † † \midcir vertical line with circle below U+02AF3 ‡ ‡ † \midcir vertical line with circle below U+02AF3 ‡ † † \midcir vertical line with circle below U+02AF3 † † † \midcir vertical line with circle below U+02AF4 † † † \midcir vertical line with circle below U+02AF4 † † † \midcir vertical line with circle below U+02AF4 † † † \midcir vertical line with circle below U+02B30 † † \midcir vertical line with circle below U+02B31 ‡ ‡ ‡ ‡ \midcir vertical line with circle below U+02B32 † \midcir vertical line with circle below \midcir vertical line with circle below U+02B32 † \midcir vertical line with circle below \midcir vertical line with circle below U+02B30 \midcir \midcir vertical line with circle below \midcir \midcir vertical line with circle below U+02B31 \midcir \midcir \midcir vertical line wit | U+02AED | | F | F | | | | F | F | | | | \bNot | reversed double stroke not sign |
| U+02AF0 | U+02AEE | | + | + | | | | + | † | | | | \revnmid | does not divide with reversed negation slash |
| U+02AF2 # # # # Nnhpar parallel with horizontal strok U+02AF3 # # # Nparsim parallel with tilde operator U+02AF7 # Nparsim parallel with tilde operator U+02AF8 * Nparsim parallel with tilde operator U+02AF8 * Ngggnest stacked very much less-than U+02AF9 * Neggnest stacked very much greater-th U+02AFA * Ngeqqslant double-line slanted less-than U+02B30 * Ngeqqslant double-line slanted greater-th U+02B31 * Ngeqqslant three left arrow with small circle U+02B31 * Ngeqqslant left arrow with small circle U+02B32 * Ngeqqslant left arrow with small circle U+02B32 * Ngeqqslant left arrow with circled plus | U+02AEF | | Ŷ | Ŷ | | | | 9 | Ŷ | | | | \cirmid | vertical line with circle above |
| U+02AF2 # # # | U+02AFO | | ļ | J | | | | 9 | | | | | \midcir | vertical line with circle below |
| U+02AF3 # # # | U+02AF2 | | # | # | | | | # | | | | | \nhpar | parallel with horizontal stroke |
| U+02AF7 Image: stacked very much less-than lequal to Image: less-than less-than lequal to less-than lequal to U+02AFA Image: less-than lequal to less-than lequal to Image: less-than lequal to less-than lequal to less-than lequal to less-than lequal to U+02B30 Image: less-than lequal to leq | U+02AF3 | | ₩ | ₩ | | | | # | | | | | \parsim | parallel with tilde operator |
| U+02AFA U+02AFA W+02B30 U+02B31 U+02B32 U+02B32 U+02B32 U+02B31 U+02B32 U+02B32 U+02B32 U+02B31 U+02B32 | U+02AF7 | | \ll | \ll | | | | | | | | | \llnest | stacked very much less-than |
| U+02AFA U+02B30 U+02B31 E E E E E E E E E E E E E E E E E E E | u+02af8 | | > | > | | | | > | > | | | | \gggnest | stacked very much greater-than |
| U+02B30 | U+02AF9 | | \leq | \leq | | | | \leq | \leq | \leq | \leq | \leq | \leqqslant | double-line slanted less-than or equal to |
| U+02B31 | U+02AFA | | | | | | | | \geqslant | \geqslant | \geqslant | \geqslant | \geqqslant | double-line slanted greater-than or equal to |
| U+02B32 | U+02B30 | | (0- | (0 - | | | € | < 0 | ↔ | | | | \circleonleftarrow | left arrow with small circle |
| $U+02B32$ \longleftrightarrow | U+02B31 | | ⇇ | ₽ | $\;$ | \equiv | ₩ | \rightleftharpoons | ₩ | ₩ | ₩ | ₩ | \leftthreearrows | three leftwards arrows |
| | | \leftarrow | · ⊕ | · ⊕ | ,- | _ | € | ← | ← | | | - | \leftarrowonoplus | left arrow with circled plus |
| | | ₩ | _ | - | ← ~~ | ₩. | € ₩ | | *** | * | ~~~ | ~~~ | - | • |
| | | | « - | « + | | | « + | « + | « | | | | | leftwards two-headed arrow |

| USV | L | Χ | S | P | D | F | N | Н | E | C | R | Macro | Description |
|------------------|---|----------------------|----------------------|---|---|-----------------|----------------------|-------------------|----------|---|---|-------------------------|--|
| U+02B35 | | ₩II | ≪II | | | « # | « II- | « | | | | \nVtwoheadleftarrow | leftwards two-headed arrow with double vertical stroke |
| u+02в36 | | « -I | « - | | | « -I | « | ≪ ⊢ | | | | \twoheadmapsfrom | leftwards two-headed arrow from bar |
| U+02B37 | | « < | « < | | | | « -≺ | *- * | | | | \twoheadleftdbkarrow | leftwards two-headed triple- dash arrow |
| u+02в38 | | ← ···· | ← ···· | | | | ‹··· | < | | | | \leftdotarrow | leftwards arrow with dotted stem |
| U+02B39 | | ₩ | # | | | ₩ | \leftrightarrow | # | | | | \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 | | « K | « K | | | ≪К | « -< | « < | | | | \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 | | <× | ** | | | | <× | \leftrightarrow | | | | \leftarrowx | leftwards arrow through x |
| U+02B3F | | ← | ← | | | | \leftarrow | ← | ← | | | \leftcurvedarrow | wave arrow pointing directly left |
| U+02B40 | | ⇐ | ⇐ | | | | ⇐ | ቒ | | | | \equalleftarrow | equals sign above leftwards arrow |
| U+02B41 | | ← | \leftarrow | | | | ← | ←~ | | | | \bsimilarleftarrow | reverse tilde operator above leftwards arrow |
| U+02B42 | | € | € | | | | \rightleftharpoons | € | | | | \leftarrowbackapprox | leftwards arrow above reverse almost equal to |
| U+02B43 | | \Rightarrow | \Rightarrow | | | | \Rightarrow | \Rightarrow | | | | \rightarrowgtr | rightwards arrow through greater-than |
| U+02B44 | | ⇒ | ⇒ | | | | \Rightarrow | ⇒ | | | | \rightarrowsupset | rightwards arrow through subset |
| U+02B45 | | # | \Leftarrow | | | € | # | € | | | | \LLeftarrow | leftwards quadruple arrow |
| u+02в46 | | \Rightarrow | \Rightarrow | | | \Rightarrow | \Rightarrow | \Rightarrow | | | | \RRightarrow | rightwards quadruple arrow |
| U+02B47 | | $\xrightarrow{\sim}$ | $\xrightarrow{\sim}$ | | | | \Longrightarrow | \hookrightarrow | | | | \bsimilarrightarrow | reverse tilde operator above rightwards arrow |
| u+02в48 | | \Longrightarrow | \Longrightarrow | | | | \Longrightarrow | ≅→ | | | | \rightarrowbackapprox | rightwards arrow above reverse almost equal to |
| U+0 2 B49 | | ~~ | ← | | | | \sim | ←~ | | | | \similarleftarrow | tilde operator above leftwards arrow |
| U+02B4A | | € | € | | | | \rightleftharpoons | ₹ | | | | \leftarrowapprox | leftwards arrow above almost equal to |
| U+02B4B | | ← | ← | | | | \leftarrow | ← | | | | \leftarrowbsimilar | leftwards arrow above reverse tilde operator |
| U+02B4C | | \Rightarrow | \Rightarrow | | | | \Rightarrow | \Rightarrow | | | | \rightarrowbsimilar | righttwards arrow above reverse tilde operator |

13 Alphabetical symbols, \mathalpha

13.1 Normal weight

13.1.1 Upright Greek, uppercase

| usv L X | S | P | D | F | N | Н | Е | C R | Macro | Description |
|--------------------|---|---|---|----|--------------|---------|--------------|-------------------------|---|------------------------|
| u+00391 A A | A | A | A | Α | A | Α | A | A A | \mupAlpha | capital alpha, greek |
| u+00392 B B | В | В | В | В | В | В | В | BB | $\mbox{mupBeta}$ | capital beta, greek |
| υ+00393 Γ Γ | Γ | Γ | Γ | Γ | Γ | Γ | Γ | ГΓ | \mupGamma | capital gamma, greek |
| u+00394 △ △ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | ΔΔ | $\mbox{\ensuremath{\texttt{MupDelta}}}$ | capital delta, greek |
| u+00395 E E | E | E | E | Ε | \mathbf{E} | Е | Ε : | ΕE | \mupEpsilon | capital epsilon, greek |
| u+00396 Z Z | Z | Z | Z | Z | \mathbf{Z} | Z | \mathbf{Z} | $\mathbf{Z} \mathbf{Z}$ | $\mbox{\ensuremath{\texttt{mupZeta}}}$ | capital zeta, greek |
| u+00397 H H | Н | Н | Η | Н | Η | Н | H l | НН | \mupEta | capital eta, greek |
| u+00398 ⊖ ⊖ | Θ | Θ | Θ | Θ | Θ | Θ | Θ (| Θ | $\mbox{\ensuremath{\mathtt{MupTheta}}}$ | capital theta, greek |
| u+00399 I I | I | Ι | Ι | -1 | Ι | 1 | I | ΙI | $\mbox{\ensuremath{\texttt{MupIota}}}$ | capital iota, greek |
| u+0039a K K | K | K | K | K | K | Κ | K : | ΚK | $\mbox{mupKappa}$ | capital kappa, greek |
| и+0039в Л Л | Λ | Λ | Λ | ٨ | Λ | \land | Λ | ΛΛ | $\mbox{\mbox{$\box{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mb$ | capital lambda, greek |
| u+0039c M M | M | M | M | M | M | М | ΜI | MM | \mupMu | capital mu, greek |
| u+0039D N N | N | N | N | N | N | Ν | N I | N N | \mupNu | capital nu, greek |
| и+0039Е Ξ Ξ | Ξ | Ξ | Ξ | Ξ | Ξ | Z | Ξ: | ΞΞ | \mupXi | capital xi, greek |
| u+0039F O O | 0 | O | 0 | 0 | 0 | 0 | 0 | OC | $\verb \mup0micron $ | capital omicron, greek |
| u+003A0 ∏ ∏ | П | П | Π | П | Π | П | П | ПП | \mupPi | capital pi, greek |
| u+003a1 P P | P | P | P | P | P | Р | P : | PΡ | \mbox{mupRho} | capital rho, greek |
| u+003A3 ∑ ∑ | | | | | | | | | $\mbox{mupSigma}$ | capital sigma, greek |
| u+003A4 T T | | | | | | | | | \mupTau | capital tau, greek |
| u+003a5 | Y | Y | Υ | Υ | Υ | Υ | Υ | ΥΥ | \mupUpsilon | capital upsilon, greek |
| u+003a6 Ф Ф | Φ | Φ | Φ | Φ | Φ | Φ | Ф | ΦФ | \mupPhi | capital phi, greek |
| u+003A7 X X | X | Χ | X | Χ | X | Χ | X : | XX | \mupChi | capital chi, greek |
| u+003a8 Ψ Ψ | | | | | | | | | \mupPsi | capital psi, greek |
| u+003a9 Ω Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | \mup0mega | capital omega, greek |
| | | | | | | | | | | |

13.1.2 Upright Greek, lowercase

| USV | LXSF | D | F | N | Н | ΕC | R | Macro | Description |
|---------|-------------------------------|-----|---|----------|---|------------|---|----------------|------------------------------------|
| и+003в1 | αααα | α | α | α | α | αα | α | \mupalpha | small alpha, greek |
| U+003B2 | ββββ | β | β | β | β | ββ | β | \mupbeta | small beta, greek |
| и+003в3 | γγγη | γ | γ | γ | γ | γγ | γ | \mupgamma | small gamma, greek |
| u+003B4 | δδδδ | δ | δ | δ | δ | δδ | δ | \mupdelta | small delta, greek |
| и+003в5 | ε ε ε ε | 3 | 3 | ε | 3 | 3 3 | ε | \mupvarepsilon | rounded small varepsilon, greek |
| и+003в6 | ζζζζ | , ζ | ζ | ζ | ζ | ζζ | ζ | \mupzeta | small zeta, greek |
| и+003в7 | ηηηη | η | η | η | η | η η | η | \mupeta | small eta, greek |
| и+003в8 | $\theta \theta \theta \theta$ | θ | θ | θ | θ | θθ | θ | \muptheta | straight theta, small theta, greek |
| и+003в9 | ι 1 ι ι | ι | ı | ι | ı | ιι | ι | \mupiota | small iota, greek |
| и+003ва | κκκκ | K | K | κ | ĸ | κκ | κ | \mupkappa | small kappa, greek |
| и+003вв | λλλλ | . λ | λ | λ | λ | λλ | λ | \muplambda | small lambda, greek |
| и+003вс | μμμμ | ιμ | μ | μ | μ | μμ | μ | \mupmu | small mu, greek |
| и+003вр | ννν | ν | ٧ | ν | ν | νν | ν | \mupnu | small nu, greek |
| | | | | | | | | | |

| USV | L | Χ | S | Р | D | F | N | I | Η | EC | R | Macro | Description |
|---------|------------|-----------------------|-------|---------------|-------------|---|------------|-----|-----|-----|------------|--------------------------|----------------------------------|
| u+003ве | ξ | ξ | ξ | ξ | ξ | ξ | ξ | 8 | 5 8 | , ξ | ξ | \mupxi | small xi, greek |
| U+003вF | O | o | 0 | 0 | 0 | 0 | O | C |) (| 0 | 0 | \mupomicron | small omicron, greek |
| u+003c0 | π | π | π | π | П | π | π | Т | τΙ | τπ | π | \muppi | small pi, greek |
| U+003C1 | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ۴ | 6 | ρ | ρ | \muprho | small rho, greek |
| U+003C2 | ς | ς | ς | ς | ς | ς | ς | 9 | 5 | ; ς | ς | \mupvarsigma | terminal sigma, greek |
| u+003c3 | σ | σ | σ | σ | σ | σ | σ | C | 7 (| σ | σ | \mupsigma | small sigma, greek |
| u+003c4 | Τ | τ | τ | τ | τ | τ | Τ | ٦ | . 1 | τ | τ | \muptau | small tau, greek |
| u+003c5 | υ | υ | υ | υ | υ | U | υ | ι | J | υ | υ | $\mbox{\em mupupsilon}$ | small upsilon, greek |
| u+003c6 | φ | φ | φ | φ | φ | φ | φ | 9 | p q | φ | φ | \mupvarphi | curly or open small phi, greek |
| u+003c7 | χ | χ | χ | χ | χ | Χ | χ | ,) | () | χ | χ | \mupchi | small chi, greek |
| u+003c8 | ψ | Ψ | ψ | ψ | Ψ | Ψ | ψ | Ч | ψ | ιψ | ψ | \muppsi | small psi, greek |
| u+003c9 | | | | | | | | | | | | \mupomega | small omega, greek |
| U+003D1 | θ | θ | θ | θ | θ | θ | θ | ť | 1 | 9 | θ | $\mbox{\em mupvartheta}$ | /vartheta - curly or open theta |
| U+003D5 | ф | ф | ф | φ | ф | ф | ф | 4 |) (| ф | ф | \mupphi | /straightphi - small phi, greek |
| U+003D6 | ϖ | $\boldsymbol{\varpi}$ | ω | ω | ω | ω | π | ס ס | σΰ | σ | σ | \mupvarpi | rounded small pi (pomega), greek |
| U+003DC | : | F | F | | | | F | F | | | | \upDigamma | capital digamma |
| U+003DD |) | F | F | | | | F | | J | F | | \updigamma | old greek small letter digamma |
| и+003го | N | χ | χ | \mathcal{U} | \varkappa | И | n | , | l l | N | х | \mupvarkappa | rounded small kappa, greek |
| U+003F1 | 0 | Q | 8 | Q | 6 | 6 | 0 | (| ? (| 9 9 | 9 | \mupvarrho | rounded small rho, greek |
| U+003F4 | | | | | | | | | | | | $\mbox{\t MupvarTheta}$ | greek capital theta symbol |
| U+003F5 | ϵ | ϵ | \in | ϵ | ϵ | E | ϵ | 6 | . (| ε ε | ϵ | \mupepsilon | greek lunate varepsilon symbol |
| | | | | | | | | | | | | | |

13.1.3 Italic, Latin, uppercase

L X S P D F N H E C R Macro Description USV mathematical italic capital a u+1D435 B B B B B B B B B B \mitB mathematical italic capital b $_{\text{U+1D436}}$ $^{\prime}$ \mitC mathematical italic capital c U+1D437 D D D D D D D D D\mitD mathematical italic capital d \mitE mathematical italic capital e \mbox{mitF} mathematical italic capital f \mitG mathematical italic capital g U+1D43B H H H H H H H H H H\mitH mathematical italic capital h \mitI mathematical italic capital i U+1D43D J J J J J J J J J\mitJ mathematical italic capital j U+1D43E K K K K K K K K K K K K \mbox{mitK} mathematical italic capital k mathematical italic capital l $\mathtt{U+1D440} \; \underline{M} \; \underline$ \mbox{mitM} mathematical italic capital m mathematical italic capital n U+1D442 0 0 0 0 0 0 0 0 0 0 $\mbox{mit0}$ mathematical italic capital o mathematical italic capital p \mbox{mitQ} mathematical italic capital q U+1D445 R R R R R R R R R R R\mitR mathematical italic capital r \mitS mathematical italic capital s mathematical italic capital t U+1D448 U U U U U U U U U U U Umathematical italic capital u U+1D449 V V V V V V V V V V V Vmathematical italic capital v

13.1.4 Italic, Latin, lowercase

```
LXSPDFNHECR Macro Description
USV
mathematical italic small a
U+1D44F b b b b b b b b b b b
                                       \mitb
                                                mathematical italic small b
U+1D450 \stackrel{\scriptstyle c}{\scriptstyle c}                                                 mathematical italic small c
U+1D451 d d d d d d d d d d d
                                       \mitd
                                                mathematical italic small d
U+1D452 e e e e e e e e e e
                                                mathematical italic small e
U+1D453 f f f f f f f f f f f
                                       \mbox{mitf}
                                                mathematical italic small f
\mitg
                                               mathematical italic small g
\miti
                                                mathematical italic small i
U+1D457 j j j j j j j j j j j j
                                       \miti
                                                mathematical italic small j
u+1D458 k k k k k k k k k k k
                                       \mbox{mitk}
                                                mathematical italic small k
\mitl
                                                mathematical italic small l
u+1D45A m m m m m m m m m m m m
                                       \mitm
                                                mathematical italic small m
mathematical italic small n
U+1D45C 0 0 0 0 0 0 0 0 0 0
                                       \mito
                                                mathematical italic small o
u+1D45D p p p p p p p p p p
                                                mathematical italic small p
                                       \mitp
U+1D45E q q q q Q Q q q q q
                                                mathematical italic small q
mathematical italic small r
                        r r r r
                                       \mit.r
U+1D460 8 8 8 8 8 8 8 8 8 8 8 8
                                                mathematical italic small s
\mitt
                                                mathematical italic small t
mathematical italic small u
                                                mathematical italic small v
\mitv
u+1D464 <u>w w w w w w w w w w w</u>
                                                mathematical italic small w
                                       \mitw
mathematical italic small x
                                       \mitx
u+1D466 y y y y y y y y y y y y
                                       \mity
                                                mathematical italic small y
mathematical italic small z
```

