

Up: [Table of Contents](#)

REC-MathML-19980407

6. Entities, Characters and Fonts

- [6.1 Introduction](#)
 - [6.1.1 The Intent of Entity Names](#)
 - [6.1.2 The STIX Project](#)
 - [6.2 Entity Listings](#)
 - [6.2.1 Non-Marking Entities](#)
 - [6.2.2 Printing Entity List](#)
 - [6.2.3 Special Constants](#)
 - [6.2.4 Alphabetical Lists](#)
 - [6.2.5 ISO Entity Set Groupings](#)
 - [6.2.5.1 ISO Symbol Entity Sets](#)
 - [6.2.5.2 ISO Math Font Entity Sets](#)
 - [6.2.5.3 Other ISO Font Entity Sets](#)
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6.1 Introduction

6.1.1 The Intent of Entity Names

Notation has proved very important for mathematics. Mathematics has grown in part because of the succinctness and suggestiveness of its evolving notation. There have been many new signs evolved for use in mathematical notation, and mathematicians have not held back from making use of many symbols originally developed elsewhere. The result is that mathematics makes use of a very large collection of symbols. It is difficult to write mathematics fluently if these characters are not available for use in coding. It is difficult to read mathematics if glyphs are not available for presentation on specific display devices.

This situation poses a problem for the W3C Math Working Group. It does not fall naturally within the purview of a math for HTML specification and DTD production to worry about more than the entities allowed in the DTD. Moreover, as experience has shown, a long list of entities with no means to display them is of little use, and a cause of frequent frustrations in trying use a standard. On the other hand, a large collection of glyphs or characters without a standard way to refer to them is not of much use either.

The W3C Math Working Group has therefore taken on directly specification of part of the full mechanism of proceeding from notation to final presentation, and is collaborating with organizations undertaking specification of the rest.

For instance, we try to use entity names that are contained in ISO TR 9573, which supersedes the ISO TR 8879 annex as far as math is concerned. There are considerations of mathematical usage that do on occasion militate against this, and the TR 9573 lists need supplementing. We hope to be able to agree with the TR 9573 WG on suitable extensions, in the course of the revision of their document that they are presently undertaking.

The STIX project of the STIPUB group of scientific and technical publishers has also been working toward a common collection of mathematical symbols and names. The W3C Math Working Group expects to issue further updates on the matter of character entities as a consequence of this project's useful work. For the latest character tables and fonts information, see the [W3C Math Working Group](#) home page.

6.1.2 The STIX Project

The STIX project team leader, Nico Poppelier, is a member of the W3C Math Working Group. The STIX project, set up by the STIPUB group of publishers, aims to formulate a collection of characters needed in the course of scientific and technical publishing. A database of characters in common use is being produced by collaborating publishing organizations. The team will propose to the Unicode consortium the additions to the next revision of the Unicode character set that this process shows are needed, together with the appropriate character codes. Finally the STIX project will commission the production of a complete set of fonts covering those Unicode characters for science and technology, to be made available to the public under license, but free of charge. The STIPUB group recognizes that easy availability of the characters and fonts greatly facilitates communication and publication.

6.2 Entity Listings

This chapter of the MathML proposal contains a listing of entities for use in MathML.

To provide more background on the characters used by mathematics we have used a larger comparative database showing codes and meanings in other common math environments. The W3C Math Working Group is very grateful to Elsevier Science and to Wolfram Research (makers of Mathematica ®) for making available to us so much useful data.

6.2.1 Non-Marking Entities

Some character entities, although important for the quality of print rendering do not directly have glyph marks that correspond. They are called here non-marking entities. Below we have a table of those adopted for the purposes of MathML. Their roles are discussed in Chapters 3 and 4, respectively on Presentation and Content Markup. The values of the spaces given are recommendations. Some of these characters do not have Unicode values. In that case the ASCII value is given in prefixed with an X if it exists, otherwise the column entry is --. The correspondence between the spacing values mentioned below and those in the Unicode descriptions are not exact, but are good matches.

Entity name	Unicode	Description
		X09	tabulator stop

	X10	force a line break
&IndentingNewLine;	--	force a line break and indent appropriately on next line
⁠	--	never break line here
&GoodBreak;	--	if a linebreak is needed, here is a good spot
&BadBreak;	--	if a linebreak is needed, try to avoid breaking here
&Space;	0020	one em of space in the current font
 	00A0	space that is not a legal breakpoint
​	200B	space of no width at all
 		space of width 1/18 em
 		space of width 3/18 em
 	2005	space of width 4/18 em
  		space of width 5/18 em
​	--	space of width -1/18 em
​	--	space of width -3/18 em
​	--	space of width -4/18 em
​	--	space of width -5/18 em
⁣	--	used as a separator, e.g., in indices (Section 3.2.4)
⁣	--	short form of ⁣
⁢	--	marks multiplication when it is understood without a mark (Section 3.2.4)
⁢	--	short form of ⁢
⁡	--	character showing function application in presentation tagging (Section 3.2.4)
⁡	--	short form of ⁡

6.2.2 Printing Entity Listings

Since the situation concerning availability of character codes from Unicode and under ISO 9573-13 is not yet fully clear at the time of writing, we have decided to proceed conservatively.

We have taken the ISO 9573-13 proposal, as conveyed to us from Anders Berglund, and have added a number of additional aliases based in the practice of the mathematical typesetting community. Thus the main influence outside ISO has been the names to be found in the TeX community.

To facilitate comprehension of a fairly large list of names, which totals over 2000 in this case, we offer the same information in more than one form.

We have entities listed by name and sample glyphs for all of them. Each entity name is accompanied by a code for a character grouping chosen from a list given below, a short verbal description, and a Unicode hex code if there is a corresponding sample

glyph to be found in ISO 10646. Those codes beginning with the hex digit E, e.g., E321, indicate assignments to the private zone of Unicode. This indicates that the character in question is not at present an official Unicode character. It is highly recommended that authors use entity names instead of Unicode values, especially for those characters in the Unicode private zone, as those values may change. It is hoped that most of these characters will become officially endorsed by Unicode and ISO under its 10646 standard in due course. In any case we expect fonts for these characters to become publicly available as the use of MathML develops. If the entity name is an alias then a reference back to the ISO form is given if there is one, and to a preferred form if not. The ISO or preferred forms have references to their alternates where they exist.

6.2.3 Special Constants

To commence we list separately a few of the special characters which MathML has seen fit to be a little radical in introducing. There are two for special constants and one for calculus.

Entity name	Unicode	Description
<code>&CapitalDifferentialD;</code>		D for use in differentials, e.g., within integrals
<code>&DD;</code>		short form of <code>&CapitalDifferentialD;</code>
<code>&DifferentialD;</code>		d for use in differentials, e.g., within integrals
<code>&dd;</code>		short form of <code>&DifferentialD;</code>
<code>&ExponentialE;</code>		e for use for the exponential base of the natural logarithms
<code>&ee;</code>		short form of <code>&ExponentialE;</code>
<code>&>false;</code>		logical constant false
<code>&ImaginaryI;</code>		i for use as a square root of -1
<code>&ii;</code>		short form of <code>&ImaginaryI;</code>
<code>&NotANumber;</code>		used in 4.3.2.9
<code>&>true;</code>		logical constant true

6.2.4 Alphabetical Lists

The first table offered is a very large [ASCII listing of printing entity names](#), ordered alphabetically, with upper-case preceding lower-case as in ASCII order. The Unicode numbers beginning with E are arbitrary assignments in the Private Area where there is presently no Unicode character available. When there is no Unicode offered at all it is because the characters listed can be thought of as font variations of common Roman alphabetic characters.

There is also an [ASCII listing of printing entities ordered by Unicode number](#). Next we have collections of the entities in entity sets which are similar to the groupings in the corresponding ISO documents.

6.2.5 ISO Entity Set Groupings

In addition, we list the above material in the groupings used by ISO 9573-13 with an additional grouping of aliases introduced. This table makes explicit the entity groupings and provides links to ASCII listings of the groups and HTML tabular listings which display the glyphs, insofar as they are to be had, as well.

6.2.5.1 ISO Symbol Entity Sets

The symbols for mathematics that ISO have considered are organized, for both historical and mnemonic reasons into groupings with somewhat descriptive names. In the tables below we reproduce the newly proposed versions of these groups and give the corresponding Unicode sample glyphs. For each ISO 9573-13 group we give first an Extended version in ASCII listing which includes aliases, then a similar listing with sample glyphs, then the Basic ISO 9573-13 entity set and its version with included glyphs. The entries are organized alphabetically by entity name.

It should be noted that the sample glyphs given here are in GIF files intended for viewing on a monitor's screen at 72dpi. They are not suitable for printing, and in particular do not constitute a set of fonts covering the symbols of mathematics. In addition, it is important to note that the Unicode numbers assigned in the private zone, beginning with hex digits E2 and above, are arbitrary and only used here to ensure that sample glyphs are available for display. They do not constitute suggested assignments of codes. Such a set of fonts is under development in more than one context. The MathML Working Group is engaged in ensuring that fonts will be readily publicly available.

This first block of entity sets includes mostly non-letter symbols, along with a few letters loaded with mathematical semantics. At the end of the block we have included the table MMALIAS of the aliases introduced by MathML, which mostly come from the TeX community, and MMEXTRA with the additional character entities added by MathML. Note that some of the blocks are

place-holders for a possible future expansion of the tables.

Group	Descriptive Name		
ISOAMSA	Added Math Symbols: Arrows	Extended Glyphs	Basic Glyphs
ISOAMSB	Added Math Symbols: Binary Operators	Extended Glyphs	Basic Glyphs
ISOAMSC	Added Math Symbols: Delimiters	Extended Glyphs	Basic Glyphs
ISOAMSN	Added Math Symbols: Negated Relations	Extended Glyphs	Basic Glyphs
ISOAMSO	Added Math Symbols: Ordinary	Extended Glyphs	Basic Glyphs
ISOAMSR	Added Math Symbols: Relations	Extended Glyphs	Basic Glyphs
ISOTECH	General Technical	Extended Glyphs	Basic Glyphs
ISOPUB	Publishing	Extended Glyphs	Basic Glyphs
ISODIA	Diacritical Marks	Extended Glyphs	Basic Glyphs
ISONUM	Numeric and Special Graphic	Extended Glyphs	Basic Glyphs
ISOBOX	Box and Line Drawing	Extended Glyphs	Basic Glyphs
MMALIAS	MathML Aliases	Basic	Glyphs
MMEXTRA	MathML Additions	Basic	Glyphs

6.2.5.2 ISO Math Font Entity Sets

Mathematical literature displays the common use of particular font styles. Characters representing given letters which differ only in the glyph presentation are in principle not different for the purposes of a character registry such as Unicode, which is not supposed to take into account mere font differences. However usage has meant that both ISO and Unicode, like mathematics, recognize them as different entities. Therefore we include lists for Greek, script, open face (also known as double struck or blackboard bold), and fraktur (also known as gothic or German) fonts.

Group	Descriptive Name	
ISOGRK3	Greek Symbols	ASCII Glyphs
ISOMSCR	Math Script Font	ASCII Glyphs
ISOMOPF	Math Open Face Font	ASCII Glyphs
ISOMFRK	Math Fraktur Font	ASCII Glyphs

6.2.5.3 Other ISO Font Entity Sets

For reference we provide a list of the names of several other ISO font entity sets which are really normally used for text. ISOGRK4 is actually a collection of emboldened forms of the Greek letters.

Group	Descriptive Name
ISOGRK1	Greek Letters
ISOGRK2	Monotoniko Greek
ISOGRK4	Alternative Greek Symbols
ISOCYR1	Russian Cyrillic
ISOCYR2	Non-Russian Cyrillic

Next: [The MathML Interface](#)

Up: [Table of Contents](#)

Up: [Chapter 6](#)Next: [By codes](#)

REC-MathML-19980407

Printing MathML Character Entities alphabetically

Based on ISO 9573-13 extended with aliases

A [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
ac	ISOAMSB	E207	most positive
acd	ISOTECH	E3A6	ac current
acE	ISOAMSB	E290	most positive, two lines below
acute	ISODIA	0301	acute accent
Afr	ISOMFRK	E47C	fraktur letter A
afr	ISOMFRK	E495	fraktur letter a
aleph	ISOTECH	2135	/aleph aleph, Hebrew
alpha	ISOGRK3	03B1	small alpha, Greek
amalg	ISOAMSB	E251	amalgamation or coproduct
amp	ISONUM	0026	ampersand
And	MMALIAS	2227	logical and
and	ISOTECH	2227	logical and
andand	ISOTECH	E36E	two logical and
andd	ISOTECH	E394	and, horizontal dash
andslope	ISOTECH	E50A	sloping large and
andv	ISOTECH	E391	and with middle stem
ang	ISOAMSO	2220	angle
ange	ISOAMSO	E2D6	angle, equal
angle	MMALIAS	2220	angle
angmsd	ISOAMSO	2221	angle-measured
angmsdaa	ISOAMSO	E2D9	angle-measured, arrow, up, right
angmsdab	ISOAMSO	E2DA	angle-measured, arrow, up, left
angmsdac	ISOAMSO	E2DB	angle-measured, arrow, down, right
angmsdad	ISOAMSO	E2DC	angle-measured, arrow, down, left
angmsdae	ISOAMSO	E2DD	angle-measured, arrow, right, up
angmsdaf	ISOAMSO	E2DE	angle-measured, arrow, left, up
angmsdag	ISOAMSO	E2DF	angle-measured, arrow, right, down
angmsdah	ISOAMSO	E2E0	angle-measured, arrow, left, down
angrt	ISOTECH	221F	right (90 degree) angle
angrtvb	ISOAMSO	E418	right angle-measured
angrtvbd	ISOAMSO	E2E1	right angle-measured, dot
angsph	ISOTECH	2222	/sphericalangle angle-spherical
angst	ISOTECH	212B	Angstrom capital A, ring
angzarr	ISOAMSA	E248	angle with down zig-zag arrow
Aopf	ISOMOPF	E4AF	open face letter A
ap	ISOTECH	2248	approximate
apacir	ISOTECH	E38C	approximate, circumflex accent
apE	ISOAMSR	E315	approximately equal or equal to
ape	ISOAMSR	224A	approximate, equals
apid	ISOAMSR	224B	approximately identical to
apos	ISONUM	0027	apostrophe
approx	MMALIAS	2248	approximate
approxexq	MMALIAS	224A	approximate, equals
Ascr	ISOMSCR	E4C5	script letter A
ascr	ISOMSCR	E4DF	script letter a
ast	MMALIAS	2217	centered asterisk
asymp	ISOAMSR	224D	asymptotically equal to
awconint	ISOTECH	2233	contour integral, anti-clockwise
awint	ISOTECH	E39B	anti clock-wise integration

B [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
backcong	MMALIAS	224C	reverse congruent
backepsilon	MMALIAS	E420	such that
backprime	MMALIAS	2035	reverse prime
backsim	MMALIAS	223D	reverse similar
backsimeq	MMALIAS	22CD	reverse similar, equals
Backslash	MMALIAS	2216	reverse solidus
Barv	ISOAMSR	E311	vert, double bar (over)
barvee	ISOAMSB	22BD	bar, vee
Barwed	ISOAMSB	2306	logical and, double bar above
barwed	ISOAMSB	22BC	logical and, bar above
barwedge	MMALIAS	22BC	logical and, bar above
bbrk	ISOAMSO	E2EE	bottom square bracket
bbrktbrk	ISOAMSO	E419	bottom above top square bracket
bcong	ISOAMSR	224C	reverse congruent
becaus	ISOTECH	2235	because
Because	MMALIAS	2235	because
because	MMALIAS	2235	because
bemptyv	ISOAMSO	E41A	reversed circle, slash
benzen	ISOCHEM	E43C	benzene ring
benzena	ISOCHEM	E42A	benzene ring, one double binding
benzenb	ISOCHEM	E42B	benzene ring, one double binding
benzenc	ISOCHEM	E42C	benzene ring, one double binding
benzend	ISOCHEM	E42D	benzene ring, one double binding
benzene	ISOCHEM	E42E	benzene ring, one double binding
benzenf	ISOCHEM	E42F	benzene ring, one double binding
benzeng	ISOCHEM	E430	benzene ring, two double bindings
benzenh	ISOCHEM	E431	benzene ring, two double bindings
benzeni	ISOCHEM	E432	benzene ring, two double bindings
benzenj	ISOCHEM	E433	benzene ring, two double bindings
benzenk	ISOCHEM	E434	benzene ring, two double bindings
benzenl	ISOCHEM	E435	benzene ring, two double bindings
benzenm	ISOCHEM	E436	benzene ring, two double bindings
benzenn	ISOCHEM	E437	benzene ring, two double bindings
benzeno	ISOCHEM	E438	benzene ring, two double bindings
benzenp	ISOCHEM	E439	benzene ring, three double bindings
benzenq	ISOCHEM	E43A	benzene ring, three double bindings
benzenr	ISOCHEM	E43B	benzene ring, circle
bepsi	ISOAMSR	E420	such that
bernou	ISOTECH	212C	Bernoulli function (script capital B)
beta	ISOGRK3	03B2	small beta, Greek
beth	ISOAMSO	2136	beth, Hebrew
between	MMALIAS	226C	between
Bfr	ISOMFRK	E47D	fraktur letter B
bfr	ISOMFRK	E496	fraktur letter b
bigcap	MMALIAS	22C2	intersection operator
bigcirc	MMALIAS	25CB	large circle
bigcup	MMALIAS	22C3	union operator
bigodot	MMALIAS	2299	circle dot operator
bigoplus	MMALIAS	2295	circle plus operator
bigotimes	MMALIAS	2297	circle times operator
bigscup	MMALIAS	2294	square union operator
bigstar	MMALIAS	2605	star, filled
bigtriangledown	MMALIAS	25BD	big down triangle, open
bigtriangleup	MMALIAS	25B3	big up triangle, open
biguplus	MMALIAS	228E	biguplus
bigvee	MMALIAS	22C1	logical and operator
bigwedge	MMALIAS	22C0	logical or operator
bkarow	MMALIAS	E405	right broken arrow
blacklozenge	MMALIAS	E501	lozenge, filled
blacksquare	MMALIAS	25A0	square, filled
blacktriangle	MMALIAS	25B4	up triangle, filled
blacktriangledown	MMALIAS	25BE	down triangle, filled

blacktriangleleft	MMALIAS	25C2	left triangle, filled
blacktriangleright	MMALIAS	25B8	right triangle, filled
blank	ISOPUB	E4F9	significant blank symbol
blk12	ISOPUB	2592	50% shaded block
blk14	ISOPUB	2591	25% shaded block
blk34	ISOPUB	2593	75% shaded block
block	ISOPUB	2588	full block
bne	ISOTECH	E388	reverse not equal
bnequiv	ISOTECH	E387	reverse not equivalent
bNot	ISOTECH	E3AD	reverse not with two horizontal strokes
bnot	ISOTECH	2310	reverse not
Bopf	ISOMOPF	E4B0	open face letter B
bot	MMALIAS	22A5	bottom
bottom	ISOTECH	22A5	bottom
bowtie	ISOAMSR	22C8	bowtie
boxbox	ISOAMSO	E2E6	two joined squares
boxminus	MMALIAS	229F	minus sign in box
boxplus	MMALIAS	229E	plus sign in box
boxtimes	MMALIAS	22A0	multiply sign in box
bprime	ISOAMSO	2035	reverse prime
Breve	MMALIAS	0306	breve
breve	ISODIA	0306	breve
brvbar	ISONUM	00A6	broken (vertical) bar
Bscr	ISOMSCR	E4C6	script letter B
bscr	ISOMSCR	E4E0	script letter b
bsemi	ISOAMSO	E2ED	reverse semi-colon
bsim	ISOAMSR	223D	reverse similar
bsime	ISOAMSR	22CD	reverse similar, equals
bsol	ISONUM	005C	/backslash reverse solidus
bsolb	ISOAMSB	E280	reverse solidus in square
bsolhsub	ISOAMSR	E34D	reverse solidus, subset
bull	ISOPUB	2022	round bullet, filled
bullet	MMALIAS	2022	round bullet, filled
bump	ISOAMSR	224E	bumpy equals
bumpe	ISOAMSR	224F	bumpy equals, equals
Bumpeq	MMALIAS	224E	bumpy equals
bumpeq	MMALIAS	224F	bumpy equals, equals