13.1.5 Italic Greek, uppercase

| Macro | Description |
|-------------|--|
| \mitAlpha | mathematical italic capital alpha |
| \mitBeta | mathematical italic capital beta |
| \mitGamma | mathematical italic capital gamma |
| \mitDelta | mathematical italic capital delta |
| \mitEpsilon | mathematical italic capital epsilon |
| \mitZeta | mathematical italic capital zeta |
| \mitEta | mathematical italic capital eta |
| 4 3 7 | MitBeta MitGamma MitDelta MitEpsilon MitZeta MitZeta |

| USV | L | Χ | S | P | D | F | N | Н | Е | C R | Macro | Description |
|---------|------------|--------------------------|-----------------------|-----------|-----------------------|---|------------|---|--------------------------|---------------------|-------------------|--|
| u+1D6E9 | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | Θ | \mitTheta | mathematical italic capital theta |
| u+1d6ea | I | I | I | I | I | 1 | I | 1 | I | I I | \mitIota | mathematical italic capital iota |
| u+1D6ев | K | \boldsymbol{K} | K | K | K | Κ | K | Κ | K | K K | $\mbox{mitKappa}$ | mathematical italic capital kappa |
| U+1D6EC | Λ | Λ | Λ | Λ | Λ | Λ | Λ | Λ | Λ | Λ Λ | \mitLambda | mathematical italic capital lambda |
| u+1d6ed | M | M | M | M | M | Μ | M | Μ | M | M M | \mitMu | mathematical italic capital mu |
| U+1D6EE | N | N | N | N | N | Ν | N | Ν | N | N N | \mitNu | mathematical italic capital nu |
| U+1D6EF | \varXi | \varXi | $\boldsymbol{\varXi}$ | 王 | Ξ | Ξ | Ξ | Z | Ξ | Ξ Ξ | \mitXi | mathematical italic capital xi |
| u+1D6F0 | O | 0 | 0 | 0 | 0 | 0 | O | 0 | O | 00 | \mitOmicron | mathematical italic capital omicron |
| U+1D6F1 | Π | Π | П | П | П | П | П | П | П | ПП | \mitPi | mathematical italic capital pi |
| U+1D6F2 | P | \boldsymbol{P} | P | P | P | P | P | Р | P | P | \mitRho | mathematical italic capital rho |
| u+1D6F3 | Θ | $\boldsymbol{\theta}$ | θ | θ | $\boldsymbol{\theta}$ | θ | Θ | θ | θ | θ | \mitvarTheta | mathematical italic capital theta symbol |
| u+1D6F4 | Σ | $\boldsymbol{\varSigma}$ | Σ | \sum | \sum | Σ | Σ | Σ | $\boldsymbol{\varSigma}$ | Σ Σ | \mitSigma | mathematical italic capital sigma |
| u+1D6F5 | T | T | T | T | T | T | T | T | T | T T | \mitTau | mathematical italic capital tau |
| u+1D6F6 | Υ | Y | Υ | Y | Υ | Υ | Υ | Υ | Υ | ΥΥ | \mitUpsilon | mathematical italic capital upsilon |
| u+1D6F7 | Φ | Φ | Φ | Φ | Φ | Φ | Φ | Φ | Φ | ΦΦ | \mitPhi | mathematical italic capital phi |
| u+1D6F8 | X | X | X | Χ | \boldsymbol{X} | Χ | X | X | X | X X | \mitChi | mathematical italic capital chi |
| u+1D6F9 | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | $\Psi \Psi$ | \mitPsi | mathematical italic capital psi |
| u+1d6fa | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | \mitOmega | mathematical italic capital omega |
| | | | | | | | | | | | - | |

13.1.6 Italic Greek, lowercase

| USV | L | Χ | S | Р | D | F | ľ | 1] | Η | Е | C | R | Macro | Description |
|---------|---------------|----------|-----------|---------------|----------|---|-----|---------|---|----------|----------|-----------|-------------------|---------------------------------------|
| u+1D6FC | α | α | α | α | α | α | (| γ | α | α | α | α | \mitalpha | mathematical italic small alpha |
| u+1d6fd | β | β | β | β | β | β | 1 | 3 | β | β | β | β | \mitbeta | mathematical italic small beta |
| U+1D6FE | γ | γ | γ | γ | γ | γ | | γ | γ | γ | γ | γ | \mitgamma | mathematical italic small gamma |
| U+1D6FF | δ | δ | δ | δ | δ | δ | (| 5 | δ | δ | δ | δ | \mitdelta | mathematical italic small delta |
| U+1D700 | ε | ε | ε | \mathcal{E} | ε | 3 | 8 | Ξ | ε | ε | ε | ε | \mitvarepsilon | mathematical italic small varepsilon |
| U+1D701 | ζ | ζ | ζ | ζ | ζ | ζ | (| 5 | ζ | ζ | ζ | ζ | \mitzeta | mathematical italic small zeta |
| U+1D702 | η | η | η | η | η | η | 1 | 7 | η | η | η | η | \miteta | mathematical italic small eta |
| U+1D703 | θ | θ | θ | θ | θ | θ | 6 | 9 | θ | θ | θ | θ | \mittheta | mathematical italic small theta |
| U+1D704 | ι | ı | L | l | l | l | - | L | 1 | l | ι | ι | \mitiota | mathematical italic small iota |
| U+1D705 | κ | K | κ | κ | K | K | F | દ | K | К | κ | κ | $\mbox{mitkappa}$ | mathematical italic small kappa |
| U+1D706 | λ | λ | λ | λ | λ | λ | , | λ | λ | λ | λ | λ | \mitlambda | mathematical italic small lambda |
| U+1D707 | μ | μ | μ | μ | μ | μ | 1 | ι | μ | μ | μ | μ | \mitmu | mathematical italic small mu |
| U+1D708 | ν | ν | ν | ν | ν | ν | 1 | , | ν | ν | ν | ν | \mitnu | mathematical italic small nu |
| U+1D709 | ξ | ξ | ξ | ξ | ξ | ξ | . 8 | Ċ | ξ | ξ | ξ | ξ | \mitxi | mathematical italic small xi |
| U+1D70A | 0 | 0 | 0 | 0 | 0 | 0 | (|) | 0 | 0 | 0 | 0 | \mitomicron | mathematical italic small omicron |
| U+1D70B | π | π | π | π | Π | π | 1 | τ | π | π | π | π | \mitpi | mathematical italic small pi |
| U+1D70C | ρ | ρ | ρ | ρ | ρ | ρ | 1 |) | ρ | ρ | ρ | ρ | \mitrho | mathematical italic small rho |
| U+1D70D | ς | ς | 5 | ς | ς | ς | (| ŝ | 5 | ς | ς | ς | \mitvarsigma | mathematical italic small final sigma |
| U+1D70E | σ | σ | σ | σ | σ | σ | (| Τ | σ | σ | σ | σ | $\mbox{mitsigma}$ | mathematical italic small sigma |
| U+1D70F | au | τ | τ | τ | τ | τ | 1 | Г | T | τ | τ | τ | \mittau | mathematical italic small tau |
| U+1D710 | v | υ | υ | v | υ | U | ı | , | U | υ | υ | U | \mitupsilon | mathematical italic small upsilon |
| U+1D711 | φ | φ | φ | φ | φ | φ | 9 | 0 | φ | φ | φ | φ | \mitvarphi | mathematical italic small phi |
| U+1D712 | χ | χ | χ | χ | χ | Χ |) | Κ. | χ | χ | χ | χ | \mitchi | mathematical italic small chi |
| U+1D713 | ψ | Ψ | ψ | ψ | Ψ | Ψ | ų | þ | Ψ | ψ | ψ | ψ | \mitpsi | mathematical italic small psi |
| U+1D714 | ω | ω | ω | ω | ω | ω | 0 | U | ω | ω | ω | ω | \mitomega | mathematical italic small omega |

| usv L X S P D F N H E C R | Macro | Description |
|---|--------------|--|
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | \mitpartial | mathematical italic partial differential |
| U+1D716 ϵ | \mitepsilon | mathematical italic varepsilon symbol |
| $U+1D717 \vartheta \vartheta \vartheta \vartheta \vartheta \vartheta \vartheta \vartheta \vartheta $ | \mitvartheta | mathematical italic theta symbol |
| U+1D718 % X X X X X N N N N K X X | \mitvarkappa | mathematical italic kappa symbol |
| U+1D719 ϕ ϕ ϕ ϕ ϕ ϕ ϕ ϕ ϕ | \mitphi | mathematical italic phi symbol |
| U+1D71A Q Q Q Q Q Q Q Q Q Q Q | \mitvarrho | mathematical italic rho symbol |
| U+1D71B | \mitvarpi | mathematical italic pi symbol |
| | | |

13.1.7 Script, Latin, uppercase

| USV | L | Χ | S | Р | Ι |) [| F | N | Η | Е | С | R | Macro | Description |
|---------|---------------|----------------|----------------|-----------------------|---|-----|---|----------------|---------------|---------------|----------------|----------------|---------------------|-------------------------------|
| U+1D49C | \mathcal{A} | \mathcal{A} | \mathcal{A} | A | J | 4 | | \mathcal{A} | A | A | A | \mathcal{A} | \mscrA | mathematical script capital a |
| U+1D49E | $\mathcal C$ | \mathscr{C} | \mathcal{C} | \mathcal{C} | (| 2 | | ${\mathcal C}$ | \mathcal{C} | \mathscr{C} | \mathscr{C} | \mathcal{C} | \mscrC | mathematical script capital c |
| U+1D49F | \mathcal{D} | Ø | \mathcal{D} | D | 1 |) | | \mathcal{D} | \mathcal{D} | \mathscr{D} | \mathscr{D} | \mathcal{D} | $\mbox{\scrD}$ | mathematical script capital d |
| U+1D4A2 | \mathcal{G} | ${\mathscr G}$ | \mathcal{G} | G | (| っ フ | | \mathcal{G} | G | \mathscr{G} | \mathscr{G} | \mathcal{G} | $\mbox{\sc msc rG}$ | mathematical script capital g |
| U+1D4A5 | \mathcal{J} | J | \mathcal{J} | J | 0 | J | | \mathcal{J} | J | J | J | ${\cal J}$ | $\mbox{\sc msc rJ}$ | mathematical script capital j |
| U+1D4A6 | \mathcal{K} | ${\mathcal K}$ | $\mathcal K$ | $\check{\mathcal{K}}$ | 1 | 5 | | \mathcal{K} | \mathcal{K} | \mathcal{K} | K | \mathcal{K} | \mscrK | mathematical script capital k |
| U+1D4A9 | \mathcal{N} | \mathcal{N} | \mathcal{N} | \mathcal{N} | J | V | | \mathcal{N} | N | \mathcal{N} | \mathcal{N} | \mathcal{N} | \mscrN | mathematical script capital n |
| U+1D4AA | \mathcal{O} | 0 | \mathcal{O} | 0 | (| 3 | | \mathcal{O} | O | 0 | \mathcal{O} | \mathcal{O} | \mscr0 | mathematical script capital o |
| U+1D4AB | \mathcal{P} | \mathscr{P} | ${\mathcal P}$ | P | 7 |) | | ${\mathcal P}$ | P | Đ | Ð | ${\mathcal P}$ | $\mbox{\sc mscrP}$ | mathematical script capital p |
| | | | | | | | | | | | | | | mathematical script capital q |
| | | | | | | | | | | | | | | mathematical script capital s |
| U+1D4AF | \mathcal{T} | $\mathcal T$ | $\mathcal T$ | I | 9 | | | ${\mathcal T}$ | \mathcal{T} | \mathcal{T} | ${\mathscr T}$ | \mathcal{T} | $\mbox{\sc msc rT}$ | mathematical script capital t |
| U+1D4BO | | | | | | | | \mathcal{U} | U | $\mathcal U$ | \mathscr{U} | \mathcal{U} | \mscrU | mathematical script capital u |
| U+1D4B1 | | | | | | | | \mathcal{V} | V | $\mathcal V$ | ${\mathcal V}$ | \mathcal{V} | \mscrV | mathematical script capital v |
| U+1D4B2 | | | | | | | | W | W | W | W | \mathcal{W} | \mscrW | mathematical script capital w |
| U+1D4B3 | \mathcal{X} | \mathcal{X} | \mathcal{X} | \mathcal{X} | 7 | K | | \mathcal{X} | χ | \mathscr{X} | \mathscr{X} | \mathcal{X} | \mscrX | mathematical script capital x |
| U+1D4B4 | y | ¥ | y | y | 1 | J | | y | Y | ¥ | ¥ | \mathcal{Y} | \mscrY | mathematical script capital y |
| U+1D4B5 | \mathcal{Z} | ${\mathcal Z}$ | \mathcal{Z} | Ž | 2 | | | \mathcal{Z} | Z | \mathcal{Z} | ${\mathcal Z}$ | ${\mathcal Z}$ | \mscrZ | mathematical script capital z |
| | | | | | | | | | | | | | | |

13.1.8 Script, Latin, lowercase

| USV | L | Χ | S | Р | D | FN | HECR | Macro | Description |
|-------------|---|--------|--------|--------|---|--------|------|--------|-----------------------------|
| u+1D4в6 | | a | a | a | a | a | , | \mscra | mathematical script small a |
| U+1D4B7 | | C | Б | в | b | в | | \mscrb | mathematical script small b |
| U+1D4B8 | | c | c | c | C | c | : | \mscrc | mathematical script small c |
| U+1D4B9 | | d | d | d | d | d | ! | \mscrd | mathematical script small d |
| U+1D4BB | | f | f | f | f | f | , | \mscrf | mathematical script small f |
| U+1D4BD | , | ħ | ĥ | h | h | h | , | \mscrh | mathematical script small h |
| U+1D4BE | | i | i | i | i | i | | \mscri | mathematical script small i |
| U+1D4BF | | i | j | j | j | 1 | • | \mscrj | mathematical script small j |
| U+1D4C0 | | | | | K | k | | \mscrk | mathematical script small k |
| U+1D4C1 | | ℓ | ℓ | ℓ | L | ℓ | | \mscrl | mathematical script small l |
| U+1D4C2 | | m | m | m | m | m | r. | \mscrm | mathematical script small m |

| USV | L | X | S | Р | D | FNHECR | Macro | Description |
|---------|-----|----|---|----------|--------|------------------|--------|-----------------------------|
| U+1D4C3 | | n | n | n | n | n | \mscrn | mathematical script small n |
| U+1D4C5 | | 12 | p | p | p | P | \mscrp | mathematical script small p |
| u+1D4c6 | - | q | q | q | 9 | \boldsymbol{q} | \mscrq | mathematical script small q |
| u+1D4C7 | | r | r | r | r | 1 | \mscrr | mathematical script small r |
| U+1D4C8 | | 3 | S | 5 | J | 3 | \mscrs | mathematical script small s |
| u+1D4C9 | | t | t | t | t | ŧ | \mscrt | mathematical script small t |
| U+1D4CA | . 7 | u | u | u | u | u | \mscru | mathematical script small u |
| U+1D4CB | | v | v | v | v | v | \mscrv | mathematical script small v |
| U+1D4CC | . 7 | v | w | ω | W | w | \mscrw | mathematical script small w |
| U+1D4CD | , , | x | x | x | χ | \boldsymbol{x} | \mscrx | mathematical script small x |
| U+1D4CE | | 4 | y | y | y | y | \mscry | mathematical script small y |
| U+1D4CF | | z | z | z | Z | z | \mscrz | mathematical script small z |
| | | | | | | | | |

13.1.9 Fraktur, Latin, uppercase

```
USV
         L X S P D F N H E C R Macro
                                                    Description
u+1D504 21 21 21 21
                           A A
                                21 21
                                      21
                                           \mfrakA
                                                   mathematical fraktur capital a
U+1D505 🎛 🐯 🐯
                          3 B 3 3 3
                                           \mfrakB
                                                   mathematical fraktur capital b
U+1D507 🎗 🎗 🤋 🕽
                          DDDD
                                      \mathfrak{D}
                                           \mbox{mfrakD}
                                                    mathematical fraktur capital d
U+1D508 € ७ ७ €
                                E E
                                      Œ
                                           \mfrakE
                                                   mathematical fraktur capital e
U+1D509 ₹ ₹ ₹
                                F
                                   F
                                       \mathfrak{F}
                                           \mfrakF
                                                    mathematical fraktur capital f
U+1D50A 🤨 😘 😘 🥴
                                6 6 6
                                           \mfrakG
                                                   mathematical fraktur capital g
U+1D50D → ♥ ♥ ♥ ♥
                                    \mathfrak{J}
                                       J
                                           \mbox{mfrakJ}
                                                    mathematical fraktur capital j
U+1D50E 🤼 🤼 🦟
                                RRR
                                           \mfrakK
                                                   mathematical fraktur capital k
U+1D50F £ & £ £
                           L L L L L
                                           \mbox{mfrakL}
                                                   mathematical fraktur capital l
U+1D510 M M M M M
                          mmmm
                                          \mfrakM
                                                   mathematical fraktur capital m
                          nnnnn
U+1D511 N N N N N
                                           \mbox{mfrakN}
                                                    mathematical fraktur capital n
U+1D512 D D D D
                          00000
                                           \mfrak0
                                                   mathematical fraktur capital o
U+1D513 🏋 🏋 🕸 🏋
                          PPPP
                                           \mfrakP
                                                   mathematical fraktur capital p
υ+1D514 Ω 🚨 🚨 Ω Ω
                          QQQQQ
                                           \mbox{mfrakQ}
                                                    mathematical fraktur capital q
U+1D516 ♥ ♥ ♥ ♥
                                666
                                           \mfrakS
                                                   mathematical fraktur capital s
                             TITI
u+1D517 🏅 🏖 🏗 🏗
                           \mathfrak{T}
                                                   mathematical fraktur capital t
                                           \mfrakT
U+1D518 U U U U U
                           u u u u u
                                           \mfrakU mathematical fraktur capital u
U+1D519 X X X X X
                          UUUUU
                                           \mfrakV
                                                   mathematical fraktur capital v
U+1D51A W W W W W
                          wwww
                                           \mfrakW
                                                   mathematical fraktur capital w
U+1D51B X X X X
                           \mathfrak{X} \mathfrak{X} \mathfrak{X} \mathfrak{X} \mathfrak{X}
                                          \mfrakX mathematical fraktur capital x
U+1D51C 2) 2) 2) 2)
                          2) V 2) 2) 2)
                                          \mfrakY mathematical fraktur capital y
```

13.1.10 Fraktur, Latin, lowercase

| | ٠. | λ | 5 | Р | D | FNF | ΗE | C R | Macro | Description |
|-------------------|-----|----------------|----------------|----------------|----------------|----------------|----------------|-------------------------------|-----------------|------------------------------|
| U+1D521 |) | b | b | ð | d | б | ð | 0 0 | \mfrakd | mathematical fraktur small d |
| U+1D522 C | | e | e | e | e | e | e | e e | \mfrake | mathematical fraktur small e |
| U+1D523 f | • | f | f | f | f | f | f | f f | \mfrakf | mathematical fraktur small f |
| U+1D524 👂 | 3 | g | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mfrakg | mathematical fraktur small g |
| υ+1D525 β |) | \mathfrak{h} | \mathfrak{h} | \mathfrak{h} | h | h | \mathfrak{h} | h h | \mfrakh | mathematical fraktur small h |
| U+1D526 i | | i | ŧ | i | i | i | i | i i | \mfraki | mathematical fraktur small i |
| U+1D527 j | | j | ţ | j | j | j | j | jj | \mfrakj | mathematical fraktur small j |
| U+1D528 t | 2 | ŧ | ŧ | ť | ŧ | ŧ | ŧ | ŧ ŧ | \mfrakk | mathematical fraktur small k |
| U+1D529 [| | Į | \mathfrak{l} | ĺ | ĺ | Į | Į | l l | \mfrakl | mathematical fraktur small l |
| U+1D52A ₩ | 11 | m | m | m | m | m | m | m m | \mfrakm | mathematical fraktur small m |
| U+1D52B 11 | ı | n | n | n | \mathfrak{n} | n | n | n n | \mfrakn | mathematical fraktur small n |
| U+1D52C 0 |) | 0 | o | 0 | 0 | 0 | 0 | 0 0 | \mfrako | mathematical fraktur small o |
| U+1D52D 📮 |) | p | \mathfrak{p} | \mathfrak{p} | \mathfrak{p} | þ | \mathfrak{p} | pр | \mbox{mfrakp} | mathematical fraktur small p |
| U+1D52E 9 | 1 | q | q | q | q | q | q | qq | \mbox{mfrakq} | mathematical fraktur small q |
| U+1D52F t | | r | \mathfrak{r} | \mathfrak{r} | \mathfrak{r} | \mathfrak{r} | \mathfrak{r} | r r | \mfrakr | mathematical fraktur small r |
| U+1D530 \$ | ĭ | B | S | $\mathfrak s$ | \mathfrak{S} | $\mathfrak s$ | $\mathfrak s$ | \mathfrak{s} \mathfrak{s} | \mbox{mfraks} | mathematical fraktur small s |
| U+1D531 t | | t | t | t | t | ŧ | ŧ | \mathfrak{t} | \mfrakt | mathematical fraktur small t |
| U+1D532 U | l | u | u | u | u | \mathfrak{u} | u | u u | \mfraku | mathematical fraktur small u |
| U+1D533 🖰 |) | b | \mathfrak{b} | \mathfrak{v} | \mathfrak{v} | v | \mathfrak{v} | v v | \mfrakv | mathematical fraktur small v |
| u+1D534 tt | 0 1 | m | m | w | w | w | w | w w | \mfrakw | mathematical fraktur small w |
| U+1D535 🏌 | | ¥ | £ | ŗ | ŗ | \mathfrak{x} | \mathfrak{x} | ŗ ŗ | \mfrakx | mathematical fraktur small x |
| u+1D536 tj |) | ŋ | ŋ | ŋ | ŋ | ŋ | ŋ | ŋŋ | \mfraky | mathematical fraktur small y |
| U+1D537 3 | j | 3 | 3 | 3 | 3 | 3 | 3 | 3 3 | \mfrakz | mathematical fraktur small z |

13.1.11 Blackboard, Latin, uppercase

usv L X S P D F N H E C R Macro Description

U+1D538 A A A A A A A A A A \BbbA U+1D539 B B B B B B B B B B \BbbB \BbbD u+1D53C E E E E E E E E E E E E \BbbE U+1D53D **F F F F F F F** F $\mathbb{F} \mathbb{F} \mathbb{F}$ \BbbF U+1D53E 6 6 6 6 6 6 6 6 6 6 6 \BbbG U+1D540 | | | \BbbI J J J J J \BbbJ $_{\text{U+1D542}}$ \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \mathbb{K} \BbbK \BbbL u+1D544 M M M M M M M M M M M \BbbM \Bbb0 u+1d54a \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \BbbS U+1D54C U U U U U U U U U U U U U \BbbU U+1D54D V V V V V V V V V V V V \BbbV U+1D54E ₩₩₩₩₩₩₩₩₩₩ \BbbW U+1D54F X X X X X X X X X X X X U+1D550 Y Y Y Y Y Y Y Y Y Y \BbbY

mathematical double-struck capital a mathematical double-struck capital b mathematical double-struck capital d mathematical double-struck capital e mathematical double-struck capital f mathematical double-struck capital g mathematical double-struck capital i mathematical double-struck capital j mathematical double-struck capital k mathematical double-struck capital l mathematical double-struck capital m mathematical double-struck capital o mathematical double-struck capital s mathematical double-struck capital t mathematical double-struck capital u mathematical double-struck capital v mathematical double-struck capital w mathematical double-struck capital x mathematical double-struck capital y

13.1.12 Blackboard, Latin, lowercase

usv LXSPDFNHECR Macro Description

U+1D552 0 a a a a a \Bbba u+1D553 b b b b b b b b b b \Bbbb U+1D554 € € € € € \mathbb{C} \mathbb{C} \Bbbc u+1D555 d d d d \mathbf{d} d d d \Bbbd U+1D556 € € € € e e e e \Bbbe f f F ſ ſ ſſ \Bbbf U+1D558 9 9 9 8 g ge ge \Bbbg \mathbf{g} g gg gg υ+1D559 **h h h h** h h h h h h \Bbbh i i i i i U+1D55A i i i i \Bbbi U+1D55B j j j \Bbbj u+1D55c k k k k k k k k k \Bbbk U+1D55D | | | 1 1 1 1 1 \Bbb1 υ+1D55E <mark>m m m m m m m</mark> m ım ım ım \Bbbm U+1D55F N N N N N N N \Bbbn \Bbbo U+1D560 0 0 0 0 0 0 0 0 U+1D561 | D | D | D TD) p p \Bbbp p p p q q U+1D562 Q Q Q Q P q q \Bbbq U+1D563 **□ □ □** \mathbf{r} r \Bbbr r U+1D564 \$ \$ \$ \$ \$ S S \Bbbs t t t t U+1D565 € 1 1 t \Bbbt υ+1D566 <mark>u u u u u u u u</mark> u u u \Bbbu U+1D567 V V V V \Bbbv U+1D568 ₩ ₩ ₩ ₩ ₩ ₩ W W \Bbbw W U+1D569 🗶 🗶 🗶 🗶 X X \Bbbx У \Bbby u+1D56A y y y y y У У U+1D56в <mark>ℤ</mark> ℤ ℤ ℤ ℤ ℤ ℤ \mathbb{Z} \mathbb{Z} \Bbbz

mathematical double-struck small a mathematical double-struck small b mathematical double-struck small c mathematical double-struck small d mathematical double-struck small e mathematical double-struck small f mathematical double-struck small g mathematical double-struck small h mathematical double-struck small i mathematical double-struck small j mathematical double-struck small k mathematical double-struck small l mathematical double-struck small m mathematical double-struck small n mathematical double-struck small o mathematical double-struck small p mathematical double-struck small q mathematical double-struck small r mathematical double-struck small s mathematical double-struck small t mathematical double-struck small u mathematical double-struck small v mathematical double-struck small w mathematical double-struck small x mathematical double-struck small y

mathematical double-struck small z

13.1.13 Sans serif, Latin, uppercase

usv L X S P D F N H E C R Macro Description

```
U+1D5A0 A A A A
                                           \msansA
                                                    mathematical sans-serif capital a
U+1D5A1 B B B B
                           В
                                   В
                                      В
                                           \mbox{msansB}
                                                    mathematical sans-serif capital b
                           C
U+1D5A2 C C C C
                                   \mathsf{C}
                                           \mbox{msansC}
                                                    mathematical sans-serif capital c
u+1D5A3 D D D D D
                           D
                                D D D
                                           \mbox{msansD}
                                                    mathematical sans-serif capital d
                           Е
U+1D5A4 E E E E
                                   Ε
                                      Ε
                                           \mbox{msansE}
                                                    mathematical sans-serif capital e
U+1D5A5 F F F F
                           F
                                   F
                                       F
                                F
                                           \mbox{msans}F
                                                    mathematical sans-serif capital f
                           G
u+1D5A6 G G G G G
                                GGGG
                                           \msansG
                                                    mathematical sans-serif capital g
U+1D5A7 H H H H H
                                           \msansH
                                                    mathematical sans-serif capital h
U+1D5A8 | I | |
                                 I - I - I
                                           \mbox{msansI}
                                                    mathematical sans-serif capital i
U+1D5A9 J J J J
                                           \msansJ
                                                    mathematical sans-serif capital j
U+1D5AA K K K K K
                           K
                                KKK
                                          \mbox{msansK}
                                                    mathematical sans-serif capital k
U+1D5AB L L L L
                           L
                                           \msansL
                                                    mathematical sans-serif capital l
U+1D5AC M M M M M
                                MMM
                          M
                                          \msansM
                                                    mathematical sans-serif capital m
                                          \msansN mathematical sans-serif capital n
U+1D5AD N N N N
                                N N N
```

```
L X S P D F N H E C R Macro
                                                  Description
USV
U+1D5AE ○ ○ ○ ○
                                 00
                                        \msans0
                                                  mathematical sans-serif capital o
U+1D5AF P P P P
                         P
                               PPP
                                        \mbox{msansP}
                                                  mathematical sans-serif capital p
U+1D5BO Q Q Q Q Q
                                 Q O
                                        \msans0
                                                  mathematical sans-serif capital q
U+1D5B1 R R R R
                         R
                               R
                                    R
                                        \mbox{msansR}
                                                  mathematical sans-serif capital r
U+1D5B2 S S S S
                         S
                                 S
                                    S
                                        \msansS
                                                  mathematical sans-serif capital s
U+1D5B3 T T T T
                               TT
                                        \mbox{msansT}
                                                  mathematical sans-serif capital t
U+1D5B4 U U U U U
                                        \msansU
                                                  mathematical sans-serif capital u
U+1D5B5 V V V V
                         ٧
                               \vee \vee \vee
                                        \msansV
                                                  mathematical sans-serif capital v
u+1D5B6 WWWWW
                         W
                              W W W
                                        \msansW
                                                  mathematical sans-serif capital w
U+1D5B7 X X X X X
                         X
                               X X X
                                        \msansX
                                                  mathematical sans-serif capital x
U+1D5B8 Y Y Y Y
                         Υ
                               Y Y Y
                                        \mbox{msansY}
                                                  mathematical sans-serif capital y
u+1D5в9 Z Z Z Z Z
                               Z Z Z
                                        \msansZ mathematical sans-serif capital z
```

13.1.14 Sans serif, Latin, lowercase

```
LXSPDFNHECR Macro Description
USV
U+1D5BA a a a a a
                             a a a
                                      \msansa mathematical sans-serif small a
                             b b
u+1D5вв b b b b b
                                      \msansb mathematical sans-serif small b
U+1D5BC C C C C
                        С
                             CC
                                      \msansc mathematical sans-serif small c
u+1D5BD d d d d
                   d
                             d d
                        d
                                      \msansd mathematical sans-serif small d
u+1D5ве <mark>е е е е</mark> е
                                      \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
                                     \msansg mathematical sans-serif small g
                             g g q
u+1D5C1 h h h h h
                        h
                             h h
                                      \msansh mathematical sans-serif small h
U+1D5C2 | | | | |
                                      \msansi mathematical sans-serif small i
U+1D5C3 j j j j
                                      \msansj mathematical sans-serif small j
u+1D5C4 k k k k k
                        k
                             k k
                                      \msansk mathematical sans-serif small k
U+1D5C5 | |
                        ı
                                      \msansl mathematical sans-serif small l
u+1D5C6 mmmmm
                                      \msansm mathematical sans-serif small m
บ+1D5C7 n n n n n
                                      \msansn mathematical sans-serif small n
U+1D5C8 0 0 0 0
                                              mathematical sans-serif small o
                                      \msanso
U+1D5C9 P P P
                   p
                        p
                                      \msansp
                                               mathematical sans-serif small p
U+1D5CA Q Q Q Q
                                      \msansq mathematical sans-serif small q
U+1D5CB r r r
                r
                                      \msansr mathematical sans-serif small r
                                      \msanss mathematical sans-serif small s
U+1D5CC S S S S S
U+1D5CD t t t t
                   t
                        t
                                      \msanst mathematical sans-serif small t
υ+1D5CE U U U U U
                                      \msansu mathematical sans-serif small u
U+1D5CF V V V
                                      \msansv mathematical sans-serif small v
U+1D5D0 W W W W W
                                      \msansw mathematical sans-serif small w
U+1D5D1 X X X X X
                                      \msansx mathematical sans-serif small x
U+1D5D2 Y Y Y Y Y
                        у
                                      \msansy mathematical sans-serif small y
U+1D5D3 Z Z Z Z Z
                                     \mbox{\sc msansz} mathematical sans-serif small z
```

13.1.15 Italic sans serif, Latin, uppercase

| USV | L | Χ | S | P | D | F I | NΗ | ΙE | С | R | Macro | Description |
|---------|---|------------------|---|---|---|-----|----|----|---|------------------|-----------|--|
| U+1D608 | A | A | Α | A | A | | Α | A | A | A | \mitsansA | mathematical sans-serif italic capital a |
| U+1D609 | В | В | В | В | В | | В | В | В | В | \mitsansB | mathematical sans-serif italic capital b |
| U+1D60A | C | C | C | C | C | | C | C | C | \boldsymbol{C} | \mitsansC | mathematical sans-serif italic capital c |
| u+1D60в | D | D | D | D | D | | D | D | D | D | \mitsansD | mathematical sans-serif italic capital d |
| U+1D60C | Ε | Ε | Ε | Е | Ε | | E | Ε | Ε | Ε | \mitsansE | mathematical sans-serif italic capital e |
| U+1D60D | F | 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 | G | \mitsansG | mathematical sans-serif italic capital g |
| U+1D60F | Н | Н | Н | Н | Н | | Η | Н | Н | Н | \mitsansH | mathematical sans-serif italic capital h |
| U+1D610 | 1 | \boldsymbol{I} | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | \mitsansI | mathematical sans-serif italic capital i |
| U+1D611 | J | J | J | J | J | | J | J | J | J | \mitsansJ | mathematical sans-serif italic capital j |
| U+1D612 | K | K | K | Κ | K | | K | K | K | K | \mitsansK | mathematical sans-serif italic capital k |
| U+1D613 | L | L | L | L | L | | L | L | L | L | \mitsansL | mathematical sans-serif italic capital l |
| U+1D614 | M | M | Μ | Μ | Μ | | M | M | Μ | \mathcal{M} | \mitsansM | mathematical sans-serif italic capital m |
| U+1D615 | Ν | Ν | Ν | Ν | Ν | | N | Ν | Ν | N | \mitsansN | mathematical sans-serif italic capital n |
| U+1D616 | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | \mitsans0 | mathematical sans-serif italic capital o |
| u+1D617 | P | P | P | Р | P | | P | P | P | P | \mitsansP | mathematical sans-serif italic capital p |
| U+1D618 | Q | Q | Q | Q | Q | | Q | Q | Q | Q | \mitsansQ | mathematical sans-serif italic capital q |
| u+1D619 | R | R | R | R | R | | R | R | R | R | \mitsansR | mathematical sans-serif italic capital r |
| U+1D61A | S | S | S | S | S | | S | 5 | S | 5 | \mitsansS | mathematical sans-serif italic capital s |
| U+1D61B | T | T | T | T | T | | Τ | T | T | T | \mitsansT | mathematical sans-serif italic capital t |
| U+1D61C | U | U | U | U | U | | U | U | U | U | \mitsansU | mathematical sans-serif italic capital u |
| U+1D61D | V | V | V | V | V | | V | V | V | V | \mitsansV | mathematical sans-serif italic capital v |
| U+1D61E | W | W | W | W | W | | N | W | W | W | \mitsansW | mathematical sans-serif italic capital w |
| U+1D61F | X | Χ | Χ | Χ | X | | X | X | Χ | X | \mitsansX | mathematical sans-serif italic capital x |
| U+1D620 | Y | Y | Υ | Υ | Y | | Y | Y | Y | Y | \mitsansY | mathematical sans-serif italic capital y |
| U+1D621 | Z | Z | Ζ | Z | Z | | Z | Ζ | Ζ | Ζ | \mitsansZ | mathematical sans-serif italic capital z |
| | | | | | | | | | | | | • |

13.1.16 Italic sans serif, Latin, lowercase

| USV | L | Χ | S | Р | D | FNH | Е | C R | Macro | Description |
|---------|---|---|---|---|---|-----|---|------------|-------------------|--|
| U+1D622 | a | a | а | а | a | а | a | a a | \mitsansa | mathematical sans-serif italic small a |
| U+1D623 | b | Ь | b | b | b | Ь | b | b b | \mitsansb | mathematical sans-serif italic small b |
| U+1D624 | С | C | С | С | C | C | C | c c | \mitsansc | mathematical sans-serif italic small c |
| U+1D625 | d | d | d | d | d | d | d | d d | \mitsansd | mathematical sans-serif italic small d |
| U+1D626 | e | e | e | e | e | e | e | e e | \mitsanse | mathematical sans-serif italic small e |
| U+1D627 | f | f | f | f | f | f | f | f f | $\mbox{mitsansf}$ | mathematical sans-serif italic small f |
| U+1D628 | g | g | g | g | g | g | g | g g | \mitsansg | mathematical sans-serif italic small g |
| U+1D629 | h | h | h | h | h | h | h | h h | $\mbox{mitsansh}$ | mathematical sans-serif italic small h |
| U+1D62A | i | i | i | i | i | i | i | i i | \mitsansi | mathematical sans-serif italic small i |
| U+1D62B | j | j | j | j | j | j | j | jj | \mitsansj | mathematical sans-serif italic small j |
| U+1D62C | k | k | k | k | k | k | k | <i>k k</i> | \mitsansk | mathematical sans-serif italic small k |
| U+1D62D | 1 | 1 | l | 1 | 1 | 1 | 1 | 1 l | \mitsansl | mathematical sans-serif italic small l |
| U+1D62E | m | m | m | m | m | m | m | m m | \mitsansm | mathematical sans-serif italic small m |
| U+1D62F | n | n | n | n | n | n | n | n n | \mitsansn | mathematical sans-serif italic small n |
| U+1D630 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 0 | \mitsanso | mathematical sans-serif italic small o |
| U+1D631 | p | p | p | р | p | p | р | p p | \mitsansp | mathematical sans-serif italic small p |
| U+1D632 | q | q | q | q | q | q | q | q | \mitsansq | mathematical sans-serif italic small q |

| USV | L | Χ | S | Р | D | FNH | ΙE | C R | Macro | Description |
|---------|---|---|---|---|---|-----|----|------------|-----------|--|
| U+1D633 | r | r | r | r | r | r | r | r r | \mitsansr | mathematical sans-serif italic small r |
| u+1D634 | S | S | S | S | S | 5 | 5 | s s | \mitsanss | mathematical sans-serif italic small s |
| U+1D635 | t | t | t | t | t | t | t | t t | \mitsanst | mathematical sans-serif italic small t |
| u+1D636 | и | и | и | И | u | и | И | u u | \mitsansu | mathematical sans-serif italic small u |
| u+1D637 | V | V | V | V | V | V | V | V V | \mitsansv | mathematical sans-serif italic small v |
| u+1D638 | W | W | w | W | W | W | W | w w | \mitsansw | mathematical sans-serif italic small w |
| u+1D639 | X | Χ | Χ | Χ | X | X | X | X X | \mitsansx | mathematical sans-serif italic small x |
| u+1D63A | y | y | y | У | У | y | У | y y | \mitsansy | mathematical sans-serif italic small y |
| u+1D63в | Z | Z | Z | Z | Z | Z | Z | Z Z | \mitsansz | mathematical sans-serif italic small z |
| | | | | | | | | | | |

13.1.17 Typewriter, Latin, uppercase

```
LXSPDFNHECR Macro Description
USV
U+1D670 A A A A A A
                          AAA \mttA
                                          mathematical monospace capital a
u+1D671 B B B B B B
                          BBB \mttB
                                          mathematical monospace capital b
U+1D672 C C C C C C C
                          CCC \mttC
                                          mathematical monospace capital c
U+1D673 D D D D D D
                          D D D
                                 \mttD
                                          mathematical monospace capital d
U+1D674 E E E E E E E
                          E E E
                                 \mttE
                                          mathematical monospace capital e
                          FFF
u+1D675 F F F F F F F
                                 \mttF
                                          mathematical monospace capital f
u+1D676 G G G G G G
                          G G G
                                 \mttG
                                          mathematical monospace capital g
U+1D677 H H H H H H H
                          HHH \mttH
                                          mathematical monospace capital h
                          I I I \mttI
U+1D678 I I I I I I I
                                          mathematical monospace capital i
υ+1D679 J J J J J J J
                          JJJ
                                 \mttJ
                                          mathematical monospace capital j
U+1D67A K K K K K K K
                          KKK \mttK
                                          mathematical monospace capital k
U+1D67B L L L L L L L
                          LLL
                                 \mttL
                                          mathematical monospace capital l
U+1D67C M M M M M M M
                          M M M \mttM
                                          mathematical monospace capital m
U+1D67D N N N N N N N
                          N N N \mttN
                                          mathematical monospace capital n
U+1D67E 0 0 0 0 0 0
                          0 0 0 \mtt0
                                          mathematical monospace capital o
U+1D67F P P P P P P
                          PPP \mttP
                                          mathematical monospace capital p
U+1D680 Q Q Q Q Q Q
                          QQQ \mttQ
                                          mathematical monospace capital q
U+1D681 R R R R R R R
                          RRR \mttR
                                          mathematical monospace capital r
U+1D682 S S S S S S S
                          SSS
                                 \mttS
                                          mathematical monospace capital s
U+1D683 T T T T T T
                          TTT
                                 \mttT
                                          mathematical monospace capital t
U+1D684 U U U U U U U
                          UUU \mttU
                                          mathematical monospace capital u
U+1D685 V V V V V V
                          V V V \mttV
                                          mathematical monospace capital v
U+1D686 W W W W W W
                          W W W \mttW
                                          mathematical monospace capital w
U+1D687 X X X X X X X
                          X X X \mttX
                                          mathematical monospace capital x
U+1D688 Y Y Y Y Y Y Y
                          YYY \mttY
                                          mathematical monospace capital y
                          Z Z Z \setminus mttZ
u+1D689 Z Z Z Z Z Z Z Z
                                          mathematical monospace capital z
```