C [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Cap	ISOAMSB	22D2	double intersection
cap	ISOTECH	2229	intersection
capand	ISOAMSB	E281	intersection, and
capbrcup	ISOAMSB	E271	intersection, bar, union
capcap	ISOAMSB	E273	intersection, intersection, joined
capcup	ISOAMSB	E26F	intersection above union
capdot	ISOAMSB	E261	intersection, with dot
caps	ISOAMSB	E275	intersection, serifs
caret	ISOPUB	2038	caret (insertion mark)
caron	ISODIA	030C	caron
ccaps	ISOAMSB	E279	closed intersection, serifs
Cconint	ISOTECH	2230	triple contour integral operator
ccups	ISOAMSB	E278	closed union, serifs
ccupssm	ISOAMSB	E27A	closed union, serifs, smash product
cdot	MMALIAS	22C5	small middle dot
cedil	ISODIA	0327	cedilla
Cedilla	MMALIAS	0327	cedilla
cemptyv	ISOAMSO	E2E8	circle, slash, small circle above
cent	ISONUM	00A2	cent sign
CenterDot	MMALIAS	00B7	middle dot
centerdot	MMALIAS	00B7	middle dot
Cfr	ISOMFRK	E47E	fraktur letter C
cfr	ISOMFRK	E497	fraktur letter c

check	ISOPUB	2713	tick, check mark
checkmark	MMALIAS	2713	tick, check mark
chi	ISOGRK3	03C7	small chi, Greek
cir	ISOPUB*	2218	circle, open
circ	MMALIAS	2218	composite function (small circle)
circeq	MMALIAS	2257	circle, equals
circle	ISOPUB	E4FA	circle, open
circlearrowleft	MMALIAS	21BA	left arr in circle
circlearrowright	MMALIAS	21BB	right arr in circle
circledast	MMALIAS	229B	asterisk in circle
circledcirc	MMALIAS	229A	small circle in circle
circleddash	MMALIAS	229D	hyphen in circle
CircleDot	MMALIAS	2299	middle dot in circle
circledR	MMALIAS	00AF	registered sign
circledS	MMALIAS	E41D	capital S in circle
circlef	ISOPUB	25CF	circle, filled
circlefb	ISOPUB	25D2	circle, filled bottom half
circlefl	ISOPUB	25D0	circle, filled left half [Harvey ball]
circlefr	ISOPUB	25D1	circle, filled right half
circleleft	ISOPUB	25D3	circle, filled top half
CircleMinus	MMALIAS	2296	minus sign in circle
CirclePlus	MMALIAS	2295	plus sign in circle
CircleTimes	MMALIAS	2297	multiply sign in circle
cirE	ISOAMSO	E41B	circle, two horizontal stroked to the right
cire	ISOAMSR	2257	circle, equals
cirfnint	ISOTECH	E395	circulation function
cirmid	ISOAMSA	E250	circle, mid below
circscir	ISOAMSO	E41C	circle, small circle to the right
ClockwiseContourIntegral	MMALIAS	2232	contour integral, clockwise
CloseCurlyDoubleQuote	MMALIAS	201D	double quotation mark, right
CloseCurlyQuote	MMALIAS	2019	single quotation mark, right
clubs	ISOPUB	2663	club suit symbol
clubsuit	MMALIAS	2663	club suit symbol
Colon	ISOAMSR	2237	/Colon, two colons
colon	ISONUM	003A	colon
Colone	ISOAMSR	E30E	double colon, equals
colone	ISOAMSR	2254	colon, equals
coloneq	MMALIAS	2254	colon, equals
comma	ISONUM	002C	comma
commat	ISONUM	0040	commercial at
comp	ISOAMSO	2201	complement sign
compfn	ISOTECH	2218	composite function (small circle)
complement	MMALIAS	2201	complement sign
cong	ISOTECH	2245	congruent with
congdot	ISOAMSR	E314	congruent, dot
Congruent	MMALIAS	2261	identical with
Conint	ISOTECH	222F	double contour integral operator
conint	ISOTECH	222E	contour integral operator
ContourIntegral	MMALIAS	222E	contour integral operator
Copf	ISOMOPF	2102	open face letter C
coprod	ISOAMSB	2210	coproduct operator
Coproduct	MMALIAS	2210	coproduct operator
copy	ISONUM	00A9	copyright sign
copysr	ISOPUB	2117	sound recording copyright sign
CounterClockwiseContourIntegral	MMALIAS	2233	contour integral, anti-clockwise
cross	ISOPUB	2612	ballot cross
Cscr	ISOMSCR	E4C7	script letter C
cscr	ISOMSCR	E4E1	script letter c
csub	ISOAMSR	E351	subset, closed
csube	ISOAMSR	E353	subset, closed, equals
csup	ISOAMSR	E352	superset, closed
csupe	ISOAMSR	E354	superset, closed, equals
ctdot	ISOTECH	22EF	/cdots, three dots, centered
cuarrl	ISOAMSA	E23E	left, curved, down arrow
cuarrrr	ISOAMSA	E400	right, curved, down arrow
cuepr	ISOAMSR	22DE	curly equals, precedes
cuesc	ISOAMSR	22DF	curly equals, succeeds

cularr	ISOAMSA	21B6	left curved arrow
cularrp	ISOAMSA	E24A	curved left arrow with plus
Cup	MMALIAS	2323	up curve
cup	ISOTECH	222A	union or logical sum
cupbrcap	ISOAMSB	E270	union, bar, intersection
CupCap	MMALIAS	224D	asymptotically equal to
cupcap	ISOAMSB	E26E	union above intersection
cupcup	ISOAMSB	E272	union, union, joined
cupdot	ISOAMSB	228D	union, with dot
cupor	ISOAMSB	E282	union, or
cups	ISOAMSB	E274	union, serifs
curarr	ISOAMSA	21B7	right curved arrow
curarrm	ISOAMSA	E249	curved right arrow with minus
curlyeqprec	MMALIAS	22DE	curly equals, precedes
curlyeqsucc	MMALIAS	22DF	curly equals, succeeds
curlyvee	MMALIAS	22CE	curly logical or
curlywedge	MMALIAS	22CF	curly logical and
curren	ISONUM	00A4	general currency sign
curvearrowleft	MMALIAS	21B6	left curved arrow
curvearrowright	MMALIAS	21B7	right curved arrow
cuvee	ISOAMSB	22CE	curly logical or
cuwed	ISOAMSB	22CF	curly logical and
cwconint	ISOTECH	2232	contour integral, clockwise
cwint	ISOTECH	2231	clockwise integral
cylcty	ISOTECH	232D	cylindricity

D [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
=====			
Dagger	ISOPUB	2021	double dagger
dagger	ISOPUB	2020	dagger
daleth	ISOAMSO	2138	daleth, Hebrew
Darr	ISOAMSA	21A1	down two-headed arrow
dArr	ISOAMSA	21D3	down double arrow
darr	ISONUM	2193	downward arrow
dash	ISOPUB	2010	hyphen (true graphic)
Dashv	ISOAMSR	E30F	double dash, vertical
dashv	ISOAMSR	22A3	dash, vertical
dbkarow	MMALIAS	E207	right doubly broken arrow
dblac	ISODIA	030B	double acute accent
ddagger	MMALIAS	2021	double dagger
ddarr	ISOAMSA	21CA	two down arrows
DDottrahd	ISOAMSA	E238	right arrow with dotted stem
ddotseq	MMALIAS	E309	equal with four dots
deg	ISONUM	00B0	degree sign
Del	MMALIAS	2207	del, Hamilton operator
Delta	ISOGRK3	0394	capital Delta, Greek
delta	ISOGRK3	03B4	small delta, Greek
demptyv	ISOAMSO	E2E7	circle, slash, bar above
dfisht	ISOAMSA	E24C	down fish tail
Dfr	ISOMFRK	E47F	fraktur letter D
dfr	ISOMFRK	E498	fraktur letter d
dHar	ISOAMSA	E227	down harpoon-left, down harpoon-right
dharl	ISOAMSA	21C3	down harpoon-left
dharr	ISOAMSA	21C2	down harpoon-rt
DiacriticalAcute	MMALIAS	0301	acute accent
DiacriticalDot	MMALIAS	0307	dot above
DiacriticalDoubleAcute	MMALIAS	030B	double acute accent
DiacriticalGrave	MMALIAS	0300	grave accent
DiacriticalLeftArrow	ISODIA	20D6	left arrow accent
DiacriticalLeftRightArrow	ISODIA	20E1	left-right arrow accent
DiacriticalLeftRightVector	ISODIA	F505	left-right harpoon accent
DiacriticalLeftVector	ISODIA	20D0	left harpoon accent

DiacriticalRightArrow	ISODIA	20D7	right arrow accent
DiacriticalRightVector	ISODIA	20D1	right harpoon accent
DiacriticalTilde	MMALIAS	0303	tilde
diam	ISOAMSB	22C4	open diamond
diamond	MMALIAS	22C4	open diamond
diamondf	ISOPUB	E4FB	diamond, filled
diamondsuit	MMALIAS	2662	diamond suit symbol
diamonfb	ISOPUB	E4FC	diamond, filled bottom half
diamonfl	ISOPUB	E4FD	diamond, filled left half
diamonfr	ISOPUB	E4FE	diamond, filled right half
diamonft	ISOPUB	E4FF	diamond, filled top half
diams	ISOPUB	2662	diamond suit symbol
die	ISODIA	0308	dieresis
digamma	MMALIAS	03DC	digamma, old Greek
disin	ISOTECH	E3A0	set membership, long horizontal stroke
div	MMALIAS	00F7	divide sign
divide	ISONUM	00F7	divide sign
divideontimes	MMALIAS	22C7	division on times
divonx	ISOAMSB	22C7	division on times
dlcorn	ISOAMSC	231E	lower left corner
dlcrop	ISOPUB	230D	downward left crop mark
dollar	ISONUM	0024	dollar sign
Dopf	ISOMOPF	E4B1	open face letter D
Dot	ISOTECH	0308	dieresis or umlaut mark
dot	ISODIA	0307	dot above
DotDot	ISOTECH	20DC	four dots above
doteq	MMALIAS	2250	equals, single dot above
doteqdot	MMALIAS	2251	equals, even dots
DotEqual	MMALIAS	2250	equals, single dot above
dotminus	MMALIAS	2238	minus sign, dot above
dotplus	MMALIAS	2214	plus sign, dot above
dotsquare	MMALIAS	22A1	small dot in box
doublebarwedge	MMALIAS	2306	logical and, double bar above
DoubleContourIntegral	MMALIAS	222F	double contour integral operator
DoubleDot	MMALIAS	0308	dieresis
DoubleDownArrow	MMALIAS	21D3	down double arrow
DoubleLeftArrow	MMALIAS	21D0	is implied by
DoubleLeftRightArrow	MMALIAS	21D4	left and right double arrow
DoubleLongLeftArrow	MMALIAS	E200	long left double arrow
DoubleLongLeftRightArrow	MMALIAS	E202	long left and right double arr
DoubleLongRightArrow	MMALIAS	E204	long right double arr
DoubleRightArrow	MMALIAS	21D2	implies
DoubleRightTee	MMALIAS	22A8	vertical, double dash
DoubleUpArrow	MMALIAS	21D1	up double arrow
DoubleUpDownArrow	MMALIAS	21D5	up&down double arrow
DoubleVerticalBar	MMALIAS	2225	parallel
DownArrow	MMALIAS	2193	downward arrow
Downarrow	MMALIAS	21D3	down double arrow
downarrow	MMALIAS	2193	downward arrow
DownArrowUpArrow	MMALIAS	E216	down arrow, up arrow
downdownarrows	MMALIAS	21CA	two down arrows
downharpoonleft	MMALIAS	21C3	down harpoon-left
downharpoonright	MMALIAS	21C2	down harpoon-rt
DownLeftVector	MMALIAS	21BD	left harpoon-down
DownRightVector	MMALIAS	21C1	right harpoon-down
DownTee	MMALIAS	22A4	top
drbkarow	MMALIAS	E209	twoheaded right broken arrow
drcorn	ISOAMSC	231F	lower right corner
drcrop	ISOPUB	230C	downward right crop mark
Dscr	ISOMSCR	E4C8	script letter D
dscr	ISOMSCR	E4E2	script letter d
dsol	ISOTECH	E3A9	solidus, bar above
dtidot	ISOTECH	22F1	/ddots, three dots, descending
dtri	ISOPUB	25BF	down triangle, open
dtrif	ISOPUB	25BE	down triangle, filled
duarr	ISOAMSA	E216	down arrow, up arrow

duhar	ISOAMSA	E217	down harp, up harp
dwangle	ISOTECH	E3AA	large downward pointing angle
dzigrarr	ISOAMSA	21DD	right long zig-zag arrow

E [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
=====	=====	=====	=====
easter	ISOAMSR	225B	equal, asterisk above
ecir	ISOAMSR	2256	circle on equals sign
ecolon	ISOAMSR	2255	equals, colon
eDDot	ISOAMSR	E309	equal with four dots
eDot	ISOAMSR	2251	equals, even dots
efDot	ISOAMSR	2252	equals, falling dots
Efr	ISOMFRK	E480	fraktur letter E
efr	ISOMFRK	E499	fraktur letter e
eg	ISOAMSR	E328	equal-or-greater
egs	ISOAMSR	22DD	equal-or-gtr, slanted
egsdot	ISOAMSR	E324	equal-or-greater, slanted, dot inside
el	ISOAMSR	E327	equal-or-less
Element	MMALIAS	2208	set membership, variant
elinters	ISOTECH	E3A7	electrical intersection
ell	ISOAMSO	2113	cursive small l
els	ISOAMSR	22DC	eq-or-less, slanted
elsdot	ISOAMSR	E323	equal-or-less, slanted, dot inside
empty	ISOAMSO	E2D3	letter O slashed
emptyset	MMALIAS	E2D3	letter O slashed
emptyv	ISOAMSO	2205	circle, slash
emsp	ISOPUB	2003	em space
emsp13	ISOPUB	2004	third of an em space
emsp14	ISOPUB	2005	quarter of an em space
ensp	ISOPUB	2002	en space (half an em)
Eopf	ISOMOPF	E4B2	open face letter E
epar	ISOTECH	22D5	parallel, equal; equal or parallel
eparsl	ISOTECH	E384	parallel, slanted, equal; homothetically congruent to
eplus	ISOAMSB	E268	equal, plus
epsi	ISOGRK3	220A	small epsilon, Greek
epsiv	ISOGRK3	03B5	rounded small epsilon, Greek
eqcirc	MMALIAS	2256	circle on equals sign
eqcolon	MMALIAS	2255	equals, colon
eqsim	MMALIAS	2242	equals, similar
eqslantgtr	MMALIAS	22DD	equal-or-gtr, slanted
eqslantless	MMALIAS	22DC	eq-or-less, slanted
equals	ISONUM	003D	equals sign
EqualTilde	MMALIAS	2242	equals, similar
equest	ISOAMSR	225F	equal with questionmark
Equilibrium	MMALIAS	21CC	right harp over l
equiv	ISOTECH	2261	identical with
equivDD	ISOAMSR	E318	equivalent, four dots above
eqvparsl	ISOTECH	E386	equivalent, equal; congruent and parallel
erarr	ISOAMSA	E236	equal, right arrow below
erDot	ISOAMSR	2253	equals, rising dots
Escr	ISOMSCR	E4C9	script letter E
escr	ISOMSCR	E4E3	script letter e
esdot	ISOAMSR	2250	equals, single dot above
Esim	ISOAMSR	E317	equal, similar
esim	ISOAMSR	2242	equals, similar
eta	ISOGRK3	03B7	small eta, Greek
excl	ISONUM	0021	exclamation mark
exist	ISOTECH	2203	/exists at least one exists
Exists	MMALIAS	2203	/exists at least one exists

F [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
fallingdotseq	MMALIAS	2252	equals, falling dots
female	ISOPUB	2640	Venus, female
ffilig	ISOPUB	FB03	small ffi ligature
fflig	ISOPUB	FB00	small ff ligature
ffllig	ISOPUB	FB04	small ffl ligature
Ffr	ISOMFRK	E481	fraktur letter F
ffr	ISOMFRK	E49A	fraktur letter f
filig	ISOPUB	FB01	small fi ligature
fjlig	ISOPUB	E500	small fj ligature
flat	ISOPUB	266D	musical flat
flig	ISOPUB	FB02	small fl ligature
fltns	ISOTECH	E381	flatness
Fopf	ISOMOPF	E4B3	open face letter F
ForAll	MMALIAS	2200	/forall for all
forall	ISOTECH	2200	/forall for all
fork	ISOAMSR	22D4	pitchfork
forkv	ISOAMSR	E31B	fork, variant
fpartint	ISOTECH	E396	finite part integral
frac12	ISONUM	00BD	fraction one-half
frac13	ISOPUB	2153	fraction one-third
frac14	ISONUM	00BC	fraction one-quarter
frac15	ISOPUB	2155	fraction one-fifth
frac16	ISOPUB	2159	fraction one-sixth
frac18	ISONUM	215B	fraction one-eighth
frac23	ISOPUB	2254	fraction two-thirds
frac25	ISOPUB	2156	fraction two-fifths
frac34	ISONUM	00BE	fraction three-quarters
frac35	ISOPUB	2157	fraction three-fifths
frac38	ISONUM	215C	fraction three-eighths
frac45	ISOPUB	2158	fraction four-fifths
frac56	ISOPUB	215A	fraction five-sixths
frac58	ISONUM	215D	fraction five-eighths
frac78	ISONUM	215E	fraction seven-eighths
frown	ISOAMSR	2322	down curve
Fscr	ISOMSCR	E4CA	script letter F
fscr	ISOMSCR	E4E4	script letter f

G [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Gamma	ISOGRK3	0393	capital Gamma, Greek
gamma	ISOGRK3	03B3	small gamma, Greek
Gammad	ISOGRK3	03DC	capital digamma
gammad	ISOGRK3	03DC	digamma, old Greek
gap	ISOAMSR	2273	greater, approximate
gE	ISOAMSR	2267	greater, double equals
ge	ISOTECH	2265	greater-than-or-equal
gEl	ISOAMSR	22DB	gt, double equals, less
gel	ISOAMSR	22DB	greater, equals, less
geq	MMALIAS	2265	greater-than-or-equal
geqq	MMALIAS	2267	greater, double equals
geqslant	MMALIAS	E421	gt-or-equal, slanted
ges	ISOAMSR	E421	gt-or-equal, slanted
gescc	ISOAMSR	E358	greater than, closed by curve, equal, slanted
gesdot	ISOAMSR	E31E	greater-than-or-equal, slanted, dot inside
gesdoto	ISOAMSR	E320	greater-than-or-equal, slanted, dot above
gesdotol	ISOAMSR	E322	greater-than-or-equal, slanted, dot above left
gesl	ISOAMSR	E32C	greater, equal, slanted, less
gesles	ISOAMSR	E332	greater, equal, slanted, less, equal, slanted
Gfr	ISOMFRK	E482	fraktur letter G
gfr	ISOMFRK	E49B	fraktur letter g