13.1.18 Typewriter, Latin, lowercase

| USV | LXSPDFNI | HECR Macro | o Description |
|--------|------------|------------|--------------------------------|
| U+1D68 | aaaaaaaaaa | aaa \mtta | mathematical monospace small a |

LXSPDFNHECR Macro Description USV u+1D68в b b b b b b b b **b** b \mttb mathematical monospace small b U+1D68c C C C C C C C CCC \mttc mathematical monospace small c mathematical monospace small d u+1p68p d d d d d d d d d d \mt.t.d u+1D68e e e e e e e e e **e** e \mtte mathematical monospace small e U+1D68F f f f f f f fff \mttf mathematical monospace small f u+1D690 g g g g g g g g ggg \mttg mathematical monospace small g u+1D691 h h h h h h h h h \mtth mathematical monospace small h U+1D692 i i i i i i i i iii \mtti mathematical monospace small i u+1D693 **j** j j **j j** jjj \mttj mathematical monospace small j u+1D694 k k k k k k k k k k \mttk mathematical monospace small k U+1D695 1 1 1 1 1 1 1 111 \mttl mathematical monospace small l U+1D696 m m m m m m $m \ m \ m$ \mttm mathematical monospace small m u+1D697 n n n n n n n n n n mathematical monospace small n \mttn U+1D698 0 0 0 0 0 0 0 000 \mtto mathematical monospace small o u+1D699 p p p p p p mathematical monospace small p pрр \mttp u+1D69A q q q q q q q qqq\mttq mathematical monospace small q u+1D69в r r r r r r r rrr\mttr mathematical monospace small r U+1D69C S S S S S S S SSS mathematical monospace small s \mtts U+1D69D t t t t t t t t t t \mttt mathematical monospace small t u+1D69E u u u u U U u 11 11 U \mt.t.11 mathematical monospace small u U+1D69F V V V V V V VV\mttv mathematical monospace small v U+1D6AO W W W W W W W W W \mttw mathematical monospace small w U+1D6A1 X X X X X X X mathematical monospace small x \mttx

mathematical monospace small y

mathematical monospace small z

13.2 Bold

u+1D6A2 y y y y y y y

U+1D6A3 Z Z Z Z Z Z Z Z

13.2.1 Bold, Latin, uppercase

ууу

\mtty

\mttz

LXSPDFNHECR USV Macro Description U+1D400 A A A A A A A A A A A A \mbfA mathematical bold capital a U+1D401 B B B B B B B B B B B \mbfB mathematical bold capital b U+1D402 C C C C C C C C C C \mbfC mathematical bold capital c U+1D403 D D D D D D D D D D \mbfD mathematical bold capital d U+1D404 E E E E E E E E E E \mbfE mathematical bold capital e U+1D405 F F F F F F F F F F F F \mbfF mathematical bold capital f U+1D406 G G G G G G G G G \mbfG mathematical bold capital g U+1D407 H H H H H H H H H H H \mbfH mathematical bold capital h U+1D408 I I I I I I I I I I I \mbfI mathematical bold capital i u+1D409 J J J J J JJJJJ \mbfJ mathematical bold capital j U+1D40A K K K K K K K K K K K K \mbfK mathematical bold capital k \mbfL mathematical bold capital l U+1D40C M M M M M M M M M M M \mbfM mathematical bold capital m U+1D40D N N N N N N N N N N N N \mbfN mathematical bold capital n U+1D40E O O O O O O O O O \mbf0 mathematical bold capital o U+1D40F P P P P P P P P P P P mathematical bold capital p

```
L X S P D F N H E C R Macro Description
USV
\mbfQ
                                              mathematical bold capital q
U+1D411 R R R R R R R R R R R
                                      \mbfR
                                              mathematical bold capital r
U+1D412 S S S S S S S S S S S
                                              mathematical bold capital s
                                      \mbfS
U+1D413 T T T T T T T T T T T
                                      \mbox{mbfT}
                                              mathematical bold capital t
U+1D414 U U U U U U U U U U U U U
                                      \mbfU
                                              mathematical bold capital u
U+1D415 V V V V V V V V V V V V
                                      \mbfV
                                              mathematical bold capital v
U+1D416 W W W W W W W W W W W
                                      \mbfW
                                              mathematical bold capital w
U+1D417 X X X X X X X X X X X X X
                                      \mbfX
                                              mathematical bold capital x
U+1D418 Y Y Y Y Y Y Y Y Y Y Y
                                      \mbfY
                                              mathematical bold capital y
U+1D419 Z Z Z Z Z Z Z Z Z Z Z Z
                                              mathematical bold capital z
```

13.2.2 Bold, Latin, lowercase

LXSPDFNHECR Macro Description USV U+1D41A a a a a a a a a a a \mbfa mathematical bold small a U+1D41B b b b b b b b b b b \mbfb mathematical bold small b U+1D41C C C C C C C C C C C \mbfc mathematical bold small c u+1D41D d d d d d d d d d d d \mbfd mathematical bold small d U+1D41E e e e e e e e e e e \mbfe mathematical bold small e U+1D41F f f f f f f f f f f \mbox{mbff} mathematical bold small f \mbfg mathematical bold small g U+1D421 h h h h h h h h h h h \mbfh mathematical bold small h U+1D422 i i i i i i i i i i \mbfi mathematical bold small i U+1D423 j j j j j jjij \mbfj mathematical bold small j U+1D424 k k k k k k k k k k k \mbfk mathematical bold small k \mbfl mathematical bold small l u+1D426 mmmmmmmmmmm \mbfm mathematical bold small m U+1D427 n n n n n n n n n n \mbfn mathematical bold small n U+1D428 0 0 0 0 0 0 0 0 0 0 \mbfo mathematical bold small o u+1D429 p p p p p p p p p \mbfp mathematical bold small p U+1D42A Q Q Q Q Q Q Q Q Q Q \mbfq mathematical bold small q U+1D42B r r r r r r r r r \mbfr mathematical bold small r U+1D42C S S S S S S S S S S \mbfs mathematical bold small s U+1D42D t t t t t t t t t t t \mbft mathematical bold small t U+1D42E U U U U U U U U U U U U \mbfu mathematical bold small u U+1D42F V V V V V V V V V V V \mbfv mathematical bold small v U+1D430 W W W W W W W W W W W \mbfw mathematical bold small w U+1D431 X X X X X X X X X X X X mathematical bold small x \mbfx \mbfy mathematical bold small y U+1D433 Z Z Z Z Z Z Z Z Z Z Z Z mathematical bold small z \mbfz

13.2.3 Bold Greek, uppercase

| USV | L | Χ | S | P | D | F | N | ΗI | E C R | Macro | Description |
|---------|-------------------|---|--------------|--------------|--------------|---|-------------------|------------|------------------------------------|-----------------------|--|
| U+1D6A8 | A | A | A | A | A | Α | A | A A | A A A | \mbfAlpha | mathematical bold capital alpha |
| U+1D6A9 | \mathbf{B} | B | B | B | \mathbf{B} | В | \mathbf{B} | B | BB | \mbfBeta | mathematical bold capital beta |
| u+1d6aa | Γ | Γ | Γ | Γ | Γ | Γ | Γ | Γ | ГГГ | \mbfGamma | mathematical bold capital gamma |
| U+1D6AB | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | ΔΔ | \mbfDelta | mathematical bold capital delta |
| U+1D6AC | \mathbf{E} | E | E | E | E | Ε | \mathbf{E} | Εl | $\mathbf{E} \mathbf{E} \mathbf{E}$ | $\mbox{mbfEpsilon}$ | mathematical bold capital epsilon |
| u+1d6ad | ${f Z}$ | Z | \mathbf{Z} | \mathbf{Z} | Z | Z | ${f Z}$ | Z | $\mathbf{Z} \mathbf{Z} \mathbf{Z}$ | \mbfZeta | mathematical bold capital zeta |
| U+1D6AE | \mathbf{H} | H | H | H | \mathbf{H} | Н | \mathbf{H} | H | нн | \mbfEta | mathematical bold capital eta |
| u+1d6af | Θ | Θ | Θ | Θ | H | Θ | Θ | Θ | Θ Θ | $\mbox{mbfTheta}$ | mathematical bold capital theta |
| u+1D6во | Ι | I | I | I | Ι | 1 | Ι | 1 | II | \mbfIota | mathematical bold capital iota |
| U+1D6B1 | \mathbf{K} | K | K | K | K | K | \mathbf{K} | K I | KK | \mbfKappa | mathematical bold capital kappa |
| U+1D6B2 | Λ | Λ | Λ | Λ | Λ | Λ | Λ | ٨ | ΛΛ | \mbfLambda | mathematical bold capital lambda |
| u+1D6в3 | \mathbf{M} | M | M | M | \mathbf{M} | M | \mathbf{M} | MI | 1 M M | \mbfMu | mathematical bold capital mu |
| u+1D6в4 | \mathbf{N} | N | N | N | N | N | \mathbf{N} | NI | NN | \mbfNu | mathematical bold capital nu |
| U+1D6B5 | Ξ | Ξ | Ξ | H | Ξ | Ξ | Ξ | Z | ΞΞΞ | \mbfXi | mathematical bold capital xi |
| u+1D6в6 | O | 0 | 0 | O | 0 | 0 | O | 0 (| 000 | \mbfOmicron | mathematical bold capital omicron |
| и+1D6в7 | П | П | П | Π | П | П | П | ПΙ | ΙПП | \mbfPi | mathematical bold capital pi |
| u+1D6в8 | \mathbf{P} | P | P | P | P | P | \mathbf{P} | P] | PP | \mbfRho | mathematical bold capital rho |
| u+1D6в9 | Θ | θ | θ | θ | θ | θ | Θ | 9 6 | $\Theta \Theta$ | $\mbox{\mbfvarTheta}$ | mathematical bold capital theta symbol |
| U+1D6BA | $\mathbf{\Sigma}$ | Σ | Σ | Σ | Σ | Σ | $\mathbf{\Sigma}$ | Σ | ΣΣΣ | \mbfSigma | mathematical bold capital sigma |
| u+1D6вв | ${f T}$ | T | \mathbf{T} | \mathbf{T} | T | T | \mathbf{T} | T 7 | $\mathbf{T} \mathbf{T}$ | \mbfTau | mathematical bold capital tau |
| U+1D6BC | Υ | Υ | Y | Y | Υ | Y | Υ | Υ | ΥΥ | $\mbox{\mbfUpsilon}$ | mathematical bold capital upsilon |
| U+1D6BD | Φ | Φ | Φ | Φ | Φ | Φ | Φ | Ф | ФФ | \mbfPhi | mathematical bold capital phi |
| U+1D6ве | \mathbf{X} | X | X | X | X | X | \mathbf{X} | X | $\mathbf{X} \mathbf{X} \mathbf{X}$ | \mbfChi | mathematical bold capital chi |
| U+1D6BF | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | $\Psi \Psi \Psi$ | \mbfPsi | mathematical bold capital psi |
| u+1D6co | $\mathbf{\Omega}$ | Ω | Ω | Ω | Ω | Ω | Ω | Ω | ΩΩΩ | \mbf0mega | mathematical bold capital omega |
| | | | | | | | | | | | |

13.2.4 Bold Greek, lowercase

| USV | L | Χ | S | Р | D | F | N | Η | Е | С | R | Macro | Description |
|---------|----------|---|-------|-------|---|---|----------|---|---|---|------------|--------------------------|-------------------------------------|
| U+1D6C2 | α | α | α | α | α | α | α | α | α | α | α | \mbfalpha | mathematical bold small alpha |
| U+1D6C3 | β | β | β | β | β | β | β | β | β | β | β | \mbfbeta | mathematical bold small beta |
| U+1D6C4 | γ | γ | γ | γ | γ | γ | γ | γ | Υ | γ | Υ | \mbfgamma | mathematical bold small gamma |
| U+1D6C5 | δ | δ | δ | δ | δ | δ | δ | δ | δ | δ | δ | \mbfdelta | mathematical bold small delta |
| U+1D6C6 | ε | 3 | ε | 3 | 3 | ε | ε | ε | 3 | 3 | ϵ | $\verb \mbfvarepsilon $ | mathematical bold small varepsilon |
| u+1D6c7 | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | \mbfzeta | mathematical bold small zeta |
| U+1D6C8 | η | η | η | η | η | η | η | η | η | η | η | \mbfeta | mathematical bold small eta |
| U+1D6C9 | θ | θ | θ | θ | θ | θ | θ | θ | θ | θ | θ | \mbftheta | mathematical bold small theta |
| u+1d6ca | ι | ι | ι | ι | ι | ι | ι | 1 | ι | ι | ι | \mbfiota | mathematical bold small iota |
| u+1D6св | κ | ĸ | κ | κ | K | K | κ | ĸ | ĸ | κ | κ | \mbfkappa | mathematical bold small kappa |
| U+1D6CC | λ | λ | λ | λ | y | λ | λ | λ | λ | λ | λ | \mbflambda | mathematical bold small lambda |
| U+1D6CD | μ | μ | μ | μ | μ | μ | μ | μ | μ | μ | μ | \mbfmu | mathematical bold small mu |
| U+1D6CE | ν | ν | ν | ν | ν | ٧ | ν | ν | ν | ν | ν | \mbfnu | mathematical bold small nu |
| U+1D6CF | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | \mbfxi | mathematical bold small xi |
| U+1D6D0 | o | 0 | 0 | 0 | 0 | 0 | o | 0 | 0 | 0 | 0 | \mbfomicron | mathematical bold small omicron |
| U+1D6D1 | π | π | π | π | п | π | π | π | π | π | π | \mbfpi | mathematical bold small pi |
| U+1D6D2 | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | \mbfrho | mathematical bold small rho |
| | | | | - | | | | | | | | \mbfvarsigma | mathematical bold small final sigma |
| | | | | | | | | | | | | | |

| usv L X S P D F N H E C R | Macro | Description |
|---|--------------|--|
| U+1D6D4 σ σ σ σ σ σ σ σ σ σ σ | \mbfsigma | mathematical bold small sigma |
| υ+1D6D5 τ τ τ τ τ τ τ τ τ τ τ | \mbftau | mathematical bold small tau |
| υ+1D6D6 υ υ υ υ υ υ υ υ υ υ υ | \mbfupsilon | mathematical bold small upsilon |
| υ+10607 φ φ φ φ φ φ φ φ φ | \mbfvarphi | mathematical bold small phi |
| $U+1D6D8 \times X \times $ | \mbfchi | mathematical bold small chi |
| υ+1D6D9 ψ ψ ψ ψ ψ ψ ψ ψ ψ ψ | \mbfpsi | mathematical bold small psi |
| $U+1D6DA \ \omega \ $ | \mbfomega | mathematical bold small omega |
| U+1D6DB 0 0 0 0 0 0 0 0 0 0 0 | \mbfpartial | mathematical bold partial differential |
| U+1D6DC ϵ | \mbfepsilon | mathematical bold varepsilon symbol |
| U+1D6DD 🐧 🐧 🐧 🐧 🐧 🐧 🐧 🐧 | \mbfvartheta | mathematical bold theta symbol |
| U+1D6DE W X X X X N N N N K X X | \mbfvarkappa | mathematical bold kappa symbol |
| U+1D6DF | \mbfphi | mathematical bold phi symbol |
| U+1D6EO Q Q 9 Q Q Q Q Q Q Q | \mbfvarrho | mathematical bold rho symbol |
| U+1D6E1 ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ ♥ | \mbfvarpi | mathematical bold pi symbol |
| | | |

13.2.5 Bold italic, Latin, uppercase

| USV | L | X | S | Р | D | F | N | Н | E | C | R | Macro | Description |
|---------|------------------|------------------|------------------|------------------|------------------|---|------------------|---|---------------------------|------------------|------------------|------------------|------------------------------------|
| u+1D468 | \boldsymbol{A} | A | \overline{A} | \overline{A} | A | Α | \boldsymbol{A} | Α | A | A | A | \mbfitA | mathematical bold italic capital a |
| u+1D469 | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | B | \boldsymbol{B} | B | \boldsymbol{B} | \boldsymbol{B} | B | \mbfitB | mathematical bold italic capital b |
| u+1d46a | \boldsymbol{C} | \boldsymbol{C} | \boldsymbol{C} | \boldsymbol{C} | \boldsymbol{C} | C | \boldsymbol{C} | C | \boldsymbol{C} | \boldsymbol{C} | C | \mbfitC | mathematical bold italic capital c |
| u+1D46в | D | \boldsymbol{D} | \boldsymbol{D} | \boldsymbol{D} | D | D | D | D | D | \boldsymbol{D} | D | \mbfitD | mathematical bold italic capital d |
| u+1D46c | \boldsymbol{E} | \boldsymbol{E} | \boldsymbol{E} | \boldsymbol{E} | \boldsymbol{E} | Ε | $oldsymbol{E}$ | E | $\boldsymbol{\mathit{E}}$ | \boldsymbol{E} | \boldsymbol{E} | \mbfitE | mathematical bold italic capital e |
| u+1d46d | \boldsymbol{F} | \boldsymbol{F} | \boldsymbol{F} | F | F | F | \boldsymbol{F} | F | F | \boldsymbol{F} | \boldsymbol{F} | \mbfitF | mathematical bold italic capital f |
| u+1d46e | \boldsymbol{G} | \boldsymbol{G} | \boldsymbol{G} | \boldsymbol{G} | G | G | \boldsymbol{G} | G | G | G | G | \mbfitG | mathematical bold italic capital g |
| u+1d46f | \boldsymbol{H} | \boldsymbol{H} | H | \boldsymbol{H} | H | Н | \boldsymbol{H} | Н | H | H | Η | \mbox{mbfitH} | mathematical bold italic capital h |
| u+1D470 | \boldsymbol{I} | I | I | I | I | I | \boldsymbol{I} | I | I | I | I | \mbfitI | mathematical bold italic capital i |
| u+1D471 | \boldsymbol{J} | \boldsymbol{J} | \boldsymbol{J} | J | J | J | \boldsymbol{J} | J | J | J | \boldsymbol{J} | $\verb \mbfitJ $ | mathematical bold italic capital j |
| u+1D472 | \boldsymbol{K} | K | K | K | K | K | \boldsymbol{K} | K | K | K | K | \mbfitK | mathematical bold italic capital k |
| u+1D473 | $oldsymbol{L}$ | \boldsymbol{L} | \boldsymbol{L} | \boldsymbol{L} | L | L | $oldsymbol{L}$ | L | L | \boldsymbol{L} | \boldsymbol{L} | $\verb \mbfitL $ | mathematical bold italic capital l |
| u+1D474 | M | M | M | M | M | M | M | M | M | M | M | \mbfitM | mathematical bold italic capital m |
| u+1D475 | N | N | N | N | N | N | N | N | N | N | N | \mbox{mbfitN} | mathematical bold italic capital n |
| u+1D476 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfit0 | mathematical bold italic capital o |
| u+1D477 | \boldsymbol{P} | P | P | \boldsymbol{P} | P | P | \boldsymbol{P} | P | P | P | P | \mbfitP | mathematical bold italic capital p |
| u+1d478 | \boldsymbol{Q} | \boldsymbol{Q} | Q | Q | Q | Q | \boldsymbol{Q} | Q | Q | Q | Q | \mbfitQ | mathematical bold italic capital q |
| u+1D479 | | | | | | | | | | | | \mbfitR | mathematical bold italic capital r |
| u+1D47A | \boldsymbol{S} | S | S | S | S | S | \boldsymbol{S} | S | S | S | S | \mbfitS | mathematical bold italic capital s |
| u+1D47в | \boldsymbol{T} | T | T | \boldsymbol{T} | T | T | T | T | T | T | T | \mbfitT | mathematical bold italic capital t |
| u+1D47C | | | | | | _ | $oldsymbol{U}$ | U | U | U | U | \mbfitU | mathematical bold italic capital u |
| u+1D47D | V | \boldsymbol{V} | V | V | $oldsymbol{V}$ | V | $oldsymbol{V}$ | V | V | \boldsymbol{V} | V | \mbfitV | mathematical bold italic capital v |
| U+1D47E | W | W | W | W | W | W | W | W | W | W | W | \mbfitW | mathematical bold italic capital w |
| u+1D47F | | | | | | | | | | | | \mbfitX | mathematical bold italic capital x |
| u+1D480 | | | | | | | | | | | | \mbfitY | mathematical bold italic capital y |
| u+1D481 | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | Z | Z | \boldsymbol{Z} | Z | \boldsymbol{Z} | Z | Z | \mbfitZ | mathematical bold italic capital z |