Gg	ISOAMSR	22D9	triple gtr-than
gg	MMALIAS	226B	double greater-than sign
ggg	MMALIAS	22D9	triple gtr-than
gimel	ISOAMSO	2137	gimel, Hebrew
gl	ISOAMSR	2277	greater, less
gla	ISOAMSR	E330	greater, less, apart
glE	ISOAMSR	E32E	greater, less, equal
glj	ISOAMSR	E32F	greater, less, overlapping
gnap	ISOAMSN	E411	greater, not approximate
gnapprox	MMALIAS	E411	greater, not approximate
gnE	ISOAMSN	2269	greater, not double equals
gne	ISOAMSN	2269	greater, not equals
gneq	MMALIAS	2269	greater, not equals
gneqq	MMALIAS	2269	greater, not double equals
gnsim	ISOAMSN	22E7	greater, not similar
Gopf	ISOMOPF	E4B4	open face letter G
grave	ISODIA	0300	grave accent
GreaterEqual	MMALIAS	2265	greater-than-or-equal
GreaterEqualLess	MMALIAS	22DB	greater, equals, less
GreaterFullEqual	MMALIAS	2267	greater, double equals
GreaterLess	MMALIAS	2277	greater, less
GreaterSlantEqual	MMALIAS	E421	gt-or-equal, slanted
GreaterTilde	MMALIAS	2273	greater, similar
Gscr	ISOMSCR	E4CB	script letter G
gscr	ISOMSCR	E4E5	script letter g
gsim	ISOAMSR	2273	greater, similar
gsime	ISOAMSR	E334	greater, similar, equal
gsiml	ISOAMSR	E336	greater, similar, less
Gt	ISOAMSR	226B	double greater-than sign
gt	ISONUM	003E	greater-than sign
gtcc	ISOAMSR	E356	greater than, closed by curve
gtcir	ISOAMSR	E326	greater than, circle inside
gtdot	ISOAMSR	22D7	greater than, with dot
gtlPar	ISOAMSC	E296	double left parenthesis, greater
gtquest	ISOAMSR	E32A	greater than, questionmark above
gtrapprox	MMALIAS	2273	greater, approximate
gtrarr	ISOAMSR	E35F	greater than, right arrow
gtrdot	MMALIAS	22D7	greater than, with dot
gtreqless	MMALIAS	22DB	greater, equals, less
gtreqqless	MMALIAS	22DB	gt, double equals, less
gtrless	MMALIAS	2277	greater, less
gtrsim	MMALIAS	2273	greater, similar
gvertneqq	MMALIAS	E2A1	gt, vert, not double equals
gvnE	ISOAMSN	E2A1	gt, vert, not double equals

H [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Hacek	MMALIAS	030C	caron
hairsp	ISOPUB	200A	hair space
half	ISONUM	00BD	fraction one-half
hamilt	ISOTECH	210B	Hamiltonian (script capital H)
hArr	ISOAMSA	21D4	left and right double arrow
harr	ISOAMSA	2194	left and right arrow
harrcir	ISOAMSA	E240	left and right arrow with a circle
harrw	ISOAMSA	21AD	left and right arr-wavy
Hat	MMALIAS	0302	circumflex accent
hbar	MMALIAS	E2D5	Planck's over 2pi
hbenzen	ISOCHEM	E44F	horizontal benzene ring
hbenzena	ISOCHEM	E43D	horizontal benzene ring, one double binding
hbenzenb	ISOCHEM	E43E	horizontal benzene ring, one double binding
hbenzenc	ISOCHEM	E43F	horizontal benzene ring, one double binding
hbenzend	ISOCHEM	E440	horizontal benzene ring, one double binding
hbenzene	ISOCHEM	E441	horizontal benzene ring, one double binding

hbenzenf	ISOCHEM	E442	horizontal benzene ring, one double binding
hbenzeng	ISOCHEM	E443	horizontal benzene ring, two double bindings
hbenzenh	ISOCHEM	E444	horizontal benzene ring, two double bindings
hbenzeni	ISOCHEM	E445	horizontal benzene ring, two double bindings
hbenzenj	ISOCHEM	E446	horizontal benzene ring, two double bindings
hbenzenk	ISOCHEM	E447	horizontal benzene ring, two double bindings
hbenzenl	ISOCHEM	E448	horizontal benzene ring, two double bindings
hbenzenm	ISOCHEM	E449	horizontal benzene ring, two double bindings
hbenzenn	ISOCHEM	E44A	horizontal benzene ring, two double bindings
hbenzeno	ISOCHEM	E44B	horizontal benzene ring, two double bindings
hbenzenp	ISOCHEM	E44C	horizontal benzene ring, three double bindings
hbenzenq	ISOCHEM	E44D	horizontal benzene ring, three double bindings
hbenzenr	ISOCHEM	E44E	horizontal benzene ring, circle
hearts	ISOPUB	2661	heart suit symbol
heartsuit	MMALIAS	2661	heart suit symbol
hellipsis	ISOPUB	2026	ellipsis (horizontal)
hercon	ISOAMSB	22B9	hermitian conjugate matrix
Hfr	ISOMFRK	E483	fraktur letter H
hfr	ISOMFRK	E49C	fraktur letter h
hksearrow	MMALIAS	E20B	SE arrow-hooked
hkswarrow	MMALIAS	E20A	SW arrow-hooked
hoarr	ISOAMSA	E243	horizontal open arrow
homtht	ISOAMSR	223B	homothetic
hookleftarrow	MMALIAS	21A9	left arrow-hooked
hookrightarrow	MMALIAS	21AA	right arrow-hooked
Hopf	ISOMOPF	E4B5	open face letter H
horbar	ISONUM	2015	horizontal bar
Hscr	ISOMSCR	E4CC	script letter H
hscr	ISOMSCR	E4E6	script letter h
hslash	MMALIAS	210F	variant Planck's over 2pi
HumpDownHump	MMALIAS	224E	bumpy equals
HumpEqual	MMALIAS	224F	bumpy equals, equals
hybull	ISOPUB	2043	rectangle, filled (hyphen bullet)
hyphen	ISONUM	E4F8	hyphen

I [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
iexcl	ISONUM	00A1	inverted exclamation mark
iff	ISOTECH	E365	/iff if and only if
Ifr	ISOMFRK	E484	fraktur letter I
ifr	ISOMFRK	E49D	fraktur letter i
iiiiint	MMALIAS	E378	quadruple integral operator
iiint	MMALIAS	222D	triple integral operator
iinfin	ISOTECH	E372	infinity sign, incomplete
iiota	ISOAMSO	2129	inverted iota
Im	MMALIAS	2111	imaginary
image	ISOAMSO	2111	imaginary
imath	ISOAMSO	0131	small i, no dot
imof	ISOAMSA	22B7	image of
imped	ISOTECH	E50B	impedance
Implies	MMALIAS	21D2	implies
in	MMALIAS	220A	set membership
incare	ISOPUB	2105	in-care-of symbol
infin	ISOTECH	221E	/infy infinity
infintie	ISOTECH	E50C	tie, infinity
Int	ISOTECH	222C	double integral operator
int	ISOTECH	222B	integral operator
intcal	ISOAMSB	22BA	intercal
Integral	MMALIAS	222B	integral operator
intercal	MMALIAS	22BA	intercal
Intersection	MMALIAS	22C2	intersection operator
intlarhk	ISOTECH	E39A	integral, left arrow with hook

intprod	MMALIAS	E259	interior product
Iopf	ISOMOPF	E4B6	open face letter I
iota	ISOGRK3	03B9	small iota, Greek
iproduct	ISOAMSB	E259	interior product
iquest	ISONUM	00BF	inverted question mark
Iscr	ISOMSCR	E4CD	script letter I
iscr	ISOMSCR	E4E7	script letter i
isin	ISOTECH	220A	set membership
isindot	ISOTECH	E39C	set membership, dot above
isinE	ISOTECH	E39E	set membership, two horizontal strokes
isins	ISOTECH	E3A4	set membership, vertical bar on horizontal stroke
isinsv	ISOTECH	E3A2	large set membership, vertical bar on horizontal stroke
isinv	ISOTECH	2208	set membership, variant

J [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Jfr	ISOMFRK	E485	fraktur letter J
jfr	ISOMFRK	E49E	fraktur letter j
jmath	ISOAMSO	E2D4	small j, no dot
Jopf	ISOMOPF	E4B7	open face letter J
Jscr	ISOMSCR	E4CE	script letter J
jscr	ISOMSCR	E4E8	script letter j

K [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
kappa	ISOGRK3	03BA	small kappa, Greek
kappav	ISOGRK3	03F0	rounded small kappa , Greek
Kfr	ISOMFRK	E486	fraktur letter K
kfr	ISOMFRK	E49F	fraktur letter k
Kopf	ISOMOPF	E4B8	open face letter K
Kscr	ISOMSCR	E4CF	script letter K
kscr	ISOMSCR	E4E9	script letter k

L [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
lAarr	ISOAMSA	21DA	left triple arrow
laemptyv	ISOAMSO	E2EA	circle, slash, left arrow above
lagran	ISOTECH	2112	Lagrangian (script capital L)
Lambda	ISOGRK3	039B	capital Lambda, Greek
lambda	ISOGRK3	03BB	small lambda, Greek
Lang	ISOTECH	300A	left angle bracket, double
lang	ISOTECH	3008	left angle bracket
langd	ISOAMSC	E297	left angle, dot
langle	MMALIAS	3008	left angle bracket
lap	ISOAMSR	2272	less, approximate
laquo	ISONUM	00AB	angle quotation mark, left
Larr	ISOAMSA	219E	twoheadleftarrow
lArr	ISOTECH	21D0	is implied by
larr	ISONUM	2190	leftward arrow
larrbfs	ISOAMSA	E220	left arrow-bar, filled square
larrfs	ISOAMSA	E222	left arrow, filled square
larrhk	ISOAMSA	21A9	left arrow-hooked
larrlp	ISOAMSA	21AB	left arrow-looped
larrpl	ISOAMSA	E23F	left arrow, plus
larrsim	ISOAMSA	E24E	left arrow, similar
larrtl	ISOAMSA	21A2	left arrow-tailed

lat	ISOAMSR	E33A	larger than
lAtail	ISOAMSA	E23D	left double arrow-tail
latail	ISOAMSA	E23C	left arrow-tail
late	ISOAMSR	E33C	larger than or equal
lates	ISOAMSR	E33E	larger than or equal, slanted
lBarr	ISOAMSA	E206	left doubly broken arrow
lbarr	ISOAMSA	E402	left broken arrow
lbrkr	ISOTECH	3014	left broken bracket
lbrace	MMALIAS	007B	left curly bracket
lbrack	MMALIAS	005B	left square bracket
lbrke	ISOAMSC	E299	left bracket, equal
lbrksld	ISOAMSC	E29D	left bracket, solidus bottom corner
lbrkslu	ISOAMSC	E29B	left bracket, solidus top corner
lceil	ISOAMSC	2308	left ceiling
lcub	ISONUM	007B	left curly bracket
ldca	ISOAMSA	E21A	left down curved arrow
ldquo	ISONUM	201C	double quotation mark, left
ldquor	ISOPUB	201E	rising double quote, left (low)
ldrdrhar	ISOAMSA	E22C	left harpoon-down over right harpoon-down
ldrushar	ISOAMSA	E228	left-down-right-up harpoon
ldsh	ISOAMSA	21B2	left down angled arrow
lE	ISOAMSR	2266	less, double equals
le	ISOTECH	2264	less-than-or-equal
LeftAngleBracket	MMALIAS	3008	left angle bracket
LeftArrow	MMALIAS	2190	leftward arrow
Leftarrow	MMALIAS	21D0	is implied by
leftarrow	MMALIAS	2190	leftward arrow
LeftArrowRightArrow	MMALIAS	21C6	left arr over right arr
leftarrowtail	MMALIAS	21A2	left arrow-tailed
LeftCeiling	MMALIAS	2308	left ceiling
LeftDownVector	MMALIAS	21C3	down harpoon-left
LeftFloor	MMALIAS	230A	left floor
leftharpoondown	MMALIAS	21BD	left harpoon-down
leftharpoonup	MMALIAS	21BC	left harpoon-up
leftleftarrows	MMALIAS	21C7	two left arrows
LeftRightArrow	MMALIAS	2194	left and right arrow
Lefttrightarrow	MMALIAS	21D4	left and right double arrow
leftrightarrow	MMALIAS	2194	left and right arrow
leftrightharpoons	MMALIAS	21C6	left arr over right arr
leftrightharpoons	MMALIAS	21CB	left harp over r
leftrightsquigarrow	MMALIAS	21AD	left and right arr-wavy
LeftTee	MMALIAS	22A3	dash, vertical
leftthreetimes	MMALIAS	22CB	leftthreetimes
LeftTriangle	MMALIAS	22B2	left triangle, open, variant
LeftTriangleEqual	MMALIAS	22B4	left triangle, equals
LeftUpVector	MMALIAS	21BF	up harpoon-left
LeftVector	MMALIAS	21BC	left harpoon-up
lEg	ISOAMSR	22DA	less, double equals, greater
leg	ISOAMSR	22DA	less, equals, greater
leq	MMALIAS	2264	less-than-or-equal
leqq	MMALIAS	2266	less, double equals
leqslant	MMALIAS	E425	less-than-or-equals, slant
les	ISOAMSR	E425	less-than-or-equals, slant
lescc	ISOAMSR	E357	less than, closed by curve, equal, slanted
lesdot	ISOAMSR	E31D	less-than-or-equal, slanted, dot inside
lesdoto	ISOAMSR	E31F	less-than-or-equal, slanted, dot above
lesdotor	ISOAMSR	E321	less-than-or-equal, slanted, dot above right
lesg	ISOAMSR	E32B	less, equal, slanted, greater
lesges	ISOAMSR	E331	less, equal, slanted, greater, equal, slanted
lessapprox	MMALIAS	2272	less, approximate
lessdot	MMALIAS	22D6	less than, with dot
lesseqgtr	MMALIAS	22DA	less, equals, greater
lesseqgtr	MMALIAS	22DA	less, double equals, greater
LessEqualGreater	MMALIAS	22DA	less, equals, greater
LessFullEqual	MMALIAS	2266	less, double equals
LessGreater	MMALIAS	2276	less, greater
lessgtr	MMALIAS	2276	less, greater

lesssim	MMALIAS	2272 less, similar
LessSlantEqual	MMALIAS	E425 less-than-or-equals, slant
LessTilde	MMALIAS	2272 less, similar
lfisht	ISOAMSA	E214 left fish tail
lfloor	ISOAMSC	230A left floor
Lfr	ISOMFRK	E487 fraktur letter L
lfr	ISOMFRK	E4A0 fraktur letter l
lg	ISOAMSR	2276 less, greater
lgE	ISOAMSR	E32D less, greater, equal
lHar	ISOAMSA	E225 left harpoon-up over left harpoon-down
lhard	ISOAMSA	21BD left harpoon-down
lharu	ISOAMSA	21BC left harpoon-up
lharul	ISOAMSA	E22E left harpoon-up over long dash
lhblk	ISOPUB	2584 lower half block
Ll	ISOAMSR	22D8 triple less-than
ll	MMALIAS	226A double less-than sign
llarr	ISOAMSA	21C7 two left arrows
llcorner	MMALIAS	231E lower left corner
Lleftarrow	MMALIAS	21DA left triple arrow
llhard	ISOAMSA	E231 left harpoon-down below long dash
lltri	ISOAMSO	E2E5 lower left triangle
lmoust	ISOAMSC	E294 left moustache
lmoustache	MMALIAS	E294 left moustache
lnap	ISOAMSN	E2A2 less, not approximate
lnapprox	MMALIAS	E2A2 less, not approximate
lnE	ISOAMSN	2268 less, not double equals
lne	ISOAMSN	2268 less, not equals
lneq	MMALIAS	2268 less, not equals
lneqq	MMALIAS	2268 less, not double equals
lnsim	ISOAMSN	22E6 less, not similar
loang	ISOTECH	3018 left open angular bracket
loarr	ISOAMSA	E242 left open arrow
lobrk	ISOTECH	301A left open bracket
LongLeftArrow	MMALIAS	E201 long left arrow
Longleftarrow	MMALIAS	E200 long left double arrow
longleftarrow	MMALIAS	E201 long left arrow
LongLeftRightArrow	MMALIAS	E203 long left and right arr
Longleftrightarrow	MMALIAS	E202 long left and right double arr
longleftrightarrow	MMALIAS	E203 long left and right arr
longmapsto	MMALIAS	E208 longmapsto
LongRightArrow	MMALIAS	E205 long right arrow
Longrightarrow	MMALIAS	E204 long right double arr
longrightarrow	MMALIAS	E205 long right arrow
looparrowleft	MMALIAS	21AB left arrow-looped
looparrowright	MMALIAS	21AC right arrow-looped
lopar	ISOTECH	E379 left open parenthesis
Lopf	ISOMOPF	E4B9 open face letter L
loplus	ISOAMSB	E25C plus sign in left half circle
lotimes	ISOAMSB	E25E multiply sign in left half circle
lowast	ISOTECH	2217 low asterisk
lowbar	ISONUM	005F low line
LowerLeftArrow	MMALIAS	2199 SW pointing arrow
LowerRightArrow	MMALIAS	2198 SE pointing arrow
loz	ISOPUB	25CA lozenge or total mark
lozenge	MMALIAS	25CA lozenge or total mark
lozf	ISOPUB	E501 lozenge, filled
lpar	ISONUM	0028 left parenthesis
lparlt	ISOAMSC	E292 left parenthesis, lt
lrarr	ISOAMSA	21C6 left arr over right arr
lrcorner	MMALIAS	231F lower right corner
lrhar	ISOAMSA	21CB left harp over r
lrhard	ISOAMSA	E22F right harpoon-down below long dash
lrtri	ISOAMSO	E2E3 lower right triangle
Lscr	ISOMSCR	E4D0 script letter L
lscr	ISOMSCR	E4EA script letter l
Lsh	MMALIAS	21B0 Lsh

lsh	ISOAMSA	21B0	Lsh
lsim	ISOAMSR	2272	less, similar
lsime	ISOAMSR	E333	less, similar, equal
lsimg	ISOAMSR	E335	less, similar, greater
lsqb	ISONUM	005B	left square bracket
lsquo	ISONUM	2018	single quotation mark, left
lsquor	ISOPUB	201A	rising single quote, left (low)
Lt	ISOAMSR	226A	double less-than sign
lt	ISONUM	003C	less-than sign
ltcc	ISOAMSR	E355	less than, closed by curve
ltcir	ISOAMSR	E325	less than, circle inside
ltdot	ISOAMSR	22D6	less than, with dot
lthree	ISOAMSB	22CB	leftthreetimes
ltimes	ISOAMSB	22C9	times sign, left closed
ltlarr	ISOAMSR	E35E	less than, left arrow
ltquest	ISOAMSR	E329	less than, questionmark above
ltr	ISOPUB	25C3	left triangle, open
ltrle	ISOAMSR	22B4	left triangle, equals
ltrif	ISOPUB	25C2	left triangle, filled
ltrPar	ISOAMSC	E295	double right parenthesis, less
lurdshar	ISOAMSA	E229	left-up-right-down harpoon
luruhar	ISOAMSA	E22B	left harpoon-up over right harpoon-up
lvertneqq	MMALIAS	E2A4	less, vert, not double equals
lvnE	ISOAMSN	E2A4	less, vert, not double equals

M [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
macr	ISODIA	0304	macron
male	ISOPUB	2642	Mars, male
malt	ISOPUB	2720	maltese cross
maltese	MMALIAS	2720	maltese cross
Map	ISOAMSA	E212	twoheaded mapsto
map	ISOAMSA	21A6	mapsto
mapsto	MMALIAS	21A6	mapsto
marker	ISOPUB	E502	histogram marker
mcomma	ISOAMSR	E31A	minus, comma above
mdash	ISOPUB	2014	em dash
mDDot	ISOAMSR	223A	minus with four dots, geometric properties
measuredangle	MMALIAS	2221	angle-measured
Mfr	ISOMFRK	E488	fraktur letter M
mfr	ISOMFRK	E4A1	fraktur letter m
mho	ISOAMSO	2127	conductance
micro	ISONUM	00B5	micro sign
mid	ISOAMSR	2223	mid
midast	ISOAMSB	2217	centered asterisk
midcir	ISOAMSA	E20F	mid, circle below
middot	ISONUM	00B7	middle dot
minus	ISOTECH	2212	minus sign
minusb	ISOAMSB	229F	minus sign in box
minusd	ISOAMSB	2238	minus sign, dot above
minusdu	ISOAMSB	E25B	minus sign, dot below
MinusPlus	MMALIAS	2213	minus-or-plus sign
mlcp	ISOAMSR	E30A	transversal intersection
mldr	ISOPUB	E503	em leader
mnplus	ISOTECH	2213	minus-or-plus sign
models	ISOAMSR	22A7	models
Mopf	ISOMOPF	E4BA	open face letter M
mp	MMALIAS	2213	minus-or-plus sign
Mscr	ISOMSCR	E4D1	script letter M
mscr	ISOMSCR	E4EB	script letter m
mstpos	ISOAMSR	223E	most positive
mu	ISOGRK3	03BC	small mu, Greek
multimap	MMALIAS	22B8	multimap

mumap ISOAMSA 22B8 multimap

N [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
nabla	ISOTECH	2207	del, Hamilton operator
nang	ISOAMSO	E2D8	not, vert, angle
nap	ISOAMSN	2249	not approximate
napE	ISOAMSN	E2C7	not approximately equal or equal to
napid	ISOAMSN	E2BC	not approximately identical to
napprox	MMALIAS	2249	not approximate
natur	ISOPUB	266E	music natural
natural	MMALIAS	266E	music natural
nbsp	ISONUM	00A0	no break (required) space
ncap	ISOAMSB	E284	bar, intersection
ncong	ISOAMSN	2247	not congruent with
ncongdot	ISOAMSN	E2C5	not congruent, dot
ncup	ISOAMSB	E283	bar, union
ndash	ISOPUB	2013	en dash
ne	ISOTECH	2260	not equal
nearhk	ISOAMSA	E20D	NE arrow-hooked
neArr	ISOAMSA	21D7	NE pointing double arrow
nearr	ISOAMSA	2197	NE pointing arrow
nearrow	MMALIAS	2197	NE pointing arrow
nedot	ISOTECH	E38A	not equal, dot
nequiv	ISOAMSN	2262	not identical with
nesear	ISOAMSA	E20E	NE & SE arrows
NestedGreaterGreater	MMALIAS	226B	double greater-than sign
NestedLessLess	MMALIAS	226A	double less-than sign
nexist	ISOAMSO	2204	negated exists
nexists	MMALIAS	2204	negated exists
Nfr	ISOMFRK	E489	fraktur letter N
nfr	ISOMFRK	E4A2	fraktur letter n
ngE	ISOAMSN	2271	not greater, double equals
nge	ISOAMSN	E2A6	not greater-than-or-equal
ngeq	MMALIAS	E2A6	not greater-than-or-equal
ngeqq	MMALIAS	2271	not greater, double equals
ngeqslant	MMALIAS	2271	not gt-or-equals, slanted
nges	ISOAMSN	2271	not gt-or-equals, slanted
nGg	ISOAMSN	E2CE	not triple greater than
ngsim	ISOAMSN	2275	not greater, similar
nGt	ISOAMSN	E2CA	not, vert, much greater than
ngt	ISOAMSN	226F	not greater-than
ngtr	MMALIAS	226F	not greater-than
nGtv	ISOAMSN	E2CC	not much greater than, variant
nhArr	ISOAMSA	21CE	not left and right double arr
nharr	ISOAMSA	21AE	not left and right arrow
nhpar	ISOTECH	E38D	not, horizontal, parallel
ni	ISOTECH	220D	contains
nis	ISOTECH	E3A5	contains, vertical bar on horizontal stroke
nisd	ISOTECH	E3A1	contains, long horizontal stroke
niv	ISOTECH	220B	contains, variant
nlArr	ISOAMSA	21CD	not implied by
nlarr	ISOAMSA	219A	not left arrow
nldr	ISOPUB	2025	double baseline dot (en leader)
nle	ISOAMSN	2270	not less, double equals
nle	ISOAMSN	E2A7	not less-than-or-equal
nLeftarrow	MMALIAS	21CD	not implied by
nleftarrow	MMALIAS	219A	not left arrow
nLeftrightarrow	MMALIAS	21CE	not left and right double arr
nlefttriarow	MMALIAS	21AE	not left and right arrow
nleq	MMALIAS	E2A7	not less-than-or-equal
nleqq	MMALIAS	2270	not less, double equals
nleqslant	MMALIAS	2270	not less-or-equals, slant

nles	ISOAMSN	2270 not less-or-equals, slant
nless	MMALIAS	226E not less-than
nLl	ISOAMSN	E2CD not triple less than
nlsim	ISOAMSN	2274 not less, similar
nLt	ISOAMSN	E2C9 not, vert, much less than
nlt	ISOAMSN	226E not less-than
nltri	ISOAMSN	22EA not left triangle
nltrie	ISOAMSN	22EC not left triangle, equals
nLtv	ISOAMSN	E2CB not much less than, variant
nmid	ISOAMSN	2224 negated mid
Nopf	ISOMOPF	E4BB open face letter N
Not	ISOTECH	E3AC not with two horizontal strokes
not	ISONUM	00AC /neg /lnot not sign
NotCongruent	MMALIAS	2262 not identical with
NotDoubleVerticalBar	MMALIAS	2226 not parallel
NotElement	MMALIAS	2209 negated set membership
NotEqual	MMALIAS	2260 not equal
NotExists	MMALIAS	2204 negated exists
NotGreater	MMALIAS	226F not greater-than
NotGreaterEqual	MMALIAS	E2A6 not greater-than-or-equal
NotGreaterFullEqual	MMALIAS	2270 not less, double equals
NotGreaterGreater	MMALIAS	E2CC not much greater than, variant
NotGreaterLess	MMALIAS	2279 not, vert, greater, less
NotGreaterSlantEqual	MMALIAS	2271 not gt-or-equals, slanted
NotGreaterTilde	MMALIAS	2275 not greater, similar
notin	ISOTECH	2209 negated set membership
notin-dot	ISOTECH	E39D negated set membership, dot above
notinE	ISOTECH	E50D negated set membership, two horizontal strokes
notinva	ISOTECH	E370 negated set membership, variant
notinvb	ISOTECH	E37B negated set membership, variant
notinvc	ISOTECH	E37C negated set membership, variant
NotLeftTriangle	MMALIAS	22EA not left triangle
NotLeftTriangleEqual	MMALIAS	22EC not left triangle, equals
NotLess	MMALIAS	226E not less-than
NotLessEqual	MMALIAS	E2A7 not less-than-or-equal
NotLessFullEqual	ISOAMSN	2270 not less, double equals
NotLessGreater	MMALIAS	2278 not, vert, less, greater
NotLessLess	MMALIAS	E2CB not much less than, variant
NotLessSlantEqual	MMALIAS	2270 not less-or-equals, slant
NotLessTilde	MMALIAS	2274 not less, similar
notni	ISOTECH	220C negated contains
notniva	ISOTECH	220C negated contains, variant
notnivb	ISOTECH	E37D contains, variant
notnivc	ISOTECH	E37E contains, variant
NotPrecedes	MMALIAS	2280 not precedes
NotPrecedesEqual	MMALIAS	E412 not precedes, equals
NotPrecedesSlantEqual	MMALIAS	22E0 not curly precedes, equals
NotReverseElement	MMALIAS	220C negated contains, variant
NotRightTriangle	MMALIAS	22EB not right triangle
NotRightTriangleEqual	MMALIAS	22ED not right triangle, equals
NotSquareSubsetEqual	MMALIAS	22E2 not, square subset, equals
NotSquareSupersetEqual	MMALIAS	22E3 not, square superset, equals
NotSubset	MMALIAS	2284 not subset, variant
NotSucceeds	MMALIAS	2281 not succeeds
NotSucceedsEqual	MMALIAS	E413 not succeeds, equals
NotSucceedsSlantEqual	MMALIAS	22E1 not succeeds, curly equals
NotSuperset	MMALIAS	2285 not superset, variant
NotTilde	MMALIAS	2241 not similar
NotTildeEqual	MMALIAS	2244 not similar, equals
NotTildeFullEqual	MMALIAS	2247 not congruent with
NotTildeTilde	MMALIAS	2249 not approximate
NotVerticalBar	MMALIAS	2224 negated mid
npar	ISOAMSN	2226 not parallel
nparallel	MMALIAS	2226 not parallel
nparsl	ISOTECH	E389 not parallel, slanted
npart	ISOTECH	E390 not partial differential

npolint	ISOTECH	E399 line integration, not including the pole
npr	ISOAMSN	2280 not precedes
nprcue	ISOAMSN	22E0 not curly precedes, equals
npre	ISOAMSN	E412 not precedes, equals
nprec	MMALIAS	2280 not precedes
npreceq	MMALIAS	E412 not precedes, equals
nrArr	ISOAMSA	21CF not implies
nrarr	ISOAMSA	219B not right arrow
nrarrc	ISOAMSA	E21D not right arrow-curved
nrarrw	ISOAMSA	E21B not right arrow-wavy
nRightarrow	MMALIAS	21CF not implies
nrightarrow	MMALIAS	219B not right arrow
nrtri	ISOAMSN	22EB not right triangle
nrtrie	ISOAMSN	22ED not right triangle, equals
nsc	ISOAMSN	2281 not succeeds
nsccue	ISOAMSN	22E1 not succeeds, curly equals
nsce	ISOAMSN	E413 not succeeds, equals
Nscr	ISOMSCR	E4D2 script letter N
nscr	ISOMSCR	E4EC script letter n
nshortmid	MMALIAS	E2AA negated short mid
nshortparallel	MMALIAS	E2AB not short par
nsim	ISOAMSN	2241 not similar
nsime	ISOAMSN	2244 not similar, equals
nsimeq	MMALIAS	2244 not similar, equals
nsmid	ISOAMSN	E2AA negated short mid
nspar	ISOAMSN	E2AB not short par
nsqsube	ISOAMSN	22E2 not, square subset, equals
nsqsupe	ISOAMSN	22E3 not, square superset, equals
nsb	ISOAMSN	2284 not subset
nsbE	ISOAMSN	2288 not subset, double equals
nsbe	ISOAMSN	2288 not subset, equals
nsbset	MMALIAS	2284 not subset, variant
nsbseteq	MMALIAS	2288 not subset, equals
nsbseteqq	MMALIAS	2288 not subset, double equals
nsucc	MMALIAS	2281 not succeeds
nsucceq	MMALIAS	E413 not succeeds, equals
nsup	ISOAMSN	2285 not superset
nsupE	ISOAMSN	2289 not superset, double equals
nsupe	ISOAMSN	2289 not superset, equals
nsupset	MMALIAS	2285 not superset, variant
nsupseteq	MMALIAS	2289 not superset, equals
nsupseteqq	MMALIAS	2289 not superset, double equals
ntgl	ISOAMSN	2279 not greater, less
ntlg	ISOAMSN	2278 not less, greater
ntriangleleft	MMALIAS	22EA not left triangle
ntrianglelefteq	MMALIAS	22EC not left triangle, equals
ntriangleright	MMALIAS	22EB not right triangle
ntrianglerighteq	MMALIAS	22ED not right triangle, equals
ntvgl	ISOAMSN	2279 not, vert, greater, less
ntvlg	ISOAMSN	2278 not, vert, less, greater
nu	ISOGRK3	03BD small nu, Greek
num	ISONUM	0023 number sign
numsp	ISOPUB	2007 digit space (width of a number)
nvap	ISOAMSN	E2C6 not, vert, approximate
nVDash	ISOAMSN	22AF not double vert, double dash
nVdash	ISOAMSN	22AE not double vertical, dash
nvDash	ISOAMSN	22AD not vertical, double dash
nvdash	ISOAMSN	22AC not vertical, dash
nvge	ISOAMSN	2271 not, vert, greater-than-or-equal
nvgt	ISOAMSN	226F not, vert, greater-than
nvhArr*	ISOAMSA	21CE not, vert, left and right double arrow
nvlnfin	ISOTECH	E38E not, vert, infinity
nvlArr	ISOAMSA	21CD not, vert, left double arrow
nvle	ISOAMSN	2270 not, vert, less-than-or-equal
nvlt	ISOAMSN	226E not, vert, less-than
nvltrie	ISOAMSN	E2D0 not, vert, left triangle, equals

nvrArr	ISOAMSA	21CF	not, vert, right double arrow
nvrtrie	ISOAMSN	E2CF	not, vert, right triangle, equals
nvsim	ISOAMSN	E415	not, vert, similar
nwarhk	ISOAMSA	E20C	NW arrow-hooked
nwArr	ISOAMSA	21D6	NW pointing double arrow
nwarr	ISOAMSA	2196	NW pointing arrow
nwarrow	MMALIAS	2196	NW pointing arrow
nwnear	ISOAMSA	E211	NW & NE arrows

O [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
oast	ISOAMSB	229B	asterisk in circle
ocir	ISOAMSB	229A	small circle in circle
odash	ISOAMSB	229D	hyphen in circle
odiv	ISOAMSB	E285	divide in circle
odot	ISOAMSB	2299	middle dot in circle
odsold	ISOAMSB	E286	dot, solidus, dot in circle
ofcir	ISOAMSB	E287	filled circle in circle
Ofr	ISOMFRK	E48A	fraktur letter O
ofr	ISOMFRK	E4A3	fraktur letter o
ogon	ISODIA	0328	ogonek
ogt	ISOAMSB	E289	greater-than in circle
ohbar	ISOAMSB	E260	circle with horizontal bar
ohm	ISONUM	2126	ohm sign
oint	MMALIAS	222E	contour integral operator
olarr	ISOAMSA	21BA	left arr in circle
olcir	ISOAMSB	E409	large circle in circle
olcross	ISOTECH	E3A8	circle, cross
olt	ISOAMSB	E288	less-than in circle
Omega	ISOGRK3	03A9	capital Omega, Greek
omega	ISOGRK3	03C9	small omega, Greek
omicron	ISOGRK3	03BE	small omicron, Greek
omid	ISOAMSB	E40A	vertical bar in circle
ominus	ISOAMSB	2296	minus sign in circle
Oopf	ISOMOPF	E4BC	open face letter O
opar	ISOAMSB	E28A	parallel in circle
OpenCurlyDoubleQuote	MMALIAS	201C	double quotation mark, left
OpenCurlyQuote	MMALIAS	2018	single quotation mark, left
operp	ISOAMSB	E28B	perpendicular in circle
oplus	ISOAMSB	2295	plus sign in circle
Or	ISOTECH	E375	double logical or
or	ISOTECH	2228	logical or
orarr	ISOAMSA	21BB	right arr in circle
ord	ISOTECH	E393	or, horizontal dash
order	ISOTECH	2134	order of (script small o)
ordf	ISONUM	00AA	ordinal indicator, feminine
ordm	ISONUM	00BA	ordinal indicator, masculine
origof	ISOAMSA	22B6	original of
oror	ISOTECH	E50E	two logical or
orslope	ISOTECH	E3AE	sloping large or
orv	ISOTECH	E392	or with middle stem
oS	ISOAMSO	E41D	capital S in circle
Oscr	ISOMSCR	E4D3	script letter O
oscr	ISOMSCR	E4ED	script letter o
oslash	MMALIAS	2298	solidus in circle
osol	ISOAMSB	2298	solidus in circle
Otimes	ISOAMSB	E28C	multiply sign in double circle
otimes	ISOAMSB	2297	multiply sign in circle
otimesas	ISOAMSB	E28D	multiply sign in circle, circumflex accent
ovbar	ISOAMSB	E40B	circle with vertical bar
OverLine	ISODIA	0305	macron

P [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
par	ISOTECH	2225	parallel
para	ISONUM	00B6	pilcrow (paragraph sign)
parallel	MMALIAS	2225	parallel
parsim	ISOAMSN	E2C8	parallel, similar
parsl	ISOTECH	E382	parallel, slanted
part	ISOTECH	2202	/partial partial differential
PartialD	MMALIAS	2202	/partial partial differential
percnt	ISONUM	0025	percent sign
period	ISONUM	002E	full stop, period
permil	ISOTECH	2030	per thousand
perp	ISOTECH	22A5	perpendicular
pertenk	ISOTECH	2031	per 10 thousand
Pfr	ISOMFRK	E48B	fraktur letter P
pfr	ISOMFRK	E4A4	fraktur letter p
Phi	ISOGRK3	03A6	capital Phi, Greek
phi	ISOGRK3	03C6	small phi, Greek
phiv	ISOGRK3	03D5	curly or open small phi, Greek
phmmat	ISOTECH	2133	physics M-matrix (script capital M)
phone	ISOPUB	260E	telephone symbol
Pi	ISOGRK3	03A0	capital Pi, Greek
pi	ISOGRK3	03C0	small pi, Greek
pitchfork	MMALIAS	22D4	pitchfork
piv	ISOGRK3	03D6	rounded small pi (pomega), Greek
plank	ISOAMSO	E2D5	Planck's over 2pi
plankv	ISOAMSO	210F	variant Planck's over 2pi
plus	ISONUM	002B	plus sign
plusacir	ISOAMSB	E26A	plus, circumflex accent above
plusb	ISOAMSB	229E	plus sign in box
pluscir	ISOAMSB	E266	plus, small circle above
plusdo	ISOAMSB	2214	plus sign, dot above
plusdu	ISOAMSB	E25A	plus sign, dot below
pluse	ISOAMSB	E267	plus, equals
PlusMinus	MMALIAS	00B1	plus-or-minus sign
plussmn	ISONUM	00B1	plus-or-minus sign
plussim	ISOAMSB	E26C	plus, similar below
plustwo	ISOAMSB	E269	plus, two; Nim-addition
pm	MMALIAS	00B1	plus-or-minus sign
pointint	ISOTECH	E376	integral around a point operator
Popf	ISOMOPF	2119	open face letter P
pound	ISONUM	00A3	pound sign
Pr	ISOAMSR	E35C	double precedes
pr	ISOAMSR	227A	precedes
prap	ISOAMSR	227E	precedes, approximate
prcue	ISOAMSR	227C	precedes, curly equals
prE	ISOAMSR	227C	precedes, double equals
pre	ISOAMSR	227C	precedes, equals
prec	MMALIAS	227A	precedes
precapprox	MMALIAS	227E	precedes, approximate
preccurlyeq	MMALIAS	227C	precedes, curly equals
Precedes	MMALIAS	227A	precedes
PrecedesEqual	MMALIAS	227C	precedes, equals
PrecedesSlantEqual	MMALIAS	227C	precedes, curly equals
PrecedesTilde	MMALIAS	227E	precedes, similar
preceq	MMALIAS	227C	precedes, equals
precnapprox	MMALIAS	22E8	precedes, not approx
precneqq	MMALIAS	E2B3	precedes, not double equals
precnsim	MMALIAS	22E8	precedes, not similar
precsim	MMALIAS	227E	precedes, similar
Prime	ISOTECH	2033	double prime or second
prime	ISOTECH	2032	/prime prime or minute
prnap	ISOAMSN	22E8	precedes, not approx
prnE	ISOAMSN	E2B3	precedes, not double equals

prnsim	ISOAMSN	22E8	precedes, not similar
profalar	ISOTECH	232E	all-around profile
profline	ISOTECH	2312	profile of a line
profsurf	ISOTECH	2313	profile of a surface
prop	ISOTECH	221D	is proportional to
Proportion	MMALIAS	2237	/Colon, two colons
Proportional	MMALIAS	221D	is proportional to
propto	MMALIAS	221D	is proportional to
prsim	ISOAMSR	227E	precedes, similar
prurel	ISOAMSR	22B0	element precedes under relation
Pscr	ISOMSCR	E4D4	script letter P
pscr	ISOMSCR	E4EE	script letter p
Psi	ISOGRK3	03A8	capital Psi, Greek
psi	ISOGRK3	03C8	small psi, Greek
puncsp	ISOPUB	2008	punctuation space (width of comma)