13.2.6 Bold italic, Latin, lowercase

| USV | L | X | S | P | D | F | N | Η | E | C | R | Macro | Description |
|---------|------------------|------------------|------------------|------------------|------------------|---|------------------|---|------------------|---|------------------|-----------------|----------------------------------|
| U+1D482 | \boldsymbol{a} | a | а | a | а | a | \boldsymbol{a} | а | a | а | a | \mbfita | mathematical bold italic small a |
| u+1D483 | \boldsymbol{b} | b | b | b | b | b | \boldsymbol{b} | b | b | b | b | \mbox{mbfitb} | mathematical bold italic small b |
| U+1D484 | \boldsymbol{c} | c | C | C | \boldsymbol{C} | C | \boldsymbol{c} | c | C | C | C | \mbfitc | mathematical bold italic small c |
| U+1D485 | d | d | d | d | d | d | d | d | d | d | d | \mbox{mbfitd} | mathematical bold italic small d |
| U+1D486 | e | e | e | e | \boldsymbol{e} | e | e | е | e | e | е | \mbfite | mathematical bold italic small e |
| u+1D487 | f | \boldsymbol{f} | \boldsymbol{f} | f | f | f | f | f | \boldsymbol{f} | f | f | \mbfitf | mathematical bold italic small f |
| u+1D488 | \boldsymbol{g} | g | g | g | g | g | \boldsymbol{g} | g | g | g | g | \mbfitg | mathematical bold italic small g |
| u+1d489 | \boldsymbol{h} | h | h | h | h | h | h | h | h | h | h | \mbox{mbfith} | mathematical bold italic small h |
| u+1d48a | \boldsymbol{i} | i | i | i | i | i | \boldsymbol{i} | i | i | i | i | \mbfiti | mathematical bold italic small i |
| U+1D48B | \boldsymbol{j} | j | j | j | j | j | $oldsymbol{j}$ | j | j | j | j | \mbox{mbfitj} | mathematical bold italic small j |
| U+1D48C | \boldsymbol{k} | \boldsymbol{k} | k | k | k | k | \boldsymbol{k} | k | k | k | \boldsymbol{k} | \mbox{mbfitk} | mathematical bold italic small k |
| U+1D48D | \boldsymbol{l} | l | l | 1 | 1 | l | \boldsymbol{l} | 1 | l | 1 | l | \mbfitl | mathematical bold italic small l |
| U+1D48E | m | m | m | m | m | m | m | m | m | m | m | \mbfitm | mathematical bold italic small m |
| U+1D48F | \boldsymbol{n} | n | n | n | n | n | \boldsymbol{n} | n | n | n | n | \mbfitn | mathematical bold italic small n |
| U+1D490 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfito | mathematical bold italic small o |
| U+1D491 | \boldsymbol{p} | p | p | p | p | p | \boldsymbol{p} | p | p | p | p | \mbox{mbfitp} | mathematical bold italic small p |
| U+1D492 | \boldsymbol{q} | \boldsymbol{q} | q | q | q | q | \boldsymbol{q} | 9 | q | q | \boldsymbol{q} | \mbox{mbfitq} | mathematical bold italic small q |
| U+1D493 | r | r | r | r | r | r | r | r | r | r | r | \mbfitr | mathematical bold italic small r |
| u+1D494 | s | S | S | S | S | S | s | s | S | S | S | \mbox{mbfits} | mathematical bold italic small s |
| u+1D495 | \boldsymbol{t} | t | t | t | t | t | \boldsymbol{t} | t | t | t | t | \mbox{mbfitt} | mathematical bold italic small t |
| u+1D496 | \boldsymbol{u} | u | u | u | u | u | \boldsymbol{u} | и | u | u | u | \mbfitu | mathematical bold italic small u |
| u+1D497 | \boldsymbol{v} | v | v | v | υ | V | \boldsymbol{v} | ν | v | ν | v | \mbfitv | mathematical bold italic small v |
| u+1D498 | \boldsymbol{w} | w | w | w | w | W | \boldsymbol{w} | w | w | w | w | \mbfitw | mathematical bold italic small w |
| u+1D499 | \boldsymbol{x} | x | \boldsymbol{x} | \boldsymbol{x} | X | X | \boldsymbol{x} | X | \boldsymbol{x} | x | \boldsymbol{x} | \mbox{mbfitx} | mathematical bold italic small x |
| u+1D49A | \boldsymbol{y} | y | y | y | y | y | \boldsymbol{y} | у | y | y | y | \mbox{mbfity} | mathematical bold italic small y |
| U+1D49B | \boldsymbol{z} | z. | Z | \boldsymbol{z} | 2 | Z | z | z | z | Z | \boldsymbol{z} | \mbox{mbfitz} | mathematical bold italic small z |

13.2.7 Bold italic Greek, uppercase

| USV | L | X | S | Р | D | F | N | Н | Е | C | R | Macro | Description |
|---------|------------------------|--------------------------|--------------------------|--------------------------|------------------|---|--------------------------|---|---------------------------|-----------------------|--------------------------|---------------------------|--|
| U+1D71C | \boldsymbol{A} | A | \boldsymbol{A} | A | \boldsymbol{A} | A | \boldsymbol{A} | Α | A | A | A | \mbfitAlpha | mathematical bold italic capital alpha |
| U+1D71D | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | \boldsymbol{B} | В | \boldsymbol{B} | В | \boldsymbol{B} | \boldsymbol{B} | B | \mbfitBeta | mathematical bold italic capital beta |
| U+1D71E | $oldsymbol{arGamma}$ | $\boldsymbol{\varGamma}$ | $\boldsymbol{\varGamma}$ | $\boldsymbol{\varGamma}$ | $I\!\!\!\Gamma$ | Γ | $oldsymbol{arGamma}$ | Γ | $\boldsymbol{\varGamma}$ | Γ | $\boldsymbol{\varGamma}$ | \mbfitGamma | mathematical bold italic capital gamma |
| U+1D71F | Δ | 4 | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | Δ | \mbfitDelta | mathematical bold italic capital delta |
| U+1D720 | $oldsymbol{E}$ | \boldsymbol{E} | \boldsymbol{E} | \boldsymbol{E} | \boldsymbol{E} | Ε | $oldsymbol{E}$ | E | $\boldsymbol{\mathit{E}}$ | \boldsymbol{E} | \boldsymbol{E} | \mbfitEpsilon | mathematical bold italic capital epsilon |
| U+1D721 | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | Z | \boldsymbol{Z} | Z | \boldsymbol{Z} | \boldsymbol{Z} | \boldsymbol{Z} | \mbfitZeta | mathematical bold italic capital zeta |
| U+1D722 | \boldsymbol{H} | \boldsymbol{H} | \boldsymbol{H} | \boldsymbol{H} | H | Н | \boldsymbol{H} | Н | H | Η | H | \mbfitEta | mathematical bold italic capital eta |
| U+1D723 | Θ | Θ | $\boldsymbol{\Theta}$ | Θ | H | Θ | $\boldsymbol{\varTheta}$ | Θ | 0 | $\boldsymbol{\Theta}$ | Θ | $\mbox{\label{locality}}$ | mathematical bold italic capital theta |
| U+1D724 | \boldsymbol{I} | I | I | I | I | I | \boldsymbol{I} | 1 | I | I | I | \mbfitIota | mathematical bold italic capital iota |
| U+1D725 | \boldsymbol{K} | K | K | K | \boldsymbol{K} | K | \boldsymbol{K} | K | \boldsymbol{K} | K | K | \mbfitKappa | mathematical bold italic capital kappa |
| U+1D726 | $\boldsymbol{\Lambda}$ | Λ | $\boldsymbol{\Lambda}$ | Λ | Λ | Λ | $\boldsymbol{\Lambda}$ | Λ | Λ | Λ | Λ | \mbfitLambda | mathematical bold italic capital lambda |
| U+1D727 | M | M | M | M | M | Μ | M | M | M | M | M | \mbfitMu | mathematical bold italic capital mu |
| U+1D728 | N | N | N | N | N | N | N | N | N | N | N | \mbfitNu | mathematical bold italic capital nu |
| U+1D729 | Ξ | Ξ | $\boldsymbol{\varXi}$ | 丑 | Ξ | Ξ | Ξ | Z | Ξ | Ξ | Ξ | \mbfitXi | mathematical bold italic capital xi |

| USV | L | X | S | P | D | F | N | Н | Е | C | R | Macro | Description |
|---------|--------------------------|------------------------|--------------------------|-----------------------|-----------------------|---|--------------------------|------------------|--------------------------|-----------------------|-----------------------|-------------------------|---|
| U+1D72A | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfit0micron | mathematical bold italic capital omicron |
| U+1D72B | П | П | П | П | П | П | $\boldsymbol{\Pi}$ | Π | П | П | Π | \mbfitPi | mathematical bold italic capital pi |
| U+1D72C | \boldsymbol{P} | \boldsymbol{P} | \boldsymbol{P} | \boldsymbol{P} | \boldsymbol{P} | P | \boldsymbol{P} | P | \boldsymbol{P} | P | P | \mbfitRho | mathematical bold italic capital rho |
| U+1D72D | $\boldsymbol{\varTheta}$ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | θ | $\boldsymbol{\varTheta}$ | Θ | $\boldsymbol{\theta}$ | θ | θ | $\mbox{\mbfitvarTheta}$ | mathematical bold italic capital theta symbol |
| U+1D72E | $oldsymbol{\Sigma}$ | $\boldsymbol{\Sigma}$ | $\boldsymbol{\varSigma}$ | $\boldsymbol{\Sigma}$ | $\boldsymbol{\Sigma}$ | Σ | $oldsymbol{\Sigma}$ | Σ | $\boldsymbol{\varSigma}$ | $\boldsymbol{\Sigma}$ | $\boldsymbol{\Sigma}$ | \mbfitSigma | mathematical bold italic capital sigma |
| U+1D72F | \boldsymbol{T} | \boldsymbol{T} | \boldsymbol{T} | \boldsymbol{T} | \boldsymbol{T} | T | \boldsymbol{T} | \boldsymbol{T} | \boldsymbol{T} | T | T | \mbfitTau | mathematical bold italic capital tau |
| U+1D730 | $\boldsymbol{\gamma}$ | Y | r | Y | Y | Y | $\boldsymbol{\gamma}$ | γ | γ | Υ | Υ | \mbfitUpsilon | mathematical bold italic capital upsilon |
| U+1D731 | $oldsymbol{\Phi}$ | Φ | Φ | Φ | Φ | Φ | $oldsymbol{\Phi}$ | Φ | Φ | Φ | Φ | \mbfitPhi | mathematical bold italic capital phi |
| U+1D732 | \boldsymbol{X} | \boldsymbol{X} | X | \boldsymbol{X} | \boldsymbol{X} | X | \boldsymbol{X} | X | \boldsymbol{X} | X | X | \mbfitChi | mathematical bold italic capital chi |
| U+1D733 | $oldsymbol{\varPsi}$ | Ψ | Ψ | Ψ | Ψ | Ψ | $oldsymbol{\varPsi}$ | Ψ | Ψ | Ψ | Ψ | \mbfitPsi | mathematical bold italic capital psi |
| U+1D734 | Ω | ${oldsymbol{arOmega}}$ | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | Ω | \mbfit0mega | mathematical bold italic capital omega |
| | | | | | | | | | | | | | |

13.2.8 Bold italic Greek, lowercase

| USV | L | X | S | Р | D | F | N | Η | Е | C | R | Macro | Description |
|---------|--------------------------|-----------------------|---------------------|---------------|-------------------------|------------|--------------------------|------------|----------------------------|-----------------------|---------------------|----------------------|---|
| u+1D736 | α | α | α | α | α | α | α | α | α | α | α | \mbfitalpha | mathematical bold italic small alpha |
| U+1D737 | $\boldsymbol{\beta}$ | β | β | β | β | β | $\boldsymbol{\beta}$ | β | β | β | β | \mbfitbeta | mathematical bold italic small beta |
| U+1D738 | γ | γ | γ | γ | Y | γ | γ | γ | γ | γ | γ | \mbfitgamma | mathematical bold italic small gamma |
| U+1D739 | δ | δ | δ | δ | δ | δ | $\boldsymbol{\delta}$ | δ | δ | δ | δ | \mbfitdelta | mathematical bold italic small delta |
| U+1D73A | ε | ε | ε | ε | ε | ε | ε | ε | $\boldsymbol{\mathcal{E}}$ | ε | ε | \mbfitvarepsilon | mathematical bold italic small varepsilon |
| U+1D73B | $\boldsymbol{\zeta}$ | ζ | ځ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | \mbfitzeta | mathematical bold italic small zeta |
| U+1D73C | η | η | η | η | η | η | η | η | η | η | η | \mbfiteta | mathematical bold italic small eta |
| U+1D73D | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | θ | θ | $\boldsymbol{\theta}$ | θ | $\boldsymbol{\theta}$ | θ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | θ | \mbfittheta | mathematical bold italic small theta |
| U+1D73E | ι | l | ι | l | ι | ı | ι | 1 | l | ι | ι | \mbfitiota | mathematical bold italic small iota |
| U+1D73F | κ | K | κ | κ | K | K | κ | K | ĸ | κ | κ | $\mbox{mbfitkappa}$ | mathematical bold italic small kappa |
| U+1D740 | λ | λ | λ | λ | λ | λ | λ | λ | λ | λ | λ | $\mbox{mbfitlambda}$ | mathematical bold italic small lambda |
| U+1D741 | μ | μ | μ | μ | μ | μ | $\boldsymbol{\mu}$ | μ | μ | μ | μ | \mbfitmu | mathematical bold italic small mu |
| U+1D742 | | | | | | | | | | | | \mbfitnu | mathematical bold italic small nu |
| U+1D743 | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | \mbfitxi | mathematical bold italic small xi |
| U+1D744 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfitomicron | mathematical bold italic small omicron |
| U+1D745 | π | π | π | π | П | π | π | π | π | π | π | \mbfitpi | mathematical bold italic small pi |
| U+1D746 | $\boldsymbol{\rho}$ | ρ | P | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | \mbfitrho | mathematical bold italic small rho |
| U+1D747 | ς | ς | 5 | ς | ς | ς | ς | 5 | ς | ς | 5 | \mbfitvarsigma | mathematical bold italic small final sigma |
| U+1D748 | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | \mbfitsigma | mathematical bold italic small sigma |
| U+1D749 | au | τ | τ | τ | τ | τ | au | τ | τ | τ | τ | \mbfittau | mathematical bold italic small tau |
| U+1D74A | \boldsymbol{v} | v | υ | v | v | U | \boldsymbol{v} | U | \boldsymbol{v} | υ | υ | \mbfitupsilon | mathematical bold italic small upsilon |
| U+1D74B | φ | φ | φ | φ | φ | φ | φ | φ | φ | φ | φ | \mbfitvarphi | mathematical bold italic small phi |
| U+1D74C | χ | χ | χ | χ | χ | X | χ | χ | χ | χ | χ | \mbfitchi | mathematical bold italic small chi |
| U+1D74D | ψ | Ψ | ψ | ψ | Ψ | Ψ | ψ | Ψ | ψ | ψ | ψ | \mbfitpsi | mathematical bold italic small psi |
| U+1D74E | ω | w | ω | ω | ω | ω | ω | ω | ω | ω | ω | \mbfitomega | mathematical bold italic small omega |
| U+1D74F | ∂ | д | 9 | д | d | 9 | ∂ | 9 | д | д | 9 | \mbfitpartial | mathematical bold italic partial differential |
| U+1D750 | ϵ | ϵ | ϵ | ϵ | $\boldsymbol{\epsilon}$ | ϵ | ϵ | ϵ | ϵ | ϵ | ϵ | \mbfitepsilon | mathematical bold italic varepsilon symbol |
| U+1D751 | $\boldsymbol{\vartheta}$ | θ | θ | ϑ | v | 9 | $\boldsymbol{\vartheta}$ | θ | $\boldsymbol{\vartheta}$ | ϑ | θ | \mbfitvartheta | mathematical bold italic theta symbol |
| U+1D752 | n | x | × | и | H | и | n | и | κ | N | × | \mbfitvarkappa | mathematical bold italic kappa symbol |
| U+1D753 | ϕ | φ | φ | ф | ф | ф | ϕ | φ | φ | ф | φ | \mbfitphi | mathematical bold italic phi symbol |
| U+1D754 | Q | Q | 9 | Q | 0 | Q | Q | Q | Q | Q | ρ | \mbfitvarrho | mathematical bold italic rho symbol |
| U+1D755 | $\overline{\omega}$ | $\boldsymbol{\varpi}$ | $\overline{\omega}$ | W | $\boldsymbol{\omega}$ | យ | $\overline{\omega}$ | ಹ | ω | $\boldsymbol{\varpi}$ | $\overline{\omega}$ | \mbfitvarpi | mathematical bold italic pi symbol |