Q [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
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Qfr	ISOMFRK	E48C	fraktur letter Q
qfr	ISOMFRK	E4A5	fraktur letter q
qint	ISOTECH	E378	quadruple integral operator
Qopf	ISOMOPF	211A	open face letter Q
qprime	ISOTECH	E371	quadruple prime
Qscr	ISOMSCR	E4D5	script letter Q
qscr	ISOMSCR	E4EF	script letter q
quatint	ISOTECH	E377	quaternion integral operator
quest	ISONUM	003F	question mark
questeq	MMALIAS	225F	equal with questionmark
quot	ISONUM	0022	quotation mark

R [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
-----	-----	----	-----
rAarr	ISOAMSA	21DB	right triple arrow
race	ISOAMSB	E40C	reverse most positive, line below
radic	ISOTECH	221A	/surd radical
raemptyv	ISOAMSO	E2E9	circle, slash, right arrow above
Rang	ISOTECH	300B	right angle bracket, double
rang	ISOTECH	3009	right angle bracket
rangd	ISOAMSC	E298	right angle, dot
range	ISOAMSO	E2D7	reverse angle, equal
rangle	MMALIAS	3009	right angle bracket
raquo	ISONUM	00BB	angle quotation mark, right
Rarr	ISOAMSA	21A0	twoheadrightarrow
rArr	ISOTECH	21D2	implies
rarr	ISONUM	2192	rightward arrow
rarrap	ISOAMSA	E235	approximate, right arrow above
rarrbfs	ISOAMSA	E221	right arrow-bar, filled square
rarrc	ISOAMSA	E21C	right arrow-curved
rarrfs	ISOAMSA	E223	right arrow, filled square
rarrhk	ISOAMSA	21AA	right arrow-hooked
rarrlp	ISOAMSA	21AC	right arrow-looped
rarrpl	ISOAMSA	E21E	right arrow, plus
rarrsim	ISOAMSA	E24D	right arrow, similar
Rarrtl	ISOAMSA	E239	right two-headed arrow with tail
rarrtl	ISOAMSA	21A3	right arrow-tailed
rarrw	ISOAMSA	219D	right arrow-wavy
rAtail	ISOAMSA	E23B	right double arrow-tail
ratal	ISOAMSA	21A3	right arrow-tail
ratio	ISOAMSR	2236	ratio
RBarr	ISOAMSA	E209	twoheaded right broken arrow

rBarr	ISOAMSA	E207 right doubly broken arrow
rbarr	ISOAMSA	E405 right broken arrow
rbbrk	ISOTECH	3015 right broken bracket
rbrace	MMALIAS	007D right curly bracket
rbrack	MMALIAS	005D right square bracket
rbrke	ISOAMSC	E29A right bracket, equal
rbrksld	ISOAMSC	E29C right bracket, solidus bottom corner
rbrkslu	ISOAMSC	E29E right bracket, solidus top corner
rceil	ISOAMSC	2309 right ceiling
rcub	ISONUM	007D right curly bracket
rdca	ISOAMSA	E219 right down curved arrow
rdldhar	ISOAMSA	E22D right harpoon-down over left harpoon-down
rdquo	ISONUM	201D double quotation mark, right
rdquor	ISOPUB	201B rising double quote, right (high)
rdsh	ISOAMSA	21B3 right down angled arrow
Re	MMALIAS	211C real
real	ISOAMSO	211C real
rect	ISOPUB	E504 rectangle, open
reg	ISONUM	00AF registered sign
ReverseElement	MMALIAS	220B contains, variant
ReverseEquilibrium	MMALIAS	21CB left harp over r
ReverseUpEquilibrium	MMALIAS	E217 down harp, up harp
rfisht	ISOAMSA	E215 right fish tail
rfloor	ISOAMSC	230B right floor
Rfr	ISOMFRK	E48D fraktur letter R
rfr	ISOMFRK	E4A6 fraktur letter r
rHar	ISOAMSA	E224 right harpoon-up over right harpoon-down
rhard	ISOAMSA	21C1 right harpoon-down
rharu	ISOAMSA	21C0 right harpoon-up
rharul	ISOAMSA	E230 right harpoon-up over long dash
rho	ISOGRK3	03C1 small rho, Greek
rhov	ISOGRK3	03F1 rounded small rho, Greek
RightAngleBracket	MMALIAS	3009 right angle bracket
RightArrow	MMALIAS	2192 rightward arrow
Rightarrow	MMALIAS	21D2 implies
rightarrow	MMALIAS	2192 rightward arrow
RightArrowLeftArrow	MMALIAS	21C4 right arr over left arr
rightarrowtail	MMALIAS	21A3 right arrow-tailed
RightCeiling	MMALIAS	2309 right ceiling
RightDownVector	MMALIAS	21C2 down harpoon-rt
RightFloor	MMALIAS	230B right floor
rightharpoondown	MMALIAS	21C1 right harpoon-down
rightharpoonup	MMALIAS	21C0 right harpoon-up
rightleftarrows	MMALIAS	21C4 right arr over left arr
rightleftharpoons	MMALIAS	21CC right harp over l
rightrightarrow	MMALIAS	21C9 two right arrows
rightsquigarrow	MMALIAS	219D right arrow-wavy
RightTee	MMALIAS	22A2 vertical, dash
RightTeeArrow	MMALIAS	21A6 mapsto
rightthreetimes	MMALIAS	22CC rightthreetimes
RightTriangle	MMALIAS	22B3 right triangle, open, variant
RightTriangleEqual	MMALIAS	22B5 right triangle, equals
RightUpVector	MMALIAS	21BE up harp-r
RightVector	MMALIAS	21C0 right harpoon-up
ring	ISODIA	030A ring
risingdotseq	MMALIAS	2253 equals, rising dots
rlarr	ISOAMSA	21C4 right arr over left arr
rlhar	ISOAMSA	21CC right harp over l
rmoust	ISOAMSC	E293 right moustache
rmoustache	MMALIAS	E293 right moustache
rnmid	ISOAMSN	E2D1 reverse nmid
roang	ISOTECH	3019 right open angular bracket
roarr	ISOAMSA	E241 right open arrow
robrk	ISOTECH	301B right open bracket
ropar	ISOTECH	E37A right open parenthesis
Ropf	ISOMOPF	211D open face letter R

rplus	ISOAMSB	E25D	plus sign in right half circle
rotimes	ISOAMSB	E40D	multiply sign in right half circle
rpar	ISONUM	0029	right parenthesis
rpargt	ISOAMSC	E291	right paren, gt
rppolint	ISOTECH	E397	line integration, rectangular path around pole
rrarr	ISOAMSA	21C9	two right arrows
Rightarrow	MMALIAS	21DB	right triple arrow
Rscr	ISOMSCR	E4D6	script letter R
rscr	ISOMSCR	211B	script letter r
Rsh	MMALIAS	21B1	Rsh
rsh	ISOAMSA	21B1	Rsh
rsqb	ISONUM	005D	right square bracket
rsquo	ISONUM	2019	single quotation mark, right
rsquor	ISOPUB	201F	rising single quote, right (high)
rthree	ISOAMSB	22CC	rightthreetimes
rtimes	ISOAMSB	22CA	times sign, right closed
rtri	ISOPUB	25B9	right triangle, open
rtrie	ISOAMSR	22B5	right triangle, equals
rtrif	ISOPUB	25B8	right triangle, filled
rtriltri	ISOAMSR	E359	right triangle above left triangle
ruharr	ISOAMSA	E22A	right harpoon-up over left harpoon-up
rx	ISOPUB	211E	pharmaceutical prescription (Rx)

S [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Sc	ISOAMSR	E35D	double succeeds
sc	ISOAMSR	227B	succeeds
scap	ISOAMSR	227F	succeeds, approximate
sccue	ISOAMSR	227D	succeeds, curly equals
scE	ISOAMSR	227E	succeeds, double equals
sce	ISOAMSR	227D	succeeds, equals
scnap	ISOAMSN	22E9	succeeds, not approx
scnE	ISOAMSN	E2B5	succeeds, not double equals
scnsim	ISOAMSN	22E9	succeeds, not similar
scpolint	ISOTECH	E398	line integration, semi-circular path around pole
sct	ISOAMSR	227F	succeeds, similar
sddot	ISOAMSB	22C5	small middle dot
sddotb	ISOAMSB	22A1	small dot in box
sdote	ISOAMSR	E319	equal, dot below
searrhk	ISOAMSA	E20B	SE arrow-hooked
seArr	ISOAMSA	21D8	SE pointing double arrow
searr	ISOAMSA	2198	SE pointing arrow
searrow	MMALIAS	2198	SE pointing arrow
sect	ISONUM	00A7	section sign
semi	ISONUM	003B	semicolon
seswar	ISOAMSA	E406	SE & SW arrows
setminus	MMALIAS	2216	reverse solidus
setmn	ISOAMSB	2216	reverse solidus
sext	ISOPUB	E505	sextile (6-pointed star)
Sfr	ISOMFRK	E48E	fraktur letter S
sfr	ISOMFRK	E4A7	fraktur letter s
sfrown	ISOAMSR	E426	small down curve
sharp	ISOPUB	266F	musical sharp
ShortLeftArrow	MMALIAS	E233	short left arrow
shortmid	MMALIAS	E301	shortmid
shortparallel	MMALIAS	E302	short parallel
ShortRightArrow	MMALIAS	E232	short right arrow
shy	ISONUM	00AD	soft hyphen
Sigma	ISOGRK3	03A3	capital Sigma, Greek
sigma	ISOGRK3	03C3	small sigma, Greek
sigmav	ISOGRK3	03C2	terminal sigma, Greek
sim	ISOTECH	223C	similar
simdot	ISOTECH	E38B	similar, dot

sime	ISOTECH	2243	similar, equals
simeq	MMALIAS	2243	similar, equals
simg	ISOAMSR	E30C	similar, greater
simgE	ISOAMSR	E338	similar, greater, equal
siml	ISOAMSR	E30B	similar, less
simlE	ISOAMSR	E337	similar, less, equal
simne	ISOAMSN	2246	similar, not equals
simplus	ISOAMSB	E26B	plus, similar above
simrarr	ISOAMSA	E234	similar, right arrow below
slarr	ISOAMSA	E233	short left arrow
SmallCircle	MMALIAS	2218	composite function (small circle)
smallfrown	MMALIAS	E426	small down curve
smallsetminus	MMALIAS	E844	sm reverse solidus
smallsmile	MMALIAS	E303	small up curve
smashp	ISOAMSB	E264	smash product
smeparsl	ISOTECH	E385	similar, parallel, slanted, equal
smid	ISOAMSR	E301	shortmid
smile	ISOAMSR	2323	up curve
smt	ISOAMSR	E339	smaller than
smtE	ISOAMSR	E33B	smaller than or equal
smtes	ISOAMSR	E33D	smaller than or equal, slanted
sol	ISONUM	002F	solidus
solb	ISOAMSB	E27F	solidus in square
solbar	ISOAMSN	E416	solidus, bar through
Sopf	ISOMOPF	E4BD	open face letter S
spades	ISOPUB	2660	spades suit symbol
spadesuit	MMALIAS	2660	spades suit symbol
spar	ISOAMSR	E302	short parallel
sqcap	ISOAMSB	2293	square intersection
sqcaps	ISOAMSB	E277	square intersection, serifs
sqcup	ISOAMSB	2294	square union
sqcups	ISOAMSB	E276	square union, serifs
Sqrt	MMALIAS	221A	/surd radical
sqsub	ISOAMSR	228F	square subset
sqsubE	ISOAMSR	2291	square subset, equals
sqsubset	MMALIAS	228F	square subset
sqsubsetE	MMALIAS	2291	square subset, equals
sqsup	ISOAMSR	2290	square superset
sqsupE	ISOAMSR	2292	square superset, equals
sqsupset	MMALIAS	2290	square superset
sqsupsetE	MMALIAS	2292	square superset, equals
sq	ISOPUB*	25A1	square, open
square	ISOTECH	25A1	square
SquareIntersection	MMALIAS	2293	square intersection
SquareSubset	MMALIAS	228F	square subset
SquareSubsetEqual	MMALIAS	2291	square subset, equals
SquareSuperset	MMALIAS	2290	square superset
SquareSupersetEqual	MMALIAS	2292	square superset, equals
SquareUnion	MMALIAS	2294	square union
squarf	ISOTECH	25A0	square, filled
squarfb	ISOPUB	E507	square, filled bottom half
squarfb1	ISOPUB	E506	square, filled bottom left corner
squarfb1	ISOPUB	25EA	square, filled bottom right corner
squarfl	ISOPUB	25E7	square, filled left half
squarfr	ISOPUB	25E8	square, filled right half
squarft	ISOPUB	E509	square, filled top half
squarft1	ISOPUB	25E9	square, filled top left corner
squarft1	ISOPUB	E508	square, filled top right corner
sq	ISOPUB*	25AA	/blacksquare -sq bullet, filled
srarr	ISOAMSA	E232	short right arrow
Sscr	ISOMSCR	E4D7	script letter S
sscr	ISOMSCR	E4F0	script letter s
ssetmn	ISOAMSB	E844	sm reverse solidus
ssmile	ISOAMSR	E303	small up curve
sstarf	ISOAMSB	22C6	small star, filled, low
Star	MMALIAS	22C6	small star, filled, low

star	MMALIAS	22C6	small star, filled, low
starf	ISOPUB	2605	star, filled
straightepsilon	MMALIAS	220A	small epsilon, Greek
straightphi	MMALIAS	03C6	small phi, Greek
strns	ISOTECH	E380	straightness
Sub	ISOAMSR	22D0	double subset
sub	ISOTECH	2282	subset or is implied by
subdot	ISOAMSB	E262	subset, with dot
subE	ISOAMSR	2286	subset, double equals
sube	ISOTECH	2286	subset, equals
subedot	ISOAMSR	E34F	subset, equals, dot
submult	ISOAMSR	E343	subset, multiply
subnE	ISOAMSN	228A	subset, not double equals
subne	ISOAMSN	228A	subset, not equals
subplus	ISOAMSR	E341	subset, plus
subrarr	ISOAMSR	E33F	subset, right arrow
Subset	MMALIAS	22D0	double subset
subset	MMALIAS	2282	subset or is implied by
subseteq	MMALIAS	2286	subset, equals
subseteqq	MMALIAS	2286	subset, double equals
SubsetEqual	MMALIAS	2286	subset, equals
subsetneq	MMALIAS	228A	subset, not equals
subsetneqq	MMALIAS	228A	subset, not double equals
subsim	ISOAMSR	E345	subset, similar
subsub	ISOAMSR	E349	subset above subset
subsup	ISOAMSR	E347	subset above superset
succ	MMALIAS	227B	succeeds
succapprox	MMALIAS	227F	succeeds, approximate
succurlyeq	MMALIAS	227D	succeeds, curly equals
Succeeds	MMALIAS	227B	succeeds
SucceedsEqual	MMALIAS	227D	succeeds, equals
SucceedsSlantEqual	MMALIAS	227D	succeeds, curly equals
SucceedsTilde	MMALIAS	227F	succeeds, similar
succeq	MMALIAS	227D	succeeds, equals
succnapprox	MMALIAS	22E9	succeeds, not approx
succneqq	MMALIAS	E2B5	succeeds, not double equals
succnsim	MMALIAS	22E9	succeeds, not similar
succsim	MMALIAS	227F	succeeds, similar
SuchThat	MMALIAS	220D	contains
Sum	MMALIAS	2211	summation operator
sum	ISOAMSB	2211	summation operator
sung	ISONUM	2669	music note (sung text sign)
Sup	ISOAMSR	22D1	double superset
sup	ISOTECH	2283	superset or implies
sup1	ISONUM	00B9	superscript one
sup2	ISONUM	00B2	superscript two
sup3	ISONUM	00B3	superscript three
supdot	ISOAMSB	E263	superset, with dot
supdsub	ISOAMSR	E34C	superset, subset, dash joining them
supE	ISOAMSR	2287	superset, double equals
supe	ISOTECH	2287	superset, equals
supedot	ISOAMSR	E350	superset, equals, dot
Superset	MMALIAS	2283	superset or implies
SupersetEqual	MMALIAS	2287	superset, equals
suphsol	ISOAMSR	E34E	superset, solidus
suphsub	ISOAMSR	E34B	superset, subset
suplarr	ISOAMSR	E340	superset, left arrow
supmult	ISOAMSR	E344	superset, multiply
supnE	ISOAMSN	228B	superset, not double equals
supne	ISOAMSN	228B	superset, not equals
supplus	ISOAMSR	E342	superset, plus
Supset	MMALIAS	22D1	double superset
supset	MMALIAS	2283	superset or implies
supseteq	MMALIAS	2287	superset, equals
supseteqq	MMALIAS	2287	superset, double equals
supsetneq	MMALIAS	228B	superset, not equals

supsetneqq	MMALIAS	228B	superset, not double equals
supsim	ISOAMSR	E346	superset, similar
supsub	ISOAMSR	E348	superset above subset
supsup	ISOAMSR	E34A	superset above superset
swarhk	ISOAMSA	E20A	SW arrow-hooked
swArr	ISOAMSA	21D9	SW pointing double arrow
swarr	ISOAMSA	2199	SW pointing arrow
swarrow	MMALIAS	2199	SW pointing arrow
swnwar	ISOAMSA	E210	SW & NW arrows

T [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
target	ISOPUB	2316	register mark or target
tau	ISOGRK3	03C4	small tau, Greek
tbrk	ISOAMSO	E2EF	top square bracket
tdot	ISOTECH	20DB	three dots above
telrec	ISOPUB	2315	telephone recorder symbol
Tfr	ISOMFRK	E48F	fraktur letter T
tfr	ISOMFRK	E4A8	fraktur letter t
there4	ISOTECH	2234	therefore
Therefore	MMALIAS	2234	therefore
therefore	MMALIAS	2234	therefore
Theta	ISOGRK3	0398	capital Theta, Greek
theta	ISOGRK3	03B8	straight theta, small theta, Greek
thetav	ISOGRK3	03D1	curly or open theta
thickapprox	MMALIAS	E306	thick approximate
thicksim	MMALIAS	E429	thick similar
thinsp	ISOPUB	2009	thin space (sixth of an em)
thkap	ISOAMSR	E306	thick approximate
thksim	ISOAMSR	E429	thick similar
Tilde	MMALIAS	223C	similar
tilde	ISODIA	0303	tilde
TildeEqual	MMALIAS	2243	similar, equals
TildeFullEqual	MMALIAS	2245	congruent with
TildeTilde	MMALIAS	2248	approximate
times	ISONUM	00D7	multiply sign
timesb	ISOAMSB	22A0	multiply sign in box
timesbar	ISOAMSB	E28E	multiply sign, bar below
timesd	ISOAMSB	E26D	times, dot
tint	ISOTECH	222D	triple integral operator
toea	MMALIAS	E20E	NE & SE arrows
top	ISOTECH	22A4	top
topbot	ISOTECH	2336	top and bottom
topcir	ISOTECH	E383	top, circle below
Topf	ISOMOPF	E4BE	open face letter T
topfork	ISOAMSR	E31C	fork with top
tosa	MMALIAS	E20F	SE & SW arrows
tprime	ISOTECH	2034	triple prime
trade	ISONUM	2122	trade mark sign
triangle	MMALIAS	25B5	up triangle, open
triangledown	MMALIAS	25BF	down triangle, open
triangleleft	MMALIAS	25C3	left triangle, open
trianglelefteq	MMALIAS	22B4	left triangle, equals
triangleq	MMALIAS	225C	triangle, equals
triangleright	MMALIAS	25B9	right triangle, open
trianglerighteq	MMALIAS	22B5	right triangle, equals
tridot	ISOAMSB	25EC	dot in triangle
trie	ISOAMSR	225C	triangle, equals
triminus	ISOAMSB	E27C	minus in triangle
TripleDot	MMALIAS	20DB	three dots above
triplus	ISOAMSB	E27B	plus in triangle
trisb	ISOAMSB	E27E	triangle, serifs at bottom
tritime	ISOAMSB	E27D	multiply in triangle

trpezium	ISOAMSO	E2EC	trapezium
Tscr	ISOMSCR	E4D8	script letter T
tscr	ISOMSCR	E4F1	script letter t
twixt	ISOAMSR	226C	between
twoheadleftarrow	MMALIAS	219E	twoheadleftarrow
twoheadrightarrow	MMALIAS	21A0	twoheadrightarrow