13.2.9 Bold script, Latin, uppercase

| USV | L | X | S | Р | D | FN | ΗЕ | С | R | Macro | Description |
|---------|--------------------------|----------------|----------------------------|----------------------------|---------------|------------------|----------------------------|----------------|----------------------------|------------------|------------------------------------|
| U+1D4D0 | $\overline{\mathcal{A}}$ | A | $\overline{\mathcal{A}}$ | \mathcal{A} | A | \mathcal{A} | \mathcal{A} | A | \mathcal{A} | \mbfscrA | mathematical bold script capital a |
| U+1D4D1 | ${\mathcal B}$ | \mathscr{B} | \mathcal{B} | \mathcal{B} | B | ${\cal B}$ | \mathscr{B} | \mathscr{B} | \mathcal{B} | \mbfscrB | mathematical bold script capital b |
| U+1D4D2 | ${\mathcal C}$ | \mathscr{C} | C | $\boldsymbol{\mathcal{C}}$ | C | \mathcal{C} | \mathscr{C} | \mathscr{C} | \mathcal{C} | \mbfscrC | mathematical bold script capital c |
| U+1D4D3 | \mathcal{D} | 9 | \mathcal{D} | \mathcal{D} | D | ${\mathcal D}$ | 2 | 9 | \mathcal{D} | \mbfscrD | mathematical bold script capital d |
| U+1D4D4 | | 8 | 3 | ε | \mathcal{E} | ${\cal E}$ | $\boldsymbol{\mathscr{E}}$ | 8 | ${\cal E}$ | \mbfscrE | mathematical bold script capital e |
| U+1D4D5 | ${\mathcal F}$ | ${\mathcal F}$ | \mathcal{F} | \mathcal{F} | F | ${\mathcal F}$ | F | F | \mathcal{F} | $\mbox{mbfscrF}$ | mathematical bold script capital f |
| U+1D4D6 | \mathcal{G} | \mathcal{G} | 9 | G | \mathcal{G} | \mathcal{G} | \mathscr{G} | \mathcal{G} | \mathcal{G} | $\mbox{mbfscrG}$ | mathematical bold script capital g |
| U+1D4D7 | \mathcal{H} | \mathcal{H} | \mathcal{H} | $\check{\mathcal{H}}$ | H | ${\cal H}$ | ${\mathcal H}$ | ${\mathscr H}$ | \mathcal{H} | \mbfscrH | mathematical bold script capital h |
| U+1D4D8 | ${\mathcal J}$ | ${\mathcal F}$ | $\boldsymbol{\mathcal{J}}$ | \mathcal{I} | J | ${\mathcal J}$ | ${\mathscr I}$ | ${\mathscr G}$ | \mathcal{I} | \mbfscrI | mathematical bold script capital i |
| U+1D4D9 | \mathcal{J} | J | \mathcal{J} | J | J | ${\mathcal J}$ | J | g | ${\cal J}$ | \mbfscrJ | mathematical bold script capital j |
| U+1D4DA | $\mathcal K$ | ${\mathscr K}$ | $\boldsymbol{\mathcal{K}}$ | $\check{\mathcal{K}}$ | K | ${\mathcal K}$ | ${\mathcal K}$ | ${\mathscr K}$ | \mathcal{K} | \mbfscrK | mathematical bold script capital k |
| U+1D4DB | \mathcal{L} | ${\mathscr L}$ | L | \mathcal{L} | C | \mathcal{L} | \mathscr{L} | \mathscr{L} | \mathcal{L} | \mbfscrL | mathematical bold script capital l |
| U+1D4DC | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | M | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mbfscrM | mathematical bold script capital m |
| U+1D4DD | \mathcal{N} | \mathcal{N} | \mathcal{N} | \mathcal{N} | N | ${\mathcal N}$ | \mathscr{N} | \mathcal{N} | \mathcal{N} | \mbfscrN | mathematical bold script capital n |
| U+1D4DE | \mathcal{O} | 0 | 0 | O | O | \mathcal{O} | 0 | 0 | 0 | \mbfscr0 | mathematical bold script capital o |
| U+1D4DF | ${\cal P}$ | <i>9</i> ° | ${\cal P}$ | \mathcal{P} | P | ${\cal P}$ | Ð | Ø | ${\cal P}$ | \mbfscrP | mathematical bold script capital p |
| U+1D4E0 | \mathcal{Q} | Q | Q | Q | Q | \mathcal{Q} | 2 | 2 | Q | \mbfscrQ | mathematical bold script capital q |
| U+1D4E1 | \mathcal{R} | ${\mathscr R}$ | \mathcal{R} | \mathcal{R} | R | ${\mathcal R}$ | \mathscr{R} | \mathscr{R} | ${\cal R}$ | \mbfscrR | mathematical bold script capital r |
| U+1D4E2 | \mathcal{S} | S | S | 5 | S | \mathcal{S} | \mathscr{S} | \mathscr{S} | ${\cal S}$ | \mbfscrS | mathematical bold script capital s |
| U+1D4E3 | | | | \mathcal{T} | T | ${\mathcal T}$ | \mathscr{T} | ${\mathscr T}$ | \mathcal{T} | \mbfscrT | mathematical bold script capital t |
| U+1D4E4 | \mathcal{U} | \mathcal{U} | u | u | u | u | \mathscr{U} | \mathscr{U} | \mathcal{U} | \mbfscrU | mathematical bold script capital u |
| U+1D4E5 | ν | V | ν | u | v | ν | \mathcal{V} | V | \mathcal{V} | \mbfscrV | mathematical bold script capital v |
| U+1D4E6 | \mathcal{W} | W | w | u | W | w | W | W | W | \mbfscrW | mathematical bold script capital w |
| U+1D4E7 | | | | | | \boldsymbol{x} | ${\mathscr X}$ | X | $\boldsymbol{\mathcal{X}}$ | \mbfscrX | mathematical bold script capital x |
| U+1D4E8 | y | ¥ | y | ¥ | y | y | Ŋ | Ŋ | y | \mbfscrY | mathematical bold script capital y |
| u+1D4E9 | | | | | Z | \boldsymbol{z} | \mathcal{Z} | \mathcal{Z} | Z | | mathematical bold script capital z |
| | | | | | | | | | | | 1 1 |

13.2.10 Bold script, Latin, lowercase

| USV | L | Χ | S | Р | D | FN | HECR | Macro | Description |
|---------|---|------------------|---|---|---|----------------------------|------|----------|----------------------------------|
| U+1D4EA | | a | a | a | a | a | | \mbfscra | mathematical bold script small a |
| U+1D4EB | | \mathcal{C} | б | в | b | C | | \mbfscrb | mathematical bold script small b |
| U+1D4EC | | \boldsymbol{c} | c | c | C | c | | \mbfscrc | mathematical bold script small c |
| U+1D4ED | | d | d | d | d | d | | \mbfscrd | mathematical bold script small d |
| U+1D4EE | | e | e | e | e | e | | \mbfscre | mathematical bold script small e |
| U+1D4EF | | f | f | P | f | f | | \mbfscrf | mathematical bold script small f |
| U+1D4F0 | | g | | • | g | $\boldsymbol{\mathcal{Q}}$ | | \mbfscrg | mathematical bold script small g |
| U+1D4F1 | | ħ | h | h | ħ | ħ | | \mbfscrh | mathematical bold script small h |
| U+1D4F2 | | i | i | i | i | i | | \mbfscri | mathematical bold script small i |
| U+1D4F3 | | i | j | j | j | j | | \mbfscrj | mathematical bold script small j |

| USV | LX | S | Р | D | F N | HECR | Macro | Description |
|---------|------------------|------------------|------------------|---|---------------------|------|----------|----------------------------------|
| U+1D4F4 | R | k | k | k | R | | \mbfscrk | mathematical bold script small k |
| U+1D4F5 | ℓ | ℓ | ℓ | L | $\boldsymbol{\ell}$ | | \mbfscrl | mathematical bold script small l |
| U+1D4F6 | m | m | m | m | m | | \mbfscrm | mathematical bold script small m |
| U+1D4F7 | n | n | \boldsymbol{n} | n | n | | \mbfscrn | mathematical bold script small n |
| U+1D4F8 | 0 | 0 | o | O | 0 | | \mbfscro | mathematical bold script small o |
| U+1D4F9 | P | p | p | p | P | | \mbfscrp | mathematical bold script small p |
| U+1D4FA | 9 | q | q | 9 | 4 | | \mbfscrq | mathematical bold script small q |
| U+1D4FE | r | r | r | r | 1 | | \mbfscrr | mathematical bold script small r |
| U+1D4F0 | 3 | s | 5 | 3 | 3 | | \mbfscrs | mathematical bold script small s |
| U+1D4FE | t | t | t | t | t | | \mbfscrt | mathematical bold script small t |
| U+1D4FE | u | u | u | u | u | | \mbfscru | mathematical bold script small u |
| U+1D4FF | v | \boldsymbol{v} | v | v | v | | \mbfscrv | mathematical bold script small v |
| U+1D500 | w | w | w | w | w | | \mbfscrw | mathematical bold script small w |
| U+1D501 | \boldsymbol{x} | x | \boldsymbol{x} | x | \boldsymbol{x} | | \mbfscrx | mathematical bold script small x |
| U+1D502 | 2 Y | y | y | y | ¥ | | \mbfscry | mathematical bold script small y |
| U+1D503 | 3 % | z | z | Z | z | | \mbfscrz | mathematical bold script small z |
| | | | | | | | | |

13.2.11 Bold fraktur, Latin, uppercase

| USV | L | Χ | S | Р | D | F N | H E | С | R | Macro | Description |
|---------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-------------------|-------------------------------------|
| u+1D56c | \mathfrak{A} | 21 | 21 | \mathfrak{A} | 21 | 21 | 2 | 21 | 21 | \mbffrakA | mathematical bold fraktur capital a |
| U+1D56D | \mathfrak{B} | \mathfrak{B} | \mathfrak{B} | \mathfrak{B} | \mathfrak{B} | \mathfrak{B} | 2 | B | \mathfrak{B} | \mbffrakB | mathematical bold fraktur capital b |
| U+1D56E | \mathfrak{C} | C | C | \mathfrak{C} | C | C | C | C | C | \mbffrakC | mathematical bold fraktur capital c |
| U+1D56F | \mathfrak{D} | D | 2 | \mathfrak{D} | D | \mathfrak{D} | T | D | \mathfrak{D} | \mbffrakD | mathematical bold fraktur capital d |
| U+1D570 | Œ | Œ | Œ | Œ | Œ | E | e | Œ | Œ | \mbffrakE | mathematical bold fraktur capital e |
| U+1D571 | \mathfrak{F} | \mbffrakF | mathematical bold fraktur capital f |
| U+1D572 | \mathfrak{G} | ß | ß | \mathfrak{G} | G | G | e | G | \mathfrak{G} | \mbffrakG | mathematical bold fraktur capital g |
| U+1D573 | \mathfrak{H} | H | H | \mathfrak{H} | H | H | S | \mathfrak{H} | \mathfrak{H} | \mbffrakH | mathematical bold fraktur capital h |
| U+1D574 | I | T | T | I | I | I | I | I | I | \mbffrakI | mathematical bold fraktur capital i |
| U+1D575 | \mathfrak{J} | \mathfrak{J} | บ | \mathfrak{J} | J | \mathfrak{J} | J | J | J | \mbffrakJ | mathematical bold fraktur capital j |
| U+1D576 | A | R | R | A | A | A | A | R | R | \mbffrakK | mathematical bold fraktur capital k |
| U+1D577 | \mathfrak{L} | $\mbox{mbffrakL}$ | mathematical bold fraktur capital l |
| U+1D578 | M | M | M | M | M | M | M | tM | M | \mbffrakM | mathematical bold fraktur capital m |
| U+1D579 | N | N | N | N | N | N | N | n | N | \mbffrakN | mathematical bold fraktur capital n |
| U+1D57A | D | D | \mathcal{D} | D | D | D | Σ | D | D | \mbffrak0 | mathematical bold fraktur capital o |
| U+1D57B | P | P | P | P | P | P | A | P | P | \mbffrakP | mathematical bold fraktur capital p |
| U+1D57C | | | | | Q | Q | Σ | Q | Q | \mbffrakQ | mathematical bold fraktur capital q |
| U+1D57D | R | R | R | R | R | R | F | R | R | $\mbox{mbffrakR}$ | mathematical bold fraktur capital r |
| U+1D57E | S | S | S | S | 8 | S | e | 5 | 6 | \mbffrakS | mathematical bold fraktur capital s |
| U+1D57F | \mathfrak{T} | T | T | \mathfrak{T} | \mathfrak{T} | \mathfrak{T} | I | T | \mathfrak{T} | \mbffrakT | mathematical bold fraktur capital t |
| U+1D580 | \mathfrak{U} | u | u | \mathfrak{U} | \mathfrak{U} | U | ٤ | u | \mathfrak{U} | \mbffrakU | mathematical bold fraktur capital u |
| U+1D581 | V | Ø | Ø | V | V | V | 2 | V | V | \mbffrakV | mathematical bold fraktur capital v |
| U+1D582 | W | W | W | W | W | W | 21 | I W | W | \mbffrakW | mathematical bold fraktur capital w |
| U+1D583 | \mathfrak{X} | X | X | \mathfrak{X} | \mathfrak{X} | \mathfrak{X} | \mathfrak{X} | \mathfrak{X} | \mathfrak{X} | \mbffrakX | mathematical bold fraktur capital x |
| U+1D584 | Y | 2) | Ŋ | Y | Ŋ | \mathfrak{Y} | \mathfrak{Z} | | Ŋ | \mbffrakY | mathematical bold fraktur capital y |
| U+1D585 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | \mbffrakZ | mathematical bold fraktur capital z |

13.2.12 Bold fraktur, Latin, lowercase

| USV | L | Χ | S | Р | D | FNI | ΗЕ | С | R | Macro | Description |
|---------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|-----------------------------------|
| U+1D586 | a | a | a | a | a | a | a | a | a | \mbffraka | mathematical bold fraktur small a |
| U+1D587 | \mathfrak{b} | \mathfrak{b} | \mathfrak{b} | \mathfrak{b} | b | b | b | b | \mathfrak{b} | \mbffrakb | mathematical bold fraktur small b |
| U+1D588 | c | c | c | c | C | c | c | c | c | \mbffrakc | mathematical bold fraktur small c |
| U+1D589 | d | b | b | 9 | 0 | ð | ð | 9 | 0 | \mbffrakd | mathematical bold fraktur small d |
| u+1D58a | e | e | e | e | e | e | e | e | e | \mbffrake | mathematical bold fraktur small e |
| u+1D58в | f | f | f | f | f | f | f | f | f | \mbffrakf | mathematical bold fraktur small f |
| U+1D58C | \mathfrak{g} | g | g | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mathfrak{g} | \mbffrakg | mathematical bold fraktur small g |
| U+1D58D | \mathfrak{h} | ħ | h | \mathfrak{h} | h | h | \mathfrak{h} | h | \mathfrak{h} | \mbffrakh | mathematical bold fraktur small h |
| U+1D58E | i | i | i | i | i | i | i | i | i | \mbffraki | mathematical bold fraktur small i |
| U+1D58F | j | j | j | j | j | j | j | j | j | \mbffrakj | mathematical bold fraktur small j |
| U+1D590 | ť | ŧ | ŧ | E | £ | E | ť | ť | ť | \mbffrakk | mathematical bold fraktur small k |
| U+1D591 | l | Ţ | ţ | ĺ | l | I | Į | l | l | \mbffrakl | mathematical bold fraktur small l |
| U+1D592 | m | m | m | m | m | m | m | m | m | \mbffrakm | mathematical bold fraktur small m |
| U+1D593 | \mathfrak{n} | n | n | \mathfrak{n} | \mathfrak{n} | n | n | \mathfrak{n} | n | \mbffrakn | mathematical bold fraktur small n |
| U+1D594 | 0 | 0 | ø | 0 | 0 | 0 | 0 | 0 | 0 | \mbffrako | mathematical bold fraktur small o |
| U+1D595 | p | Þ | þ | \mathfrak{p} | p | p | p | p | p | $\mbox{mbffrakp}$ | mathematical bold fraktur small p |
| U+1D596 | q | q | q | q | q | q | q | q | q | $\mbox{mbffrakq}$ | mathematical bold fraktur small q |
| U+1D597 | r | r | r | r | r | r | r | r | \mathfrak{r} | $\verb \mbffrakr $ | mathematical bold fraktur small r |
| U+1D598 | \mathfrak{s} | 3 | 3 | \mathfrak{s} | \mathfrak{S} | \mathfrak{s} | S | \mathfrak{s} | \mathfrak{s} | $\verb \mbffraks $ | mathematical bold fraktur small s |
| U+1D599 | t | t | t | t | t | ť | ť | ŧ | ŧ | $\verb \mbffrakt $ | mathematical bold fraktur small t |
| U+1D59A | \mathfrak{u} | u | u | \mathfrak{u} | u | \mathfrak{u} | u | \mathfrak{u} | \mathfrak{u} | \mbffraku | mathematical bold fraktur small u |
| U+1D59B | v | b | b | v | b | v | b | b | \mathfrak{v} | $\verb \mbffrakv $ | mathematical bold fraktur small v |
| U+1D59C | w | w | w | w | w | w | w | w | w | \mbffrakw | mathematical bold fraktur small w |
| U+1D59D | ŗ | ¥ | ¥ | ŗ | \mathfrak{x} | ŗ | ŗ | ŗ | ŗ | $\mbox{mbffrakx}$ | mathematical bold fraktur small x |
| U+1D59E | ŋ | ŋ | ŋ | ŋ | ŋ | ŋ | ŋ | ŋ | ŋ | $\mbox{mbffraky}$ | mathematical bold fraktur small y |
| U+1D59F | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | $\verb \mbffrakz $ | mathematical bold fraktur small z |
| | | | | | | | | | | | |

13.2.13 Bold sans serif, Latin, uppercase

| USV | L | Χ | S | P | D | FNH | ΙE | C | R | Macro | Description |
|---------|---|---|---|---|---|-----|----|----|---|-----------|--|
| U+1D5D4 | Α | Α | Α | Α | A | Α | Α | Α | Α | \mbfsansA | mathematical sans-serif bold capital a |
| U+1D5D5 | В | В | В | B | B | В | В | В | В | \mbfsansB | mathematical sans-serif bold capital b |
| U+1D5D6 | C | C | C | C | C | C | C | C | C | \mbfsansC | mathematical sans-serif bold capital c |
| U+1D5D7 | D | D | D | D | D | D | D | D | D | \mbfsansD | mathematical sans-serif bold capital d |
| U+1D5D8 | Е | Ε | Ε | E | Е | E | Ε | Ε | Ε | \mbfsansE | mathematical sans-serif bold capital e |
| U+1D5D9 | F | F | F | F | F | F | F | F | F | \mbfsansF | mathematical sans-serif bold capital f |
| U+1D5DA | G | G | G | G | G | G | G | G | G | \mbfsansG | mathematical sans-serif bold capital g |
| U+1D5DB | Н | Н | Н | Н | Н | Н | Н | Н | Н | \mbfsansH | mathematical sans-serif bold capital h |
| U+1D5DC | 1 | Ι | | 1 | | 1 | -1 | -1 | 1 | \mbfsansI | mathematical sans-serif bold capital i |
| U+1D5DD | J | J | J | J | J | J | J | J | J | \mbfsansJ | mathematical sans-serif bold capital j |

| USV | L | X | S | P | D | F | NΗ | E | C | R | Macro | Description |
|---------|---|---|---|---|---|---|-------------|---|---|---|--------------------|--|
| U+1D5DE | K | K | K | K | K | ŀ | < | K | K | K | \mbfsansK | mathematical sans-serif bold capital k |
| U+1D5DF | L | L | L | L | L | | L | L | L | L | $\verb \mbfsansL $ | mathematical sans-serif bold capital l |
| U+1D5E0 | M | M | M | M | M | N | √ I | M | М | M | \mbfsansM | mathematical sans-serif bold capital m |
| U+1D5E1 | N | N | N | N | N | | V | N | Ν | Ν | \mbfsansN | mathematical sans-serif bold capital n |
| U+1D5E2 | 0 | 0 | 0 | 0 | 0 | (| O | 0 | 0 | O | \mbfsans0 | mathematical sans-serif bold capital o |
| U+1D5E3 | P | P | P | P | P | | P | P | P | P | \mbfsansP | mathematical sans-serif bold capital p |
| U+1D5E4 | Q | Q | Q | Q | Q | (| Q | Q | Q | Q | \mbfsansQ | mathematical sans-serif bold capital q |
| U+1D5E5 | R | R | R | R | R | | R | R | R | R | \mbfsansR | mathematical sans-serif bold capital r |
| U+1D5E6 | S | S | S | S | S | | S | S | S | S | \mbfsansS | mathematical sans-serif bold capital s |
| U+1D5E7 | Т | T | Т | Т | Т | | Т | Т | Т | Т | \mbfsansT | mathematical sans-serif bold capital t |
| U+1D5E8 | U | U | U | U | U | ı | J | U | U | U | \mbfsansU | mathematical sans-serif bold capital u |
| U+1D5E9 | V | ٧ | V | V | V | 1 | V | V | V | V | \mbfsansV | mathematical sans-serif bold capital v |
| U+1D5EA | W | W | W | W | W | V | V | W | W | W | \mbfsansW | mathematical sans-serif bold capital w |
| U+1D5EB | X | X | X | X | X | | X | Χ | X | X | \mbfsansX | mathematical sans-serif bold capital x |
| U+1D5EC | Υ | Υ | Υ | Y | Y | • | Y | Υ | Υ | Υ | \mbfsansY | mathematical sans-serif bold capital y |
| U+1D5ED | Z | Z | Z | Z | Z | 7 | Z | Z | Z | Z | \mbfsansZ | mathematical sans-serif bold capital z |

13.2.14 Bold sans serif, Latin, lowercase

| USV | L | X | S | P | D | FNE | ΙE | C | R | Macro | Description |
|---------|---|----------|---|---|---|-----|----|---|---|-----------------------|--------------------------------------|
| U+1D5EE | a | а | a | a | a | a | a | a | a | \mbfsansa | mathematical sans-serif bold small a |
| U+1D5EF | b | b | b | b | b | b | b | b | b | \mbfsansb | mathematical sans-serif bold small b |
| U+1D5F0 | C | C | C | C | C | C | C | C | C | \mbfsansc | mathematical sans-serif bold small c |
| U+1D5F1 | d | d | d | d | d | d | d | d | d | $\mbox{mbfsansd}$ | mathematical sans-serif bold small d |
| U+1D5F2 | e | е | е | е | e | e | e | е | e | \mbfsanse | mathematical sans-serif bold small e |
| U+1D5F3 | f | f | f | f | f | f | f | f | f | $\mbox{mbfsansf}$ | mathematical sans-serif bold small f |
| U+1D5F4 | g | g | g | g | g | g | g | g | g | \mbfsansg | mathematical sans-serif bold small g |
| U+1D5F5 | h | h l | h | h | h | h | h | h | h | $\mbox{mbfsansh}$ | mathematical sans-serif bold small h |
| U+1D5F6 | i | i. | i | i | i | i i | i | i | i | \mbfsansi | mathematical sans-serif bold small i |
| U+1D5F7 | j | j | j | j | j | j | j | j | j | $\mbsymbol{mbfsansj}$ | mathematical sans-serif bold small j |
| U+1D5F8 | k | k | k | k | k | k | k | k | k | $\mbox{mbfsansk}$ | mathematical sans-serif bold small k |
| U+1D5F9 | I | 1 | l | I | ı | - 1 | | | l | $\mbox{mbfsansl}$ | mathematical sans-serif bold small l |
| u+1D5FA | m | m r | n | m | m | m | m | m | m | \mbfsansm | mathematical sans-serif bold small m |
| U+1D5FB | n | n | n | n | n | n | n | n | n | \mbfsansn | mathematical sans-serif bold small n |
| U+1D5FC | O | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfsanso | mathematical sans-serif bold small o |
| U+1D5FD | p | р | p | p | p | p | p | p | p | $\verb \mbfsansp $ | mathematical sans-serif bold small p |
| U+1D5FE | q | q | q | q | q | q | q | q | q | $\mbox{mbfsansq}$ | mathematical sans-serif bold small q |
| U+1D5FF | r | r | r | r | r | r | r | r | r | $\verb \mbfsansr $ | mathematical sans-serif bold small r |
| U+1D600 | S | S | S | S | S | S | S | S | S | $\verb \mbfsanss $ | mathematical sans-serif bold small s |
| U+1D601 | t | t | t | t | t | t | t | t | t | \mbfsanst | mathematical sans-serif bold small t |
| U+1D602 | u | u | u | u | u | u | u | u | u | \mbfsansu | mathematical sans-serif bold small u |
| U+1D603 | V | v | V | V | V | V | V | V | V | \mbfsansv | mathematical sans-serif bold small v |
| u+1D604 | w | w١ | N | W | W | W | W | W | W | \mbfsansw | mathematical sans-serif bold small w |
| U+1D605 | X | X | X | X | X | X | X | X | X | $\verb \mbfsansx $ | mathematical sans-serif bold small x |
| U+1D606 | y | у | y | У | y | y | у | y | y | \mbfsansy | mathematical sans-serif bold small y |
| u+1D607 | Z | Z | Z | Z | Z | Z | Z | Z | Z | \mbfsansz | mathematical sans-serif bold small z |

13.2.15 Bold italic sans serif, Latin, uppercase

| USV | L | X | S | P | D | F N | H | Ε (| R | Macro | Description |
|---------|------------------|---|---|---|---|------------------|---|---------------|----------|-------------|---|
| u+1D63C | A | A | Α | A | A | A | - | 4 / | A | \mbfitsansA | mathematical sans-serif bold italic capital a |
| U+1D63D | B | B | В | B | B | B | L | 3 E | B | \mbfitsansB | mathematical sans-serif bold italic capital b |
| U+1D63E | C | C | C | C | C | C | (| C (| C | \mbfitsansC | mathematical sans-serif bold italic capital c |
| U+1D63F | D | D | D | D | D | D | L | \mathcal{L} | D | \mbfitsansD | mathematical sans-serif bold italic capital d |
| u+1D640 | E | E | E | E | E | E | | E E | Ε | \mbfitsansE | mathematical sans-serif bold italic capital e |
| U+1D641 | F | F | F | F | F | F | | - F | F | \mbfitsansF | mathematical sans-serif bold italic capital f |
| U+1D642 | G | G | G | G | G | G | (| G (| G | \mbfitsansG | mathematical sans-serif bold italic capital g |
| u+1D643 | Н | Н | Н | H | H | Н | I | 1 F | I H | \mbfitsansH | mathematical sans-serif bold italic capital h |
| u+1D644 | 1 | I | 1 | 1 | - | 1 | | 1 | 1 | \mbfitsansI | mathematical sans-serif bold italic capital i |
| u+1D645 | J | J | J | J | J | J | | J . | J | \mbfitsansJ | mathematical sans-serif bold italic capital j |
| u+1D646 | K | K | K | K | K | K | I | < K | K | \mbfitsansK | mathematical sans-serif bold italic capital k |
| u+1D647 | L | L | L | L | L | L | | L L | L | \mbfitsansL | mathematical sans-serif bold italic capital l |
| u+1D648 | M | M | Μ | M | M | M | / | Л Л | 1 M | \mbfitsansM | mathematical sans-serif bold italic capital m |
| u+1D649 | N | N | N | N | N | N | 1 | V / | I N | \mbfitsansN | mathematical sans-serif bold italic capital n |
| u+1d64a | 0 | 0 | 0 | 0 | 0 | 0 | (| 0 | 0 | \mbfitsans0 | mathematical sans-serif bold italic capital o |
| u+1D64в | P | P | P | P | P | P | 1 | P | P | \mbfitsansP | mathematical sans-serif bold italic capital p |
| u+1D64C | \boldsymbol{Q} | Q | Q | Q | Q | \boldsymbol{Q} | (| Q G | Q | \mbfitsansQ | mathematical sans-serif bold italic capital q |
| u+1D64D | R | R | R | R | R | R | 1 | R F | R | \mbfitsansR | mathematical sans-serif bold italic capital r |
| u+1D64E | S | S | S | 5 | S | S | | 5 5 | 5 | \mbfitsansS | mathematical sans-serif bold italic capital s |
| u+1D64f | T | T | T | T | T | T | 7 | r 7 | T | \mbfitsansT | mathematical sans-serif bold italic capital t |
| u+1D650 | U | U | U | U | U | U | l | J | U | \mbfitsansU | mathematical sans-serif bold italic capital u |
| U+1D651 | V | V | V | V | V | V | ١ | / L | ' V | \mbfitsansV | mathematical sans-serif bold italic capital v |
| U+1D652 | W | W | W | W | W | W | V | ν ν | <i>W</i> | \mbfitsansW | mathematical sans-serif bold italic capital w |
| u+1D653 | X | X | X | X | X | X |) | <i>(</i>) | X | \mbfitsansX | mathematical sans-serif bold italic capital x |
| u+1D654 | Y | Y | Y | Y | Y | Y | 7 | / } | ' Y | \mbfitsansY | mathematical sans-serif bold italic capital y |
| U+1D655 | Z | Z | Z | Z | Z | Z | | Z Z | Z | \mbfitsansZ | mathematical sans-serif bold italic capital z |

13.2.16 Bold italic sans serif, Latin, lowercase

| USV | L | Χ | S | Р | D | FNH | ΙE | C | R | Macro | Description |
|---------|---|---|---|---|---|------------------|----|---|---|---------------------|---|
| U+1D656 | a | a | а | a | a | а | a | a | а | \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 | C | C | C | C | C | C | C | C | C | \mbfitsansc | mathematical sans-serif bold italic small c |
| U+1D659 | d | d | d | d | d | d | d | d | d | \mbfitsansd | mathematical sans-serif bold italic small d |
| U+1D65A | e | e | e | e | e | \boldsymbol{e} | e | e | e | \mbfitsanse | mathematical sans-serif bold italic small e |
| u+1D65в | f | f | f | f | f | f | f | f | f | \mbfitsansf | mathematical sans-serif bold italic small f |
| U+1D65C | g | g | g | g | g | g | g | g | g | \mbfitsansg | mathematical sans-serif bold italic small g |
| U+1D65D | h | h | h | h | h | h | h | h | h | $\mbox{mbfitsansh}$ | mathematical sans-serif bold italic small h |
| U+1D65E | i | i | i | i | i | i | i | i | i | \mbfitsansi | mathematical sans-serif bold italic small i |
| U+1D65F | j | j | j | j | j | j | j | j | j | \mbfitsansj | mathematical sans-serif bold italic small j |
| U+1D660 | k | k | k | k | k | k | k | k | k | \mbfitsansk | mathematical sans-serif bold italic small k |
| U+1D661 | 1 | 1 | l | 1 | | 1 | 1 | 1 | l | \mbfitsansl | mathematical sans-serif bold italic small l |
| U+1D662 | m | m | m | m | m | m | m | m | m | \mbfitsansm | mathematical sans-serif bold italic small m |
| U+1D663 | n | n | n | n | n | n | n | n | n | \mbfitsansn | mathematical sans-serif bold italic small n |

| USV | L | Χ | S | P | D | FNH | Е | C | R | Macro | Description |
|---------|---|---|---|---|---|-----|---|---|------------------|----------------------|---|
| U+1D664 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfitsanso | mathematical sans-serif bold italic small o |
| U+1D665 | p | p | p | p | p | p | p | p | p | \mbfitsansp | mathematical sans-serif bold italic small p |
| U+1D666 | q | q | q | q | q | q | q | q | q | \mbfitsansq | mathematical sans-serif bold italic small q |
| u+1D667 | r | r | r | r | r | r | r | r | r | \mbfitsansr | mathematical sans-serif bold italic small r |
| U+1D668 | S | S | S | S | S | S | S | S | 5 | $\verb \mbfitsanss $ | mathematical sans-serif bold italic small s |
| u+1D669 | t | t | t | t | t | t | t | t | t | $\verb \mbfitsanst $ | mathematical sans-serif bold italic small t |
| u+1d66a | u | u | u | u | u | u | u | u | u | \mbfitsansu | mathematical sans-serif bold italic small u |
| u+1D66в | V | V | V | V | V | V | V | V | \boldsymbol{V} | \mbfitsansv | mathematical sans-serif bold italic small v |
| U+1D66C | W | W | w | W | W | W | w | w | W | \mbfitsansw | mathematical sans-serif bold italic small w |
| U+1D66D | X | X | X | X | X | X | X | X | X | \mbfitsansx | mathematical sans-serif bold italic small x |
| U+1D66E | y | y | y | y | y | y | y | y | y | \mbfitsansy | mathematical sans-serif bold italic small y |
| U+1D66F | Z | Z | z | z | Z | Z | Z | Z | Z | \mbfitsansz | mathematical sans-serif bold italic small z |
| | | | | | | | | | | | |

13.2.17 Bold sans serif Greek, uppercase

| USV | L > | (S | P | D | FNH | E | C | R | Macro | Description |
|---------|---|------|---|---|-----|----|----|---|---------------------------|---|
| u+1D756 | 5 A | A | A | A | Α | Α | Α | Α | \mbfsansAlpha | mathematical sans-serif bold capital alpha |
| u+1D757 | 7 B | 3 B | B | B | В | В | В | В | \mbfsansBeta | mathematical sans-serif bold capital beta |
| U+1D758 | 3 Г [| Г | Γ | Γ | Γ | Γ | Γ | Γ | \mbfsansGamma | mathematical sans-serif bold capital gamma |
| u+1D759 | Δ / | Δ | Δ | Δ | Δ | Δ | Δ | Δ | \mbfsansDelta | mathematical sans-serif bold capital delta |
| u+1D75 | E | E | Ε | E | E | Ε | Ε | Е | $\verb \mbfsansEpsilon $ | mathematical sans-serif bold capital epsilon |
| U+1D75E | 3 Z Z | ZZ | Z | Z | Z | Z | Z | Z | \mbfsansZeta | mathematical sans-serif bold capital zeta |
| u+1D750 | : H F | ł H | Н | Н | Н | Н | Н | Н | \mbfsansEta | mathematical sans-serif bold capital eta |
| u+1D751 | Θ (| Θ | Θ | Θ | Θ | Θ | Θ | Θ | \mbfsansTheta | mathematical sans-serif bold capital theta |
| U+1D75E | : I] | [] | I | | - 1 | -1 | -1 | L | \mbfsansIota | mathematical sans-serif bold capital iota |
| U+1D75F | K | K | K | K | K | K | K | K | \mbfsansKappa | mathematical sans-serif bold capital kappa |
| u+1D760 | Λ/ | ۸ ۱ | Λ | Λ | Λ | ٨ | Λ | Λ | \mbfsansLambda | mathematical sans-serif bold capital lambda |
| u+1D761 | M | /I M | M | M | M | M | M | M | \mbfsansMu | mathematical sans-serif bold capital mu |
| u+1D762 | 2 N I | N N | N | N | N | N | Ν | Ν | \mbfsansNu | mathematical sans-serif bold capital nu |
| u+1D763 | 3 = 3 | ΞΞ | Ξ | Ξ | Ξ | Ξ | Ξ | Ξ | \mbfsansXi | mathematical sans-serif bold capital xi |
| u+1D764 | 0 (| 0 0 | 0 | 0 | 0 | 0 | 0 | O | \mbfsansOmicron | mathematical sans-serif bold capital omicron |
| u+1D765 | , Π Γ | 1 П | П | П | П | П | П | П | \mbfsansPi | mathematical sans-serif bold capital pi |
| u+1D766 | P | P | P | P | Р | P | P | P | \mbfsansRho | mathematical sans-serif bold capital rho |
| u+1D767 | - | 9 0 | θ | θ | Θ | Θ | θ | Θ | $\verb \mbfsansvarTheta $ | mathematical sans-serif bold capital theta symbol |
| u+1D768 | 3 Σ Σ | Σ | Σ | Σ | Σ | Σ | Σ | Σ | \mbfsansSigma | mathematical sans-serif bold capital sigma |
| u+1D769 | , T | ГΤ | Т | T | Т | Т | Т | Т | \mbfsansTau | mathematical sans-serif bold capital tau |
| u+1D76A | | | | | Υ | Υ | Υ | Υ | $\verb \mbfsansUpsilon $ | mathematical sans-serif bold capital upsilon |
| u+1D76E | ф | ÞΦ | Φ | Φ | Ф | ф | Φ | Φ | \mbfsansPhi | mathematical sans-serif bold capital phi |
| u+1D760 | | | | | X | X | X | X | \mbfsansChi | mathematical sans-serif bold capital chi |
| u+1D761 | уΨ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | Ψ | \mbfsansPsi | mathematical sans-serif bold capital psi |
| u+1D761 | Ως | 2 Ω | Ω | Ω | Ω | Ω | Ω | Ω | \mbfsansOmega | mathematical sans-serif bold capital omega |

13.2.18 Bold sans serif Greek, lowercase

| USV | L | X | S | P | DF | ΝH | Е | C | R | Macro | Description |
|---------|---|---|---|---|------------|-------------|--------------------|------------|-------------------------|---|---|
| U+1D770 | α | α | α | α | α | α | α | α | α | \mbfsansalpha | mathematical sans-serif bold small alpha |
| U+1D771 | β | β | β | β | β | β | β | β | β | \mbfsansbeta | mathematical sans-serif bold small beta |
| U+1D772 | 7 | γ | γ | γ | γ | Υ | 7 | 7 | γ | \mbfsansgamma | mathematical sans-serif bold small gamma |
| U+1D773 | δ | δ | δ | δ | δ | δ | δ | δ | δ | \mbfsansdelta | mathematical sans-serif bold small delta |
| U+1D774 | ε | ε | ε | 3 | 3 | 3 | ε | ε | 3 | $\verb \mbfsansvarepsilon $ | mathematical sans-serif bold small varepsilon |
| U+1D775 | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | \mbfsanszeta | mathematical sans-serif bold small zeta |
| U+1D776 | η | η | η | η | η | η | η | η | η | \mbfsanseta | mathematical sans-serif bold small eta |
| U+1D777 | θ | θ | θ | θ | θ | θ | θ | θ | θ | \mbfsanstheta | mathematical sans-serif bold small theta |
| U+1D778 | L | ι | ι | ι | ι | ι | L | L | ι | \mbfsansiota | mathematical sans-serif bold small iota |
| U+1D779 | κ | K | K | K | K | K | κ | κ | K | \mbfsanskappa | mathematical sans-serif bold small kappa |
| U+1D77A | λ | λ | λ | λ | λ | λ | λ | λ | λ | \mbfsanslambda | mathematical sans-serif bold small lambda |
| U+1D77B | μ | μ | μ | μ | μ | μ | μ | μ | μ | \mbfsansmu | mathematical sans-serif bold small mu |
| U+1D77C | ν | ν | ν | ν | ν | ν | ν | ν | ν | \mbfsansnu | mathematical sans-serif bold small nu |
| U+1D77D | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | \mbfsansxi | mathematical sans-serif bold small xi |
| U+1D77E | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfsansomicron | mathematical sans-serif bold small omicron |
| U+1D77F | π | π | π | π | π | π | $\boldsymbol{\pi}$ | π | $\boldsymbol{\pi}$ | \mbfsanspi | mathematical sans-serif bold small pi |
| U+1D780 | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | ρ | \mbfsansrho | mathematical sans-serif bold small rho |
| U+1D781 | ς | ς | ς | ς | ς | ς | ς | ς | ς | \mbfsansvarsigma | mathematical sans-serif bold small final sigma |
| U+1D782 | σ | σ | σ | σ | σ | σ | σ | σ | σ | \mbfsanssigma | mathematical sans-serif bold small sigma |
| U+1D783 | Τ | τ | τ | τ | τ | τ | τ | Τ | τ | \mbfsanstau | mathematical sans-serif bold small tau |
| U+1D784 | υ | υ | U | υ | U | υ | υ | υ | υ | $\mbox{$\box{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{\m | mathematical sans-serif bold small upsilon |
| U+1D785 | φ | φ | φ | φ | φ | φ | φ | φ | φ | \mbfsansvarphi | mathematical sans-serif bold small phi |
| U+1D786 | χ | χ | X | χ | X | χ | χ | χ | χ | \mbfsanschi | mathematical sans-serif bold small chi |
| U+1D787 | ψ | Ψ | ψ | Ψ | Ψ | ψ | ψ | ψ | ψ | \mbfsanspsi | mathematical sans-serif bold small psi |
| u+1D788 | ω | ω | ω | ω | ω | ω | ω | ω | ω | \mbfsansomega | mathematical sans-serif bold small omega |
| u+1D789 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | \mbfsanspartial | mathematical sans-serif bold partial differential |
| u+1D78A | E | ε | ε | € | € | € | E | ϵ | $\boldsymbol{\epsilon}$ | $\mbox{$\box{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{$\mbox{\m | mathematical sans-serif bold varepsilon symbol |
| u+1D78в | ď | θ | 9 | 9 | 9 | ϑ | ð | ď | θ | $\mbox{$\$ | mathematical sans-serif bold theta symbol |
| U+1D78C | Н | × | × | × |) (| н | н | н | x | \mbfsansvarkappa | mathematical sans-serif bold kappa symbol |
| U+1D78D | ф | ф | ф | ф | ф | ф | ф | ф | φ | \mbfsansphi | mathematical sans-serif bold phi symbol |
| U+1D78E | Q | 9 | ę | 6 | 9 | Q | Q | Q | Q | \mbfsansvarrho | mathematical sans-serif bold rho symbol |
| U+1D78F | ω | យ | យ | យ | យ | ω | ϖ | ω | ۵ | \mbfsansvarpi | mathematical sans-serif bold pi symbol |