U [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
Uarr	ISOAMSA	219F	up two-headed arrow
uArr	ISOAMSA	21D1	up double arrow
uarr	ISONUM	2191	upward arrow
Uarrocir	ISOAMSA	E237	up two-headed arrow above circle
udarr	ISOAMSA	21C5	up arrow, down arrow
udhar	ISOAMSA	E218	up harp, down harp
ufisht	ISOAMSA	E24B	up fish tail
Ufr	ISOMFRK	E490	fraktur letter U
ufr	ISOMFRK	E4A9	fraktur letter u
uHar	ISOAMSA	E226	up harpoon-left, up harpoon-right
uharl	ISOAMSA	21BF	up harpoon-left
uharr	ISOAMSA	21BE	up harp-r
uhblk	ISOPUB	2580	upper half block
ulcorn	ISOAMSC	231C	upper left corner
ulcorner	MMALIAS	231C	upper left corner
ulcrop	ISOPUB	230F	upward left crop mark
ultri	ISOAMSO	E2E4	upper left triangle
uml	ISODIA	0308	umlaut mark
UnderLine	ISODIA	0332	underline
Union	MMALIAS	22C3	union operator
UnionPlus	MMALIAS	228E	plus sign in union
Uopf	ISOMOPF	E4BF	open face letter U
UpArrow	MMALIAS	2191	upward arrow
Uparrow	MMALIAS	21D1	up double arrow
uparrow	MMALIAS	2191	upward arrow
UpArrowDownArrow	MMALIAS	21C5	up arrow, down arrow
UpDownArrow	MMALIAS	2195	up&down arrow
Updownarrow	MMALIAS	21D5	up&down double arrow
updownarrow	MMALIAS	2195	up&down arrow
UpEquilibrium	MMALIAS	E218	up harp, down harp
upharpoonleft	MMALIAS	21BF	up harpoon-left
upharpoonright	MMALIAS	21BE	up harp-r
uplus	ISOAMSB	228E	plus sign in union
UpperLeftArrow	MMALIAS	2196	NW pointing arrow
UpperRightArrow	MMALIAS	2197	NE pointing arrow
Upsi	ISOGRK3	03D2	capital Upsilon, Greek
upsi	ISOGRK3	03C5	small upsilon, Greek
Upsilon	MMALIAS	03D2	capital Upsilon, Greek
upsilon	MMALIAS	03C5	small upsilon, Greek
UpTee	MMALIAS	22A5	perpendicular
upuparrows	MMALIAS	21C8	two up arrows
urcorn	ISOAMSC	231D	upper right corner
urcorner	MMALIAS	231D	upper right corner
urcrop	ISOPUB	230E	upward right crop mark
urtri	ISOAMSO	E2E2	upper right triangle
Uscr	ISOMSCR	E4D9	script letter U
uscr	ISOMSCR	E4F2	script letter u
utdot	ISOTECH	22F0	three dots, ascending
utri	ISOPUB	25B5	up triangle, open
utrif	ISOPUB	25B4	up triangle, filled
uarr	ISOAMSA	21C8	two up arrows
uwangle	ISOTECH	E3AB	large upward pointing angle

V [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
vangrt	ISOTECH	22BE	right angle, variant (with arc)
varepsilon	MMALIAS	03B5	rounded small epsilon, Greek
varkappa	MMALIAS	03F0	rounded small kappa , Greek
varnothing	MMALIAS	2205	circle, slash
varphi	MMALIAS	03D5	curly or open small phi, Greek
varpi	MMALIAS	03D6	rounded small pi (pomega), Greek
varpropto	MMALIAS	221D	proportional, variant
vArr	ISOAMSA	21D5	up&down double arrow
varr	ISOAMSA	2195	up&down arrow
varrho	MMALIAS	03F1	rounded small rho, Greek
varsigma	MMALIAS	03C2	terminal sigma, Greek
varsubsetneq	MMALIAS	E2B9	subset, not equals, variant
varsubsetneqq	MMALIAS	E2B8	subset not double equals, variant
varsupsetneq	MMALIAS	E2BA	superset, not equals, variant
varsupsetneqq	MMALIAS	E2BB	super not double equals, variant
vartheta	MMALIAS	03D1	curly or open theta
vartriangleleft	MMALIAS	22B2	left triangle, open, variant
vartriangleright	MMALIAS	22B3	right triangle, open, variant
Vbar	ISOAMSR	E30D	double vert, bar (under)
vBar	ISOAMSR	E310	vert, double bar (under)
vBarv	ISOAMSR	E312	double bar, vert over and under
VDash	ISOAMSR	22AB	double vert, double dash
Vdash	ISOAMSR	22A9	double vertical, dash
vDash	ISOAMSR	22A8	vertical, double dash
vdash	ISOAMSR	22A2	vertical, dash
Vdashl	ISOAMSR	E313	vertical, dash (long)
Vee	MMALIAS	22C1	logical and operator
vee	MMALIAS	2228	logical or
veebar	ISOAMSB	22BB	logical or, bar below
veeeq	ISOTECH	225A	logical or, equals
vellip	ISOPUB	22EE	vertical ellipsis
Verbar	ISOTECH	2016	double vertical bar
verbar	ISONUM	007C	vertical bar
Vert	MMALIAS	2016	double vertical bar
vert	MMALIAS	007C	vertical bar
VerticalBar	MMALIAS	2223	mid
VerticalTilde	MMALIAS	2240	wreath product
Vfr	ISOMFRK	E491	fraktur letter V
vfr	ISOMFRK	E4AA	fraktur letter v
vltri	ISOAMSR	22B2	left triangle, open, variant
vnsup	ISOAMSN	2284	not subset, variant
vnsup	ISOAMSN	2285	not superset, variant
Vopf	ISOMOPF	E4C0	open face letter V
vprop	ISOAMSR	221D	proportional, variant
vrtri	ISOAMSR	22B3	right triangle, open, variant
Vscr	ISOMSCR	E4DA	script letter V
vscr	ISOMSCR	E4F3	script letter v
vsubnE	ISOAMSN	E2B8	subset not double equals, variant
vsubne	ISOAMSN	E2B9	subset, not equals, variant
vsupnE	ISOAMSN	E2BB	super not double equals, variant
vsupne	ISOAMSN	E2BA	superset, not equals, variant
Vvdash	ISOAMSR	22AA	triple vertical, dash
vzigzag	ISOAMSO	E2EB	vertical zig-zag line

W [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
wedbar	ISOAMSB	E265	wedge, bar below
Wedge	MMALIAS	22C0	logical or operator

wedge	MMALIAS	2227	logical and
wedgeq	ISOTECH	2259	corresponds to (wedge, equals)
weierp	ISOAMSO	2118	Weierstrass p
Wfr	ISOMFRK	E492	fraktur letter W
wfr	ISOMFRK	E4AB	fraktur letter w
Wopf	ISOMOPF	E4C1	open face letter W
wp	MMALIAS	2118	Weierstrass p
wr	MMALIAS	2240	wreath product
wreath	ISOAMSB	2240	wreath product
Wscr	ISOMSCR	E4DB	script letter W
wscr	ISOMSCR	E4F4	script letter w

X [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
xcap	ISOAMSB	22C2	intersection operator
xcirc	ISOAMSB	25CB	large circle
xcup	ISOAMSB	22C3	union operator
xdtri	ISOAMSB	25BD	big down triangle, open
Xfr	ISOMFRK	E493	fraktur letter X
xfr	ISOMFRK	E4AC	fraktur letter x
xhArr	ISOAMSA	E202	long left and right double arr
xharr	ISOAMSA	E203	long left and right arr
Xi	ISOGRK3	039E	capital Xi, Greek
xi	ISOGRK3	03BE	small xi, Greek
xlArr	ISOAMSA	E200	long left double arrow
xlarr	ISOAMSA	E201	long left arrow
xmap	ISOAMSA	E208	longmapsto
xnis	ISOTECH	E3A3	large contains, vertical bar on horizontal stroke
xodot	ISOAMSB	2299	circle dot operator
Xopf	ISOMOPF	E4C2	open face letter X
xoplus	ISOAMSB	2295	circle plus operator
xotime	ISOAMSB	2297	circle times operator
xrArr	ISOAMSA	E204	long right double arr
xrarr	ISOAMSA	E205	long right arrow
Xscr	ISOMSCR	E4DC	script letter X
xscr	ISOMSCR	E4F5	script letter x
xscup	ISOAMSB	2294	square union operator
xuplus	ISOAMSB	228E	biguplus
xutri	ISOAMSB	25B3	big up triangle, open
xvee	ISOAMSB	22C1	logical and operator
xwedge	ISOAMSB	22C0	logical or operator

Y [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
yen	ISONUM	00A5	yen sign
Yfr	ISOMFRK	E494	fraktur letter Y
yfr	ISOMFRK	E4AD	fraktur letter y
Yopf	ISOMOPF	E4C3	open face letter Y
Yscr	ISOMSCR	E4DD	script letter Y
yscr	ISOMSCR	E4F6	script letter y

Z [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Character Name	Group	Code	Description
zeta	ISOGRK3	03B6	small zeta, Greek
Zfr	ISOMFRK	2124	fraktur letter Z
zfr	ISOMFRK	E4AE	fraktur letter z

zigrarr	ISOAMSA	E244	right zig-zag arrow
Zopf	ISOMOPF	E4C4	open face letter Z
Zscr	ISOMSCR	E4DE	script letter Z
zscr	ISOMSCR	E4F7	script letter z

Up: [Chapter 6](#)Next: [Alphabetically](#)

REC-MathML-19980407

Printing MathML Character Entities ordered by Unicode

Based on ISO 9573-13 extended with aliases

00 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
0021	excl	ISONUM	exclamation mark
0022	quot	ISONUM	quotation mark
0023	num	ISONUM	number sign
0024	dollar	ISONUM	dollar sign
0025	percnt	ISONUM	percent sign
0026	amp	ISONUM	ampersand
0027	apos	ISONUM	apostrophe
0028	lpar	ISONUM	left parenthesis
0029	rpar	ISONUM	right parenthesis
002A	ast	ISONUM]
002B	plus	ISONUM	plus sign
002C	comma	ISONUM	comma
002E	period	ISONUM	full stop, period
002F	sol	ISONUM	solidus
003A	colon	ISONUM	colon
003B	semi	ISONUM	semicolon
003C	lt	ISONUM	less-than sign
003D	equals	ISONUM	equals sign
003E	gt	ISONUM	greater-than sign
003F	quest	ISONUM	question mark
0040	commat	ISONUM	commercial at
005B	lbrack	MMALIAS	left square bracket
005C	bsol	ISONUM	/backslash reverse solidus
005D	rbrack	MMALIAS	right square bracket
005F	lowbar	ISONUM	low line
007B	lbrace	MMALIAS	left curly bracket
007C	vert	MMALIAS	vertical bar
007D	rbrace	MMALIAS	right curly bracket
00A0	nbsp	ISONUM	no break (required) space
00A1	ixcl	ISONUM	inverted exclamation mark
00A2	cent	ISONUM	cent sign
00A3	pound	ISONUM	pound sign
00A4	curren	ISONUM	general currency sign
00A5	yen	ISONUM	yen sign
00A6	brvbar	ISONUM	broken (vertical) bar
00A7	sect	ISONUM	section sign
00A9	copy	ISONUM	copyright sign
00AA	ordf	ISONUM	ordinal indicator, feminine
00AB	laquo	ISONUM	angle quotation mark, left
00AC	not	ISONUM	/neg /lnot not sign
00AD	shy	ISONUM	soft hyphen
00AF	circledR	MMALIAS	registered sign
00B0	deg	ISONUM	degree sign
00B1	pm	MMALIAS	plus-or-minus sign
00B2	sup2	ISONUM	superscript two
00B3	sup3	ISONUM	superscript three
00B5	micro	ISONUM	micro sign
00B6	para	ISONUM	pilcrow (paragraph sign)
00B7	centerdot	MMALIAS	middle dot

00B9	sup1	ISONUM	superscript one
00BA	ordm	ISONUM	ordinal indicator, masculine
00BB	raquo	ISONUM	angle quotation mark, right
00BC	frac14	ISONUM	fraction one-quarter
00BD	half	ISONUM	fraction one-half
00BE	frac34	ISONUM	fraction three-quarters
00BF	iquest	ISONUM	inverted question mark
00D7	times	ISONUM	multiply sign
00F7	div	MMALIAS	divide sign

01 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
0131	imath	ISOAMSO	small i, no dot

03 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
0300	DiacriticalGrave	MMALIAS	grave accent
0301	DiacriticalAcute	MMALIAS	acute accent
0302	Hat	MMALIAS	circumflex accent
0303	DiacriticalTilde	MMALIAS	tilde
0304	macr	ISODIA	macron
0305	OverLine	ISODIA	macron
0306	Breve	MMALIAS	breve
0307	DiacriticalDot	MMALIAS	dot above
0308	DoubleDot	MMALIAS	dieresis
030A	ring	ISODIA	ring
030B	DiacriticalDoubleAcu	MMALIAS	double acute accent
030C	Hacek	MMALIAS	caron
0327	Cedilla	MMALIAS	cedilla
0328	ogon	ISODIA	ogonek
0332	UnderLine	ISODIA	underline
0393	Gamma	ISOGRK3	capital Gamma, Greek
0394	Delta	ISOGRK3	capital Delta, Greek
0398	Theta	ISOGRK3	capital Theta, Greek
039B	Lambda	ISOGRK3	capital Lambda, Greek
039E	Xi	ISOGRK3	capital Xi, Greek
03A0	Pi	ISOGRK3	capital Pi, Greek
03A3	Sigma	ISOGRK3	capital Sigma, Greek
03A6	Phi	ISOGRK3	capital Phi, Greek
03A8	Psi	ISOGRK3	capital Psi, Greek
03A9	Omega	ISOGRK3	capital Omega, Greek
03B1	alpha	ISOGRK3	small alpha, Greek
03B2	beta	ISOGRK3	small beta, Greek
03B3	gamma	ISOGRK3	small gamma, Greek
03B4	delta	ISOGRK3	small delta, Greek
03B5	varepsilon	MMALIAS	rounded small epsilon, Greek
03B6	zeta	ISOGRK3	small zeta, Greek
03B7	eta	ISOGRK3	small eta, Greek
03B8	theta	ISOGRK3	straight theta, small theta, Greek
03B9	iota	ISOGRK3	small iota, Greek
03BA	kappa	ISOGRK3	small kappa, Greek
03BB	lambda	ISOGRK3	small lambda, Greek
03BC	mu	ISOGRK3	small mu, Greek
03BD	nu	ISOGRK3	small nu, Greek
03BE	xi	ISOGRK3	small xi, Greek
03C0	pi	ISOGRK3	small pi, Greek
03C1	rho	ISOGRK3	small rho, Greek
03C2	varsigma	MMALIAS	terminal sigma, Greek
03C3	sigma	ISOGRK3	small sigma, Greek

03C4	tau	ISOGRK3	small tau, Greek
03C5	upsilon	MMALIAS	small upsilon, Greek
03C6	straightphi	MMALIAS	small phi, Greek
03C7	chi	ISOGRK3	small chi, Greek
03C8	psi	ISOGRK3	small psi, Greek
03C9	omega	ISOGRK3	small omega, Greek
03D1	vartheta	MMALIAS	curly or open theta
03D2	Upsilon	MMALIAS	capital Upsilon, Greek
03D5	varphi	MMALIAS	curly or open small phi, Greek
03D6	varpi	MMALIAS	rounded small pi (pomega), Greek
03DC	digamma	MMALIAS	digamma, old Greek
03F0	varkappa	MMALIAS	rounded small kappa, Greek
03F1	varrho	MMALIAS	rounded small rho, Greek

20 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
2002	ensp	ISOPUB	en space (half an em)
2003	emsp	ISOPUB	em space
2004	emsp13	ISOPUB	third of an em space
2005	emsp14	ISOPUB	quarter of an em space
2007	numsp	ISOPUB	digit space (width of a number)
2008	puncsp	ISOPUB	punctuation space (width of comma)
2009	thinsp	ISOPUB	thin space (sixth of an em)
200A	hairsp	ISOPUB	hair space
2010	dash	ISOPUB	hyphen (true graphic)
2013	ndash	ISOPUB	en dash
2014	mdash	ISOPUB	em dash
2015	horbar	ISONUM	horizontal bar
2016	Vert	MMALIAS	double vertical bar
2018	OpenCurlyQuote	MMALIAS	single quotation mark, left
2019	CloseCurlyQuote	MMALIAS	single quotation mark, right
201A	lsquor	ISOPUB	rising single quote, left (low)
201B	rdquor	ISOPUB	rising double quote, right (high)
201C	OpenCurlyDoubleQuote	MMALIAS	double quotation mark, left
201D	CloseCurlyDoubleQuote	MMALIAS	double quotation mark, right
201E	ldquor	ISOPUB	rising double quote, left (low)
201F	rsquor	ISOPUB	rising single quote, right (high)
2020	dagger	ISOPUB	dagger
2021	ddagger	MMALIAS	double dagger
2022	bullet	MMALIAS	round bullet, filled
2025	nldr	ISOPUB	double baseline dot (en leader)
2026	hellip	ISOPUB	ellipsis (horizontal)
2030	permil	ISOTECH	per thousand
2031	pertenk	ISOTECH	per 10 thousand
2032	prime	ISOTECH	/prime prime or minute
2033	Prime	ISOTECH	double prime or second
2034	tprime	ISOTECH	triple prime
2035	backprime	MMALIAS	reverse prime
2038	caret	ISOPUB	caret (insertion mark)
2043	hybull	ISOPUB	rectangle, filled (hyphen bullet)
20D0	DiacriticalLeftVecto	ISODIA	left harpoon accent
20D1	DiacriticalRightVect	ISODIA	right harpoon accent
20D6	DiacriticalLeftArrow	ISODIA	left arrow accent
20D7	DiacriticalRightArro	ISODIA	right arrow accent
20DB	TripleDot	MMALIAS	three dots above
20DC	DotDot	ISOTECH	four dots above
20E1	DiacriticalLeftRight	ISODIA	left-right arrow accent