13.2.19 Bold italic sans serif Greek, uppercase

| USV | L | X | S | Р | D | FN | H] | Е | C | R | Macro | Description |
|---------|---|---|---|---|---|----|-----|----|---|---|-----------------------------|---|
| U+1D790 | A | A | Α | A | A | A | | 4 | Α | A | \mbfitsansAlpha | mathematical sans-serif bold italic capital alpha |
| U+1D791 | В | В | В | B | B | B | | В | В | В | \mbfitsansBeta | mathematical sans-serif bold italic capital beta |
| U+1D792 | Γ | Γ | Γ | Γ | Γ | Γ | | Γ | Γ | Γ | \mbfitsansGamma | mathematical sans-serif bold italic capital gamma |
| U+1D793 | Δ | Δ | Δ | Δ | Δ | Δ | 4 | Δ | Δ | Δ | \mbfitsansDelta | mathematical sans-serif bold italic capital delta |
| u+1D794 | E | Ε | E | E | E | E | | E | Ε | Ε | $\verb \mbfitsansEpsilon $ | mathematical sans-serif bold italic capital epsilon |
| U+1D795 | Z | Z | Z | Z | Z | Z | | Z. | Z | Z | \mbfitsansZeta | mathematical sans-serif bold italic capital zeta |
| u+1D796 | Η | Н | Η | Н | H | Н | 1 | Н | Η | Н | \mbfitsansEta | mathematical sans-serif bold italic capital eta |
| U+1D797 | Θ | Θ | Θ | Θ | Θ | Θ | (| 9 | Θ | Θ | $\verb \mbfitsansTheta $ | mathematical sans-serif bold italic capital theta |
| u+1D798 | 1 | I | 1 | 1 | | 1 | | 1 | I | 1 | $\mbox{\tt mbfitsansIota}$ | mathematical sans-serif bold italic capital iota |
| U+1D799 | K | K | K | K | K | K | - 1 | K | K | K | \mbfitsansKappa | mathematical sans-serif bold italic capital kappa |
| U+1D79A | Λ | Λ | Λ | Λ | Λ | 1 | | Λ | Λ | Λ | \mbfitsansLambda | mathematical sans-serif bold italic capital lambda |

| USV | L | X S P | D | FNH | ΙE | C | R | Macro | Description |
|---------|------------------|--------------|---|-----------------------|----|-----------------------|-----------------------|--------------------|--|
| U+1D79B | M | М М М | M | М | М | М | M | \mbfitsansMu | mathematical sans-serif bold italic capital mu |
| U+1D790 | . N | N N N | N | N | N | N | N | \mbfitsansNu | mathematical sans-serif bold italic capital nu |
| U+1D79E | ∍ Ξ . | EEE | Ξ | Ξ | Ξ | Ξ | Ξ | \mbfitsansXi | mathematical sans-serif bold italic capital xi |
| U+1D79E | 0 | 000 | 0 | 0 | 0 | 0 | 0 | \mbfitsansOmicron | mathematical sans-serif bold italic capital omicron |
| U+1D79F | : П | ППП | П | П | П | П | П | \mbfitsansPi | mathematical sans-serif bold italic capital pi |
| U+1D7A0 | P | PPP | P | P | P | P | P | \mbfitsansRho | mathematical sans-serif bold italic capital rho |
| U+1D7A1 | ι <i>Θ</i> (| 9 0 0 | θ | $\boldsymbol{\theta}$ | θ | θ | $\boldsymbol{\theta}$ | \mbfitsansvarTheta | mathematical sans-serif bold italic capital theta symbol |
| U+1D7A2 | <u>Σ</u> . | ΣΣΣ | Σ | Σ | Σ | Σ | Σ | \mbfitsansSigma | mathematical sans-serif bold italic capital sigma |
| U+1D7A3 | 3 T | T T T | T | T | T | T | T | \mbfitsansTau | mathematical sans-serif bold italic capital tau |
| U+1D7A4 | r | YYY | Y | $\boldsymbol{\gamma}$ | γ | $\boldsymbol{\gamma}$ | Y | \mbfitsansUpsilon | mathematical sans-serif bold italic capital upsilon |
| U+1D7A5 | , φ (| ΦΦΦ | Φ | Φ | Φ | Φ | Φ | \mbfitsansPhi | mathematical sans-serif bold italic capital phi |
| U+1D7A6 | 5 X . | XXX | X | X | X | X | X | \mbfitsansChi | mathematical sans-serif bold italic capital chi |
| U+1D7A7 | · Ψ | ΨΨΨ | Ψ | Ψ | Ψ | Ψ | Ψ | \mbfitsansPsi | mathematical sans-serif bold italic capital psi |
| U+1D7A8 | Ω | ΩΩΩ | Ω | Ω | Ω | Ω | Ω | \mbfitsans0mega | mathematical sans-serif bold italic capital omega |

13.2.20 Bold italic sans serif Greek, lowercase

| | т | 37 | _ | _ | _ | T N T T T | | _ | | | D |
|---------|--------------------------|-------|---|----------|----------|--------------------------|--------------------------|-----------------------|------------------------|---|--|
| USV | L | X | 5 | Р | D | FNH | Ŀ | C | K | Macro | Description |
| U+1D7AA | α | α | α | α | α | α | α | α | α | \mbfitsansalpha | mathematical sans-serif bold italic small alpha |
| U+1D7AB | β | β | β | β | β | β | β | β | β | \mbfitsansbeta | mathematical sans-serif bold italic small beta |
| U+1D7AC | γ | γ | γ | γ | γ | γ | γ | γ | γ | \mbfitsansgamma | mathematical sans-serif bold italic small gamma |
| U+1D7AD | δ | δ | δ | δ | δ | δ | δ | δ | δ | \mbfitsansdelta | mathematical sans-serif bold italic small delta |
| U+1D7AE | ε | ε | ε | ε | ε | ε | ε | ε | ε | $\verb \mbfitsansvarepsilon $ | mathematical sans-serif bold italic small varepsilon |
| u+1d7af | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | ζ | $\mbox{\mbox{$\mbox{mbfitsanszeta}}}$ | mathematical sans-serif bold italic small zeta |
| U+1D7B0 | η | η | η | η | η | η | η | η | η | \mbfitsanseta | mathematical sans-serif bold italic small eta |
| U+1D7B1 | $\boldsymbol{\theta}$ | θ | θ | θ | θ | θ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | $\boldsymbol{\theta}$ | $\mbox{$\$ | mathematical sans-serif bold italic small theta |
| U+1D7B2 | L | L | l | L | L | ι | L | L | l | \mbfitsansiota | mathematical sans-serif bold italic small iota |
| U+1D7B3 | κ | K | K | K | K | K | κ | κ | K | $\mbox{\mbfitsanskappa}$ | mathematical sans-serif bold italic small kappa |
| U+1D7B4 | λ | λ | λ | λ | λ | λ | λ | λ | λ | \mbfitsanslambda | mathematical sans-serif bold italic small lambda |
| U+1D7B5 | $\boldsymbol{\mu}$ | μ | μ | μ | μ | μ | $\boldsymbol{\mu}$ | μ | μ | \mbfitsansmu | mathematical sans-serif bold italic small mu |
| U+1D7B6 | ν | ν | ν | ν | V | ν | ν | ν | ν | \mbfitsansnu | mathematical sans-serif bold italic small nu |
| U+1D7B7 | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | ξ | \mbfitsansxi | mathematical sans-serif bold italic small xi |
| U+1D7B8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \mbfitsansomicron | mathematical sans-serif bold italic small omicron |
| U+1D7B9 | π | π | π | π | π | π | π | π | π | \mbfitsanspi | mathematical sans-serif bold italic small pi |
| U+1D7BA | ρ | ρ | ρ | ρ | p | ρ | ρ | ρ | ρ | \mbfitsansrho | mathematical sans-serif bold italic small rho |
| U+1D7BB | ς | ς | ς | ς | 5 | ς | ς | ς | ς | \mbfitsansvarsigma | mathematical sans-serif bold italic small final sigma |
| U+1D7BC | σ | σ | σ | σ | σ | σ | σ | σ | σ | \mbfitsanssigma | mathematical sans-serif bold italic small sigma |
| U+1D7BD | au | τ | τ | T | T | τ | au | au | τ | \mbfitsanstau | mathematical sans-serif bold italic small tau |
| U+1D7BE | \boldsymbol{v} | U | U | U | U | υ | \boldsymbol{v} | \boldsymbol{v} | υ | $\mbox{$\$ | mathematical sans-serif bold italic small upsilon |
| U+1D7BF | φ | φ | φ | φ | φ | $\boldsymbol{\varphi}$ | $\boldsymbol{\varphi}$ | φ | $\boldsymbol{\varphi}$ | \mbfitsansvarphi | mathematical sans-serif bold italic small phi |
| U+1D7C0 | | | | | | X | X | χ | | \mbfitsanschi | mathematical sans-serif bold italic small chi |
| U+1D7C1 | ψ | Ψ | ψ | Ψ | Ψ | $oldsymbol{\psi}$ | ψ | ψ | ψ | \mbfitsanspsi | mathematical sans-serif bold italic small psi |
| U+1D7C2 | | | | | ω | ω | ω | ω | ω | $\mbox{\mbfitsansomega}$ | mathematical sans-serif bold italic small omega |
| U+1D7C3 | 9 | д | д | 9 | 9 | d | 9 | д | 9 | \mbfitsanspartial | mathematical sans-serif bold italic partial differential |
| U+1D7C4 | | | | | E | ϵ | ϵ | ϵ | ϵ | $\mbox{$\$ | mathematical sans-serif bold italic varepsilon symbol |
| U+1D7C5 | $\boldsymbol{\vartheta}$ | д | 9 | 9 | 9 | $\boldsymbol{\vartheta}$ | $\boldsymbol{\vartheta}$ | ϑ | θ | $\verb \mbfitsansvartheta $ | mathematical sans-serif bold italic theta symbol |
| U+1D7C6 | Н | X | × | H | × | н | Н | Н | × | $\mbox{\mbfitsansvarkappa}$ | mathematical sans-serif bold italic kappa symbol |

| USV | L | X | S | P | DI | FN | lΗ | E | C | R | Macro | Description |
|---------|---|---|---|---|----|----|----|---|---|---|--|---|
| U+1D7C8 | Q | Q | ę | 0 | 6 | Ę | ? | Q | Q | ę | \mbfitsansphi \mbfitsansvarrho \mbfitsansvarpi | mathematical sans-serif bold italic phi symbol mathematical sans-serif bold italic rho symbol mathematical sans-serif bold italic pi symbol |

13.3 Miscellaneous

| USV | L | Χ | S | Р | D | F | N | Н | Е | С | R | Macro | Description |
|------------------|----------------|----------------|----------------|-----------------------|----------------|--------------|----------------|---------------|----------------|----------------------------|----------------|----------------------------------|---------------------------------------|
| U+000F0 | ð | ð | ð | ð | ð | ð | ð | ð | ð | ð | ð | \matheth | eth |
| U+02010 | - | - | - | - | - | - | - | _ | - | - | - | \mathhyphen | hyphen |
| U+02102 | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \mathbb{C} | \BbbC | /bbb c, open face c |
| U+0210A | | \mathcal{Q} | g | g | g | g | \mathcal{Q} | | g | \boldsymbol{g} | g | \mscrg | /scr g, script letter g |
| U+0210B | \mathcal{H} | \mathcal{H} | \mathcal{H} | $\check{\mathcal{H}}$ | H | | \mathcal{H} | Н | | \mathscr{H} | | \mscrH | hamiltonian (script capital h) |
| U+0210C | \mathfrak{H} | 5 | 5 | \mathfrak{H} | \mathfrak{H} | | \mathfrak{H} | H | \mathfrak{H} | \mathfrak{H} | \mathfrak{H} | \mfrakH | /frak h, upper case h |
| U+0210D | \mathbb{H} | Н | Н | \mathbb{H} | \mathbb{H} | H | \mathbb{H} | \mathbb{H} | \mathbb{H} | \mathbb{H} | \mathbb{H} | \BbbH | /bbb h, open face h |
| U+0210F | \hbar | \hbar | ħ | ħ | ħ | ħ | \hbar | ħ | \hbar | ħ | ħ | $\hslash^{(a)}$ | /hslash - variant planck's over 2pi |
| U+0 2 110 | $\mathcal I$ | $\mathcal {J}$ | ${\mathcal I}$ | \mathcal{I} | J | | $\mathcal I$ | đ | ${\mathscr I}$ | ${\mathscr I}$ | ${\cal I}$ | \mscrI | /scr i, script letter i |
| U+02111 | I | T | T | I | \Im | | I | 1 | F | I | I | $\operatorname{Im}^{(p)}$ | imaginary part |
| U+02112 | \mathcal{L} | \mathscr{L} | \mathcal{L} | L | \mathcal{L} | | \mathcal{L} | L | \mathscr{L} | \mathscr{L} | \mathcal{L} | \mscrL | lagrangian (script capital l) |
| U+02113 | ℓ | ℓ | ℓ | ℓ | P | f | ℓ | l | ℓ | ℓ | ℓ | \ensuremath{lack} ell $^{(p)}$ | cursive small l |
| U+02115 | \mathbb{N} | N | N | \mathbb{N} | \mathbb{N} | \mathbb{N} | \mathbb{N} | \mathbb{N} | \mathbb{N} | \mathbb{N} | \mathbb{N} | \BbbN | /bbb n, open face n |
| U+02118 | 80 | 80 | 80 | 89 | ရ | | 80 | Q | ର | 80 | 80 | \wp (p) | weierstrass p |
| U+02119 | \mathbb{P} | P | P | \mathbb{P} | \mathbb{P} | P | \mathbb{P} | \mathbb{P} | P | \mathbb{P} | \mathbb{P} | \BbbP | /bbb p, open face p |
| U+0211A | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \mathbb{Q} | \BbbQ | /bbb q, open face q |
| U+0211B | \mathcal{R} | \mathscr{R} | \mathcal{R} | \mathcal{R} | R | | \mathcal{R} | \mathcal{R} | \mathscr{R} | \mathscr{R} | \mathcal{R} | \mscrR | /scr r, script letter r |
| U+0211C | \mathfrak{R} | R | R | \mathfrak{R} | R | | R | R | R | \mathfrak{R} | \Re | \Re ^(p) | real part |
| U+0211D | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \mathbb{R} | \BbbR | /bbb r, open face r |
| U+02124 | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \mathbb{Z} | \BbbZ | /bbb z, open face z |
| U+02128 | 3 | 3 | 3 | 3 | 3 | | 3 | 33 | 3 | 3 | 3 | \mfrakZ | /frak z, upper case z |
| U+02129 | | 1 | 1 | | | | 1 | 1 | | | | \turnediota | turned iota |
| U+0212B | Å | Å | Å | Å | Å | Å | Å | Å | Å | Å | Å | \Angstrom | angstrom capital a, ring |
| U+0212C | \mathcal{B} | \mathscr{B} | \mathcal{B} | \mathcal{B} | B | | \mathcal{B} | \mathcal{B} | \mathscr{B} | \mathscr{B} | \mathcal{B} | \mscrB | bernoulli function (script capital b) |
| U+0212D | \mathfrak{C} | \mathbb{C} | \mathbb{C} | \mathfrak{C} | C | | \mathfrak{C} | \mathcal{Z} | \mathfrak{C} | \mathfrak{C} | \mathfrak{C} | \mfrakC | black-letter capital c |
| U+0212F | | e | e | e | e | | e | | e | e | e | \mscre | /scr e, script letter e |
| U+02130 | | \mathscr{E} | | | \mathcal{E} | | \mathcal{E} | \mathcal{E} | \mathcal{E} | $\boldsymbol{\mathscr{E}}$ | ${\cal E}$ | \mscrE | /scr e, script letter e |
| U+02131 | \mathcal{F} | \mathcal{F} | ${\mathcal F}$ | \mathcal{F}_{ℓ} | F | | \mathcal{F} | F | F | F | \mathcal{F} | \mscrF | /scr f, script letter f |
| U+02133 | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mathcal{M} | \mscrM | physics m-matrix (script capital m) |
| U+02134 | | 0 | 0 | o | O | | 0 | | 0 | 0 | 0 | \mscro | order of (script small o) |
| U+02135 | X | × | × | N | N | Ж | × | Х | × | X | X | $\allow{aleph}^{(p)}$ | aleph, hebrew |
| U+02136 | コ | コ | コ | \supset | \supset | ב | コ | ב | | | | $\mathbf{\hat{h}}$ | beth, hebrew |
| U+02137 | Z | ٦ | ス | 7 | ٦ | ג | Z | J | J | 7 | ٦ | $\gimel^{(a)}$ | gimel, hebrew |
| u+02138 | J | 7 | 7 | \neg | J | Т | 7 | Т | ٦ | ٦ | ٦ | \del{daleth} | daleth, hebrew |
| U+0213D | \bigcirc | 8 | 8 | Y | P | | Q | | 8 | | | \Bbbgamma | double-struck small gamma |
| U+0213E | | Γ | Γ | Γ | Γ | | Γ | | Γ | | | \BbbGamma | double-struck capital gamma |
| U+0213F | | П | П | Π | П | | П | | П | | | \BbbPi | double-struck capital pi |
| U+02202 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | \partial ^(p) | partial differential |
| U+02207 | ∇ | ∇ | ∇ | ∇ | ∇ | V | ∇ | ∇ | ∇ | ∇ | ∇ | $\nabla^{(p)}$ | nabla, del, hamilton operator |
| u+1d6a4 | \imath | l | l | 1 | 1 | I | \imath | 1 | l | 1 | \imath | $\label{limit} \$ | mathematical italic small dotless i |

| USV | L | X | S | P | D | F | N | Н | E | C | R | Macro | Description |
|---------|----------|----------------|--------------------|----------|----------------|----------|--------------|----------|--------------------|--------------------|----------|--|---|
| u+1D6A5 | J | J | J | 1 | J | J | J | J | J | J | J | $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $ | mathematical italic small dotless j |
| U+1D6C1 | ∇ | ∇ | ∇ | ∇ | ∇ | V | ∇ | ∇ | \triangle | ∇ | ∇ | \mbfnabla | mathematical bold nabla |
| U+1D6FB | ∇ | ∇ | ∇ | ∇ | \overline{V} | ∇ | ∇ | ∇ | ∇ | ∇ | ∇ | \mitnabla | mathematical italic nabla |
| U+1D735 | ∇ | \overline{V} | $oldsymbol{ abla}$ | ∇ | $oldsymbol{V}$ | V | ∇ | ∇ | $oldsymbol{ abla}$ | $oldsymbol{ abla}$ | ∇ | \mbfitnabla | mathematical bold italic nabla |
| u+1D76f | ∇ | ∇ | ∇ | V | V | | ∇ | | ∇ | ∇ | ∇ | \mbfsansnabla | mathematical sans-serif bold nabla |
| u+1D7A9 | ∇ | ∇ | 7 | ∇ | V | | ∇ | | ∇ | ∇ | ∇ | \mbfitsansnabla | mathematical sans-serif bold italic nabla |
| u+1D7CA | | F | \mathbf{F} | | | F | \mathbf{F} | | | | | \mbfDigamma | mathematical bold capital digamma |
| u+1D7Св | | F | F | | | F | F | | | | | \mbfdigamma | mathematical bold small digamma |
| , | | | | | | Ċ | 1 | | | | | S | O . |