21 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
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2102	Copf	ISOMOPF	open face letter C
2105	incare	ISOPUB	in-care-of symbol
210B	hamilt	ISOTECH	Hamiltonian (script capital H)
210F	hslash	MMALIAS	variant Planck's over 2pi
2111	Im	MMALIAS	imaginary
2112	lagran	ISOTECH	Lagrangian (script capital L)
2113	ell	ISOAMSO	cursive small l
2117	copysr	ISOPUB	sound recording copyright sign
2118	wp	MMALIAS	Weierstrass p
2119	Popf	ISOMOPF	open face letter P
211A	Qopf	ISOMOPF	open face letter Q
211B	rscr	ISOMSCR	script letter r
211C	Re	MMALIAS	real
211D	Ropf	ISOMOPF	open face letter R
211E	rx	ISOPUB	pharmaceutical prescription (Rx)
2122	trade	ISONUM	trade mark sign
2124	Zfr	ISOMFRK	fraktur letter Z
2126	ohm	ISONUM	ohm sign
2127	mho	ISOAMSO	conductance
2129	iota	ISOAMSO	inverted iota
212B	angst	ISOTECH	Angstrom capital A, ring
212C	bernou	ISOTECH	Bernoulli function (script capital B)
2133	phmmat	ISOTECH	physics M-matrix (script capital M)
2134	order	ISOTECH	order of (script small o)
2135	aleph	ISOTECH	/aleph aleph, Hebrew
2136	beth	ISOAMSO	beth, Hebrew
2137	gimel	ISOAMSO	gimel, Hebrew
2138	daleth	ISOAMSO	daleth, Hebrew
2153	frac13	ISOPUB	fraction one-third
2155	frac15	ISOPUB	fraction one-fifth
2156	frac25	ISOPUB	fraction two-fifths
2157	frac35	ISOPUB	fraction three-fifths
2158	frac45	ISOPUB	fraction four-fifths
2159	frac16	ISOPUB	fraction one-sixth
215A	frac56	ISOPUB	fraction five-sixths
215B	frac18	ISONUM	fraction one-eighth
215C	frac38	ISONUM	fraction three-eighths
215D	frac58	ISONUM	fraction five-eighths
215E	frac78	ISONUM	fraction seven-eighths
2190	leftarrow	MMALIAS	leftward arrow
2191	uparrow	MMALIAS	upward arrow
2192	rightarrow	MMALIAS	rightward arrow
2193	downarrow	MMALIAS	downward arrow
2194	leftrightarrow	MMALIAS	left and right arrow
2195	updownarrow	MMALIAS	up&downarrow
2196	UpperLeftArrow	MMALIAS	NW pointing arrow
2197	UpperRightArrow	MMALIAS	NE pointing arrow
2198	searrow	MMALIAS	SE pointing arrow
2199	swarrow	MMALIAS	SW pointing arrow
219A	nleftarrow	MMALIAS	not left arrow
219B	nrightarrow	MMALIAS	not right arrow
219D	rightsquigarrow	MMALIAS	right arrow-wavy
219E	twoheadleftarrow	MMALIAS	twoheadleftarrow
219F	Uarr	ISOAMSA	up two-headed arrow
21A0	twoheadrightarrow	MMALIAS	twoheadrightarrow
21A1	Darr	ISOAMSA	down two-headed arrow
21A2	leftarrowtail	MMALIAS	left arrow-tailed
21A3	rightarrowtail	MMALIAS	right arrow-tailed
21A6	RightTeeArrow	MMALIAS	mapsto
21A9	hookleftarrow	MMALIAS	left arrow-hooked
21AA	hookrightarrow	MMALIAS	right arrow-hooked
21AB	looparrowleft	MMALIAS	left arrow-looped
21AC	looparrowright	MMALIAS	right arrow-looped
21AD	leftrightsquigarrow	MMALIAS	left and right arr-wavy
21AE	nleftrightarrow	MMALIAS	not left and right arrow
21B0	Lsh	MMALIAS	Lsh

21B1	Rsh	MMALIAS	Rsh
21B2	ldsh	ISOAMSA	left down angled arrow
21B3	rdsh	ISOAMSA	right down angled arrow
21B6	curvearrowleft	MMALIAS	left curved arrow
21B7	curvearrowright	MMALIAS	right curved arrow
21BA	circlearrowleft	MMALIAS	left arr in circle
21BB	circlearrowright	MMALIAS	right arr in circle
21BC	LeftVector	MMALIAS	left harpoon-up
21BD	leftharpoondown	MMALIAS	left harpoon-down
21BE	upharpoonright	MMALIAS	up harp-r
21BF	upharpoonleft	MMALIAS	up harpoon-left
21C0	RightVector	MMALIAS	right harpoon-up
21C1	rightharpoondown	MMALIAS	right harpoon-down
21C2	RightDownVector	MMALIAS	down harpoon-rt
21C3	LeftDownVector	MMALIAS	down harpoon-left
21C4	rightleftarrows	MMALIAS	right arr over left arr
21C5	UpArrowDownArrow	MMALIAS	up arrow, down arrow
21C6	leftrightarrows	MMALIAS	left arr over right arr
21C7	leftleftarrows	MMALIAS	two left arrows
21C8	upuparrows	MMALIAS	two up arrows
21C9	rightrightarrows	MMALIAS	two right arrows
21CA	downdownarrows	MMALIAS	two down arrows
21CB	ReverseEquilibrium	MMALIAS	left harp over r
21CC	rightleftharpoons	MMALIAS	right harp over l
21CD	nLeftarrow	MMALIAS	not implied by
21CE	nLeftrightarrow	MMALIAS	not left and right double arr
21CF	nrightarrow	MMALIAS	not implies
21D0	Leftarrow	MMALIAS	is implied by
21D1	Uparrow	MMALIAS	up double arrow
21D2	Rightarrow	MMALIAS	implies
21D3	Downarrow	MMALIAS	down double arrow
21D4	Leftrightarrow	MMALIAS	left and right double arrow
21D5	Updownarrow	MMALIAS	up&down double arrow
21D6	nwArr	ISOAMSA	NW pointing double arrow
21D7	neArr	ISOAMSA	NE pointing double arrow
21D8	seArr	ISOAMSA	SE pointing double arrow
21D9	swArr	ISOAMSA	SW pointing double arrow
21DA	Lleftarrow	MMALIAS	left triple arrow
21DB	Rrightarrow	MMALIAS	right triple arrow
21DD	dzigrarr	ISOAMSA	right long zig-zag arrow

22 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
2200	ForAll	MMALIAS	/forall for all
2201	complement	MMALIAS	complement sign
2202	PartialD	MMALIAS	/partial partial differential
2203	Exists	MMALIAS	/exists at least one exists
2204	NotExists	MMALIAS	negated exists
2205	varnothing	MMALIAS	circle, slash
2207	Del	MMALIAS	del, Hamilton operator
2208	Element	MMALIAS	set membership, variant
2209	NotElement	MMALIAS	negated set membership
220A	straightepsilon	MMALIAS	small epsilon, Greek
220B	ReverseElement	MMALIAS	contains, variant
220C	NotReverseElement	MMALIAS	negated contains, variant
220D	SuchThat	MMALIAS	contains
2210	Coproduct	MMALIAS	coproduct operator
2211	Sum	MMALIAS	summation operator
2212	minus	ISOTECH	minus sign
2213	mp	MMALIAS	minus-or-plus sign
2214	dotplus	MMALIAS	plus sign, dot above
2216	setminus	MMALIAS	reverse solidus
2217	ast	MMALIAS	centered asterisk

2218	SmallCircle	MMALIAS	composite function (small circle)
221A	Sqrt	MMALIAS	/surd radical
221D	varpropto	MMALIAS	proportional, variant
221E	infin	ISOTECH	/infty infinity
221F	angrt	ISOTECH	right (90 degree) angle
2220	angle	MMALIAS	angle
2221	measuredangle	MMALIAS	angle-measured
2222	angsph	ISOTECH	/sphericalangle angle-spherical
2223	VerticalBar	MMALIAS	mid
2224	NotVerticalBar	MMALIAS	negated mid
2225	parallel	MMALIAS	parallel
2226	nparallel	MMALIAS	not parallel
2227	wedge	MMALIAS	logical and
2228	vee	MMALIAS	logical or
2229	cap	ISOTECH	intersection
222A	cup	ISOTECH	union or logical sum
222B	Integral	MMALIAS	integral operator
222C	Int	ISOTECH	double integral operator
222D	iiint	MMALIAS	triple integral operator
222E	oint	MMALIAS	contour integral operator
222F	DoubleContourIntegra	MMALIAS	double contour integral operator
2230	Cconint	ISOTECH	triple contour integral operator
2231	cwint	ISOTECH	clockwise integral
2232	ClockwiseContourInte	MMALIAS	contour integral, clockwise
2233	CounterClockwiseCont	MMALIAS	contour integral, anti-clockwise
2234	therefore	MMALIAS	therefore
2235	because	MMALIAS	because
2236	ratio	ISOAMSR	ratio
2237	Proportion	MMALIAS	/Colon, two colons
2238	dotminus	MMALIAS	minus sign, dot above
223A	mDDot	ISOAMSR	minus with four dots, geometric properties
223B	homtht	ISOAMSR	homothetic
223C	Tilde	MMALIAS	similar
223D	backsim	MMALIAS	reverse similar
223E	mstpos	ISOAMSR	most positive
2240	wr	MMALIAS	wreath product
2241	NotTilde	MMALIAS	not similar
2242	EqualTilde	MMALIAS	equals, similar
2243	TildeEqual	MMALIAS	similar, equals
2244	nsimeq	MMALIAS	not similar, equals
2245	TildeFullEqual	MMALIAS	congruent with
2246	simne	ISOAMSN	similar, not equals
2247	NotTildeFullEqual	MMALIAS	not congruent with
2248	TildeTilde	MMALIAS	approximate
2249	NotTildeTilde	MMALIAS	not approximate
224A	approxpeq	MMALIAS	approximate, equals
224B	apid	ISOAMSR	approximately identical to
224C	backcong	MMALIAS	reverse congruent
224D	CupCap	MMALIAS	asymptotically equal to
224E	HumpDownHump	MMALIAS	bumpy equals
224F	HumpEqual	MMALIAS	bumpy equals, equals
2250	doteq	MMALIAS	equals, single dot above
2251	doteqdot	MMALIAS	equals, even dots
2252	fallingdotseq	MMALIAS	equals, falling dots
2253	risingdotseq	MMALIAS	equals, rising dots
2254	coloneq	MMALIAS	colon, equals
2255	eqcolon	MMALIAS	equals, colon
2256	eqcirc	MMALIAS	circle on equals sign
2257	circeq	MMALIAS	circle, equals
2259	wedgeq	ISOTECH	corresponds to (wedge, equals)
225A	veeeq	ISOTECH	logical or, equals
225B	easter	ISOAMSR	equal, asterisk above
225C	triangleq	MMALIAS	triangle, equals
225F	questeq	MMALIAS	equal with questionmark
2260	NotEqual	MMALIAS	not equal
2261	Congruent	MMALIAS	identical with

2262	NotCongruent	MMALIAS	not identical with
2264	leq	MMALIAS	less-than-or-equal
2265	GreaterEqual	MMALIAS	greater-than-or-equal
2266	LessFullEqual	MMALIAS	less, double equals
2267	GreaterFullEqual	MMALIAS	greater, double equals
2268	lneq	MMALIAS	less, not equals
2269	gneq	MMALIAS	greater, not equals
226A	NestedLessLess	MMALIAS	double less-than sign
226B	NestedGreaterGreater	MMALIAS	double greater-than sign
226C	between	MMALIAS	between
226E	NotLess	MMALIAS	not less-than
226F	NotGreater	MMALIAS	not greater-than
2270	NotLessSlantEqual	MMALIAS	not less-or-equals, slant
2271	NotGreaterSlantEqual	MMALIAS	not gt-or-equals, slanted
2272	LessTilde	MMALIAS	less, similar
2273	gtrsim	MMALIAS	greater, similar
2274	NotLessTilde	MMALIAS	not less, similar
2275	NotGreaterTilde	MMALIAS	not greater, similar
2276	lessgtr	MMALIAS	less, greater
2277	gtrless	MMALIAS	greater, less
2278	NotLessGreater	MMALIAS	not, vert, less, greater
2279	NotGreaterLess	MMALIAS	not, vert, greater, less
227A	prec	MMALIAS	precedes
227B	succ	MMALIAS	succeeds
227C	preceq	MMALIAS	precedes, equals
227D	succeq	MMALIAS	succeeds, equals
227E	precsim	MMALIAS	precedes, similar
227F	sucsim	MMALIAS	succeeds, similar
2280	nprec	MMALIAS	not precedes
2281	nsucc	MMALIAS	not succeeds
2282	subset	MMALIAS	subset or is implied by
2283	supset	MMALIAS	superset or implies
2284	nsubset	MMALIAS	not subset, variant
2285	nsubset	MMALIAS	not superset, variant
2286	subseteq	MMALIAS	subset, equals
2287	supseteq	MMALIAS	superset, equals
2288	nsubseteq	MMALIAS	not subset, equals
2289	nsupseteq	MMALIAS	not superset, equals
228A	subsetneq	MMALIAS	subset, not equals
228B	supsetneq	MMALIAS	superset, not equals
228D	cupdot	ISOAMSB	union, with dot
228E	UnionPlus	MMALIAS	plus sign in union
228F	SquareSubset	MMALIAS	square subset
2290	SquareSuperset	MMALIAS	square superset
2291	SquareSubsetEqual	MMALIAS	square subset, equals
2292	SquareSupersetEqual	MMALIAS	square superset, equals
2293	SquareIntersection	MMALIAS	square intersection
2294	SquareUnion	MMALIAS	square union
2295	CirclePlus	MMALIAS	plus sign in circle
2296	CircleMinus	MMALIAS	minus sign in circle
2297	CircleTimes	MMALIAS	multiply sign in circle
2298	oslash	MMALIAS	solidus in circle
2299	CircleDot	MMALIAS	middle dot in circle
229A	circledcirc	MMALIAS	small circle in circle
229B	circledast	MMALIAS	asterisk in circle
229D	circleddash	MMALIAS	hyphen in circle
229E	boxplus	MMALIAS	plus sign in box
229F	boxminus	MMALIAS	minus sign in box
22A0	boxtimes	MMALIAS	multiply sign in box
22A1	dotsquare	MMALIAS	small dot in box
22A2	RightTee	MMALIAS	vertical, dash
22A3	LeftTee	MMALIAS	dash, vertical
22A4	DownTee	MMALIAS	top
22A5	UpTee	MMALIAS	perpendicular
22A7	models	ISOAMSR	models
22A8	DoubleRightTee	MMALIAS	vertical, double dash

22A9	Vdash	ISOAMSR	double vertical, dash
22AA	Vvdash	ISOAMSR	triple vertical, dash
22AB	VDash	ISOAMSR	double vert, double dash
22AC	nvdash	ISOAMSN	not vertical, dash
22AD	nvDash	ISOAMSN	not vertical, double dash
22AE	nVdash	ISOAMSN	not double vertical, dash
22AF	nVDash	ISOAMSN	not double vert, double dash
22B0	prurel	ISOAMSR	element precedes under relation
22B2	vartriangleleft	MMALIAS	left triangle, open, variant
22B3	vartriangleright	MMALIAS	right triangle, open, variant
22B4	triangleleftteq	MMALIAS	left triangle, equals
22B5	trianglerighteq	MMALIAS	right triangle, equals
22B6	origof	ISOAMSA	original of
22B7	imof	ISOAMSA	image of
22B8	multimap	MMALIAS	multimap
22B9	hercon	ISOAMSB	hermitian conjugate matrix
22BA	intercal	MMALIAS	intercal
22BB	veebar	ISOAMSB	logical or, bar below
22BC	barwedge	MMALIAS	logical and, bar above
22BD	barvee	ISOAMSB	bar, vee
22BE	vangrt	ISOTECH	right angle, variant (with arc)
22C0	Wedge	MMALIAS	logical or operator
22C1	Vee	MMALIAS	logical and operator
22C2	Intersection	MMALIAS	intersection operator
22C3	Union	MMALIAS	union operator
22C4	diamond	MMALIAS	open diamond
22C5	cdot	MMALIAS	small middle dot
22C6	star	MMALIAS	small star, filled, low
22C7	divideontimes	MMALIAS	division on times
22C8	bowtie	ISOAMSR	bowtie
22C9	ltimes	ISOAMSB	times sign, left closed
22CA	rtimes	ISOAMSB	times sign, right closed
22CB	leftthreetimes	MMALIAS	leftthreetimes
22CC	rightthreetimes	MMALIAS	rightthreetimes
22CD	backsimeq	MMALIAS	reverse similar, equals
22CE	curlyvee	MMALIAS	curly logical or
22CF	curlywedge	MMALIAS	curly logical and
22D0	Subset	MMALIAS	double subset
22D1	Supset	MMALIAS	double superset
22D2	Cap	ISOAMSB	double intersection
22D3	Cup	ISOAMSB	double union
22D4	pitchfork	MMALIAS	pitchfork
22D5	epar	ISOTECH	parallel, equal; equal or parallel
22D6	lessdot	MMALIAS	less than, with dot
22D7	gtrdot	MMALIAS	greater than, with dot
22D8	Ll	ISOAMSR	triple less-than
22D9	ggg	MMALIAS	triple gtr-than
22DA	LessEqualGreater	MMALIAS	less, equals, greater
22DB	gtreqqlless	MMALIAS	gt, double equals, less
22DC	eqslantless	MMALIAS	eq-or-less, slanted
22DD	eqslantgtr	MMALIAS	equal-or-gtr, slanted
22DE	curlyeqprec	MMALIAS	curly equals, precedes
22DF	curlyeqsucc	MMALIAS	curly equals, succeeds
22E0	NotPrecedesSlantEqua	MMALIAS	not curly precedes, equals
22E1	NotSucceedsSlantEqua	MMALIAS	not succeeds, curly equals
22E2	NotSquareSubsetEqual	MMALIAS	not, square subset, equals
22E3	NotSquareSupersetEqu	MMALIAS	not, square superset, equals
22E6	lnsim	ISOAMSN	less, not similar
22E7	gnsim	ISOAMSN	greater, not similar
22E8	precnsim	MMALIAS	precedes, not similar
22E9	succnsim	MMALIAS	succeeds, not similar
22EA	ntriangleleft	MMALIAS	not left triangle
22EB	ntriangleright	MMALIAS	not right triangle
22EC	ntriangleleftteq	MMALIAS	not left triangle, equals
22ED	ntrianglerighteq	MMALIAS	not right triangle, equals
22EE	vellip	ISOPUB	vertical ellipsis
22EF	ctdot	ISOTECH	/cdots, three dots, centered

22F0	utdot	ISOTECH	three dots, ascending
22F1	dtdot	ISOTECH	/ddots, three dots, descending

23 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
2306	doublebarwedge	MMALIAS	logical and, double bar above
2308	LeftCeiling	MMALIAS	left ceiling
2309	RightCeiling	MMALIAS	right ceiling
230A	LeftFloor	MMALIAS	left floor
230B	RightFloor	MMALIAS	right floor
230C	drcrop	ISOPUB	downward right crop mark
230D	dlcrop	ISOPUB	downward left crop mark
230E	urcrop	ISOPUB	upward right crop mark
230F	ulcrop	ISOPUB	upward left crop mark
2310	bnot	ISOTECH	reverse not
2312	proflin	ISOTECH	profile of a line
2313	profsurf	ISOTECH	profile of a surface
2315	telrec	ISOPUB	telephone recorder symbol
2316	target	ISOPUB	register mark or target
231C	ulcorner	MMALIAS	upper left corner
231D	urcorner	MMALIAS	upper right corner
231E	llcorner	MMALIAS	lower left corner
231F	lrcorner	MMALIAS	lower right corner
2322	frown	ISOAMSR	down curve
2323	Cup	MMALIAS	up curve
232D	cylcty	ISOTECH	cylindricity
232E	profalar	ISOTECH	all-around profile
2336	topbot	ISOTECH	top and bottom

25 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
2580	uhblk	ISOPUB	upper half block
2584	lhblk	ISOPUB	lower half block
2588	block	ISOPUB	full block
2591	blk14	ISOPUB	25% shaded block
2592	blk12	ISOPUB	50% shaded block
2593	blk34	ISOPUB	75% shaded block
25A0	blacksquare	MMALIAS	square, filled
25A1	square	ISOTECH	square
25AA	sqf	ISOPUB*	/blacksquare -sq bullet, filled
25B3	bigtriangleup	MMALIAS	big up triangle, open
25B4	blacktriangle	MMALIAS	up triangle, filled
25B5	triangle	MMALIAS	up triangle, open
25B8	blacktriangleright	MMALIAS	right triangle, filled
25B9	triangleright	MMALIAS	right triangle, open
25BD	bigtriangledown	MMALIAS	big down triangle, open
25BE	blacktriangledown	MMALIAS	down triangle, filled
25BF	triangledown	MMALIAS	down triangle, open
25C2	blacktriangleleft	MMALIAS	left triangle, filled
25C3	triangleleft	MMALIAS	left triangle, open
25CA	lozenge	MMALIAS	lozenge or total mark
25CB	bigcirc	MMALIAS	large circle
25CF	circlef	ISOPUB	circle, filled
25D0	circlefl	ISOPUB	circle, filled left half [Harvey ball]
25D1	circlefr	ISOPUB	circle, filled right half
25D2	circlefb	ISOPUB	circle, filled bottom half
25D3	circleft	ISOPUB	circle, filled top half
25E7	squarfl	ISOPUB	square, filled left half
25E8	squarfr	ISOPUB	square, filled right half

25E9	squarftl	ISOPUB	square, filled top left corner
25EA	squarfbr	ISOPUB	square, filled bottom right corner
25EC	tridot	ISOAMSB	dot in triangle

26 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
2605	bigstar	MMALIAS	star, filled
2606	star	ISOPUB	star, open
260E	phone	ISOPUB	telephone symbol
2612	cross	ISOPUB	ballot cross
2640	female	ISOPUB	Venus, female
2642	male	ISOPUB	Mars, male
2660	spadesuit	MMALIAS	spades suit symbol
2661	heartsuit	MMALIAS	heart suit symbol
2662	diamondsuit	MMALIAS	diamond suit symbol
2663	clubsuit	MMALIAS	club suit symbol
2669	sung	ISONUM	music note (sung text sign)
266D	flat	ISOPUB	musical flat
266E	natural	MMALIAS	music natural
266F	sharp	ISOPUB	musical sharp

27 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
2713	checkmark	MMALIAS	tick, check mark
2720	maltese	MMALIAS	maltese cross

30 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
3008	LeftAngleBracket	MMALIAS	left angle bracket
3009	RightAngleBracket	MMALIAS	right angle bracket
300A	Lang	ISOTECH	left angle bracket, double
300B	Rang	ISOTECH	right angle bracket, double
3014	lbrkr	ISOTECH	left broken bracket
3015	rbrkr	ISOTECH	right broken bracket
3018	loang	ISOTECH	left open angular bracket
3019	roang	ISOTECH	right open angular bracket
301A	lobrk	ISOTECH	left open bracket
301B	robrk	ISOTECH	right open bracket

E2 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
E200	Longleftarrow	MMALIAS	long left double arrow
E201	longleftarrow	MMALIAS	long left arrow
E202	Longleftrightarrow	MMALIAS	long left and right double arr
E203	longleftrightarrow	MMALIAS	long left and right arr
E204	Longrightarrow	MMALIAS	long right double arr
E205	longrightarrow	MMALIAS	long right arrow
E206	lBarr	ISOAMSA	left doubly broken arrow
E207	dbkarow	MMALIAS	right doubly broken arrow
E208	longmapsto	MMALIAS	longmapsto
E209	drbkarow	MMALIAS	twoheaded right broken arrow

E20A	hkswarow	MMALIAS	SW arrow-hooked
E20B	hksearow	MMALIAS	SE arrow-hooked
E20C	nwarhk	ISOAMSA	NW arrow-hooked
E20D	nearhk	ISOAMSA	NE arrow-hooked
E20E	toea	MMALIAS	NE & SE arrows
E20F	tosa	MMALIAS	SE & SW arrows
E210	swnear	ISOAMSA	SW & NW arrows
E211	nwnear	ISOAMSA	NW & NE arrows
E212	Map	ISOAMSA	twoheaded mapsto
E214	lfisht	ISOAMSA	left fish tail
E215	rfisht	ISOAMSA	right fish tail
E216	DownArrowUpArrow	MMALIAS	down arrow, up arrow
E217	ReverseUpEquilibrium	MMALIAS	down harp, up harp
E218	UpEquilibrium	MMALIAS	up harp, down harp
E219	rdca	ISOAMSA	right down curved arrow
E21A	ldca	ISOAMSA	left down curved arrow
E21B	nrarrw	ISOAMSA	not right arrow-wavy
E21C	rarrc	ISOAMSA	right arrow-curved
E21D	nrarrc	ISOAMSA	not right arrow-curved
E21E	rarrpl	ISOAMSA	right arrow, plus
E220	larrbfs	ISOAMSA	left arrow-bar, filled square
E221	rarrbfs	ISOAMSA	right arrow-bar, filled square
E222	larrfs	ISOAMSA	left arrow, filled square
E223	rarrfs	ISOAMSA	right arrow, filled square
E224	rHar	ISOAMSA	right harpoon-up over right harpoon-down
E225	lHar	ISOAMSA	left harpoon-up over left harpoon-down
E226	uHar	ISOAMSA	up harpoon-left, up harpoon-right
E227	dHar	ISOAMSA	down harpoon-left, down harpoon-right
E228	ldrushar	ISOAMSA	left-down-right-up harpoon
E229	lurdshar	ISOAMSA	left-up-right-down harpoon
E22A	ruluhar	ISOAMSA	right harpoon-up over left harpoon-up
E22B	luruhar	ISOAMSA	left harpoon-up over right harpoon-up
E22C	ldrldhar	ISOAMSA	left harpoon-down over right harpoon-down
E22D	rdldhar	ISOAMSA	right harpoon-down over left harpoon-down
E22E	lharul	ISOAMSA	left harpoon-up over long dash
E22F	lrhard	ISOAMSA	right harpoon-down below long dash
E230	rharul	ISOAMSA	right harpoon-up over long dash
E231	llhard	ISOAMSA	left harpoon-down below long dash
E232	ShortRightArrow	MMALIAS	short right arrow
E233	ShortLeftArrow	MMALIAS	short left arrow
E234	simrarr	ISOAMSA	similar, right arrow below
E235	rarrap	ISOAMSA	approximate, right arrow above
E236	erarr	ISOAMSA	equal, right arrow below
E237	Uarroccir	ISOAMSA	up two-headed arrow above circle
E238	DDottrahd	ISOAMSA	right arrow with dotted stem
E239	Rarrttl	ISOAMSA	right two-headed arrow with tail
E23B	rAtail	ISOAMSA	right double arrow-tail
E23C	latail	ISOAMSA	left arrow-tail
E23D	lAtail	ISOAMSA	left double arrow-tail
E23E	cuarrl	ISOAMSA	left, curved, down arrow
E23F	larrpl	ISOAMSA	left arrow, plus
E240	harrcir	ISOAMSA	left and right arrow with a circle
E241	roarr	ISOAMSA	right open arrow
E242	loarr	ISOAMSA	left open arrow
E243	hoarr	ISOAMSA	horizontal open arrow
E244	zigrarr	ISOAMSA	right zig-zag arrow
E248	angzarr	ISOAMSA	angle with down zig-zag arrow
E249	curarrm	ISOAMSA	curved right arrow with minus
E24A	cularrp	ISOAMSA	curved left arrow with plus
E24B	ufisht	ISOAMSA	up fish tail
E24C	dfisht	ISOAMSA	down fish tail
E24D	rarrsim	ISOAMSA	right arrow, similar
E24E	larrsim	ISOAMSA	left arrow, similar
E250	cirmid	ISOAMSA	circle, mid below
E251	amalg	ISOAMSB	amalgamation or coproduct
E259	intprod	MMALIAS	interior product

E25A	plusdu	ISOAMSB	plus sign, dot below
E25B	minusdu	ISOAMSB	minus sign, dot below
E25C	loplus	ISOAMSB	plus sign in left half circle
E25D	roplus	ISOAMSB	plus sign in right half circle
E25E	lotimes	ISOAMSB	multiply sign in left half circle
E260	ohbar	ISOAMSB	circle with horizontal bar
E261	capdot	ISOAMSB	intersection, with dot
E262	subdot	ISOAMSB	subset, with dot
E263	supdot	ISOAMSB	superset, with dot
E264	smashp	ISOAMSB	smash product
E265	wedbar	ISOAMSB	wedge, bar below
E266	pluscir	ISOAMSB	plus, small circle above
E267	pluse	ISOAMSB	plus, equals
E268	eplus	ISOAMSB	equal, plus
E269	plustwo	ISOAMSB	plus, two; Nim-addition
E26A	plusacir	ISOAMSB	plus, circumflex accent above
E26B	simplus	ISOAMSB	plus, similar above
E26C	plussim	ISOAMSB	plus, similar below
E26D	timesd	ISOAMSB	times, dot
E26E	cupcap	ISOAMSB	union above intersection
E26F	capcup	ISOAMSB	intersection above union
E270	cupbrcap	ISOAMSB	union, bar, intersection
E271	capbrcup	ISOAMSB	intersection, bar, union
E272	cupcup	ISOAMSB	union, union, joined
E273	capcap	ISOAMSB	intersection, intersection, joined
E274	cups	ISOAMSB	union, serifs
E275	caps	ISOAMSB	intersection, serifs
E276	sqcups	ISOAMSB	square union, serifs
E277	sqcaps	ISOAMSB	square intersection, serifs
E278	ccups	ISOAMSB	closed union, serifs
E279	ccaps	ISOAMSB	closed intersection, serifs
E27A	ccupssm	ISOAMSB	closed union, serifs, smash product
E27B	triplus	ISOAMSB	plus in triangle
E27C	triminus	ISOAMSB	minus in triangle
E27D	tritime	ISOAMSB	multiply in triangle
E27E	trisb	ISOAMSB	triangle, serifs at bottom
E27F	solb	ISOAMSB	solidus in square
E280	bsolb	ISOAMSB	reverse solidus in square
E281	capand	ISOAMSB	intersection, and
E282	cupor	ISOAMSB	union, or
E283	ncup	ISOAMSB	bar, union
E284	ncap	ISOAMSB	bar, intersection
E285	odiv	ISOAMSB	divide in circle
E286	odsold	ISOAMSB	dot, solidus, dot in circle
E287	ofcir	ISOAMSB	filled circle in circle
E288	olt	ISOAMSB	less-than in circle
E289	ogt	ISOAMSB	greater-than in circle
E28A	opar	ISOAMSB	parallel in circle
E28B	operp	ISOAMSB	perpendicular in circle
E28C	Otimes	ISOAMSB	multiply sign in double circle
E28D	otimesas	ISOAMSB	multiply sign in circle, circumflex accent
E28E	timesbar	ISOAMSB	multiply sign, bar below
E290	acE	ISOAMSB	most positive, two lines below
E291	rpargt	ISOAMSC	right paren, gt
E292	lparlt	ISOAMSC	left parenthesis, lt
E293	rmoustache	MMALIAS	right moustache
E294	lmoustache	MMALIAS	left moustache
E295	ltrPar	ISOAMSC	double right parenthesis, less
E296	gtlPar	ISOAMSC	double left parenthesis, greater
E297	langd	ISOAMSC	left angle, dot
E298	rangd	ISOAMSC	right angle, dot
E299	lbrke	ISOAMSC	left bracket, equal
E29A	rbrke	ISOAMSC	right bracket, equal
E29B	lbrkslu	ISOAMSC	left bracket, solidus top corner
E29C	rbrksld	ISOAMSC	right bracket, solidus bottom corner
E29D	lbrksld	ISOAMSC	left bracket, solidus bottom corner

E29E	rbrkslu	ISOAMSC	right bracket, solidus top corner
E2A1	gvertneqq	MMALIAS	gt, vert, not double equals
E2A2	lnapprox	MMALIAS	less, not approximate
E2A4	lvertneqq	MMALIAS	less, vert, not double equals
E2A6	NotGreaterEqual	MMALIAS	not greater-than-or-equal
E2A7	NotLessEqual	MMALIAS	not less-than-or-equal
E2AA	nshortmid	MMALIAS	negated short mid
E2AB	nshortparallel	MMALIAS	not short par
E2B3	precneqq	MMALIAS	precedes, not double equals
E2B5	succneqq	MMALIAS	succeeds, not double equals
E2B8	varsubsetneqq	MMALIAS	subset not double equals, variant
E2B9	varsubsetneq	MMALIAS	subset, not equals, variant
E2BA	varsupsetneq	MMALIAS	superset, not equals, variant
E2BB	varsupsetneqq	MMALIAS	super not double equals, variant
E2BC	napid	ISOAMSN	not approximately identical to
E2C5	ncongdot	ISOAMSN	not congruent, dot
E2C6	nvap	ISOAMSN	not, vert, approximate
E2C7	napE	ISOAMSN	not approximately equal or equal to
E2C8	parsim	ISOAMSN	parallel, similar
E2C9	nLt	ISOAMSN	not, vert, much less than
E2CA	nGt	ISOAMSN	not, vert, much greater than
E2CB	NotLessLess	MMALIAS	not much less than, variant
E2CC	NotGreaterGreater	MMALIAS	not much greater than, variant
E2CD	nLl	ISOAMSN	not triple less than
E2CE	nGg	ISOAMSN	not triple greater than
E2CF	nvrtrie	ISOAMSN	not, vert, right triangle, equals
E2D0	nvltrie	ISOAMSN	not, vert, left triangle, equals
E2D1	rnmid	ISOAMSN	reverse nmid
E2D3	emptyset	MMALIAS	letter O slashed
E2D4	jmath	ISOAMSO	small j, no dot
E2D5	hbar	MMALIAS	Planck's over 2pi
E2D6	ange	ISOAMSO	angle, equal
E2D7	range	ISOAMSO	reverse angle, equal
E2D8	nang	ISOAMSO	not, vert, angle
E2D9	angmsdaa	ISOAMSO	angle-measured, arrow, up, right
E2DA	angmsdab	ISOAMSO	angle-measured, arrow, up, left
E2DB	angmsdac	ISOAMSO	angle-measured, arrow, down, right
E2DC	angmsdad	ISOAMSO	angle-measured, arrow, down, left
E2DD	angmsdae	ISOAMSO	angle-measured, arrow, right, up
E2DE	angmsdaf	ISOAMSO	angle-measured, arrow, left, up
E2DF	angmsdag	ISOAMSO	angle-measured, arrow, right, down
E2E0	angmsdah	ISOAMSO	angle-measured, arrow, left, down
E2E1	angrtvbd	ISOAMSO	right angle-measured, dot
E2E2	urtri	ISOAMSO	upper right triangle
E2E3	lrtri	ISOAMSO	lower right triangle
E2E4	ultri	ISOAMSO	upper left triangle
E2E5	lltri	ISOAMSO	lower left triangle
E2E6	boxbox	ISOAMSO	two joined squares
E2E7	demptyv	ISOAMSO	circle, slash, bar above
E2E8	cemptyv	ISOAMSO	circle, slash, small circle above
E2E9	raemptyv	ISOAMSO	circle, slash, right arrow above
E2EA	laemptyv	ISOAMSO	circle, slash, left arrow above
E2EB	vzigzag	ISOAMSO	vertical zig-zag line
E2EC	trpezium	ISOAMSO	trapezium
E2ED	bsemi	ISOAMSO	reverse semi-colon
E2EE	bbrk	ISOAMSO	bottom square bracket
E2EF	tbrk	ISOAMSO	top square bracket

E3 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
E301	shortmid	MMALIAS	shortmid
E302	shortparallel	MMALIAS	short parallel
E303	smallsmile	MMALIAS	small up curve

E306	thickapprox	MMALIAS	thick approximate
E309	ddotseq	MMALIAS	equal with four dots
E30A	mlcp	ISOAMSR	transversal intersection
E30B	siml	ISOAMSR	similar, less
E30C	simg	ISOAMSR	similar, greater
E30D	Vbar	ISOAMSR	double vert, bar (under)
E30E	Colone	ISOAMSR	double colon, equals
E30F	Dashv	ISOAMSR	double dash, vertical
E310	vBar	ISOAMSR	vert, double bar (under)
E311	Barv	ISOAMSR	vert, double bar (over)
E312	vBarv	ISOAMSR	double bar, vert over and under
E313	Vdashl	ISOAMSR	vertical, dash (long)
E314	congdot	ISOAMSR	congruent, dot
E315	apE	ISOAMSR	approximately equal or equal to
E317	Esim	ISOAMSR	equal, similar
E318	equivDD	ISOAMSR	equivalent, four dots above
E319	sdote	ISOAMSR	equal, dot below
E31A	mcomma	ISOAMSR	minus, comma above
E31B	forkv	ISOAMSR	fork, variant
E31C	topfork	ISOAMSR	fork with top
E31D	lesdot	ISOAMSR	less-than-or-equal, slanted, dot inside
E31E	gesdot	ISOAMSR	greater-than-or-equal, slanted, dot inside
E31F	lesdoto	ISOAMSR	less-than-or-equal, slanted, dot above
E320	gesdoto	ISOAMSR	greater-than-or-equal, slanted, dot above
E321	lesdotr	ISOAMSR	less-than-or-equal, slanted, dot above right
E322	gesdotol	ISOAMSR	greater-than-or-equal, slanted, dot above left
E323	elsdot	ISOAMSR	equal-or-less, slanted, dot inside
E324	egsdot	ISOAMSR	equal-or-greater, slanted, dot inside
E325	ltcir	ISOAMSR	less than, circle inside
E326	gtcir	ISOAMSR	greater than, circle inside
E327	el	ISOAMSR	equal-or-less
E328	eg	ISOAMSR	equal-or-greater
E329	ltquest	ISOAMSR	less than, questionmark above
E32A	gtquest	ISOAMSR	greater than, questionmark above
E32B	lesg	ISOAMSR	less, equal, slanted, greater
E32C	gesl	ISOAMSR	greater, equal, slanted, less
E32D	lgE	ISOAMSR	less, greater, equal
E32E	glE	ISOAMSR	greater, less, equal
E32F	glj	ISOAMSR	greater, less, overlapping
E330	gla	ISOAMSR	greater, less, apart
E331	lesges	ISOAMSR	less, equal, slanted, greater, equal, slanted
E332	gesles	ISOAMSR	greater, equal, slanted, less, equal, slanted
E333	lsime	ISOAMSR	less, similar, equal
E334	gsime	ISOAMSR	greater, similar, equal
E335	lsimg	ISOAMSR	less, similar, greater
E336	gsiml	ISOAMSR	greater, similar, less
E337	simlE	ISOAMSR	similar, less, equal
E338	simgE	ISOAMSR	similar, greater, equal
E339	smt	ISOAMSR	smaller than
E33A	lat	ISOAMSR	larger than
E33B	smtE	ISOAMSR	smaller than or equal
E33C	late	ISOAMSR	larger than or equal
E33D	smtes	ISOAMSR	smaller than or equal, slanted
E33E	lates	ISOAMSR	larger than or equal, slanted
E33F	subrarr	ISOAMSR	subset, right arrow
E340	suplarr	ISOAMSR	superset, left arrow
E341	subplus	ISOAMSR	subset, plus
E342	supplus	ISOAMSR	superset, plus
E343	submult	ISOAMSR	subset, multiply
E344	supmult	ISOAMSR	superset, multiply
E345	subsim	ISOAMSR	subset, similar
E346	supsim	ISOAMSR	superset, similar
E347	subsup	ISOAMSR	subset above superset
E348	supsub	ISOAMSR	superset above subset
E349	subsub	ISOAMSR	subset above subset
E34A	supsup	ISOAMSR	superset above superset
E34B	supsub	ISOAMSR	superset, subset

E34C	supdsub	ISOAMSR	superset, subset, dash joining them
E34D	bsolhsb	ISOAMSR	reverse solidus, subset
E34E	suphsol	ISOAMSR	superset, solidus
E34F	subedot	ISOAMSR	subset, equals, dot
E350	supedot	ISOAMSR	superset, equals, dot
E351	bsub	ISOAMSR	subset, closed
E352	csup	ISOAMSR	superset, closed
E353	csube	ISOAMSR	subset, closed, equals
E354	csupe	ISOAMSR	superset, closed, equals
E355	ltcc	ISOAMSR	less than, closed by curve
E356	gtcc	ISOAMSR	greater than, closed by curve
E357	lescc	ISOAMSR	less than, closed by curve, equal, slanted
E358	gescc	ISOAMSR	greater than, closed by curve, equal, slanted
E359	rtriltri	ISOAMSR	right triangle above left triangle
E35C	Pr	ISOAMSR	double precedes
E35D	Sc	ISOAMSR	double succeeds
E35E	ltlarr	ISOAMSR	less than, left arrow
E35F	gtrarr	ISOAMSR	greater than, right arrow
E365	iff	ISOTECH	/iff if and only if
E36E	andand	ISOTECH	two logical and
E370	notinva	ISOTECH	negated set membership, variant
E371	qprime	ISOTECH	quadruple prime
E372	iinfin	ISOTECH	infinity sign, incomplete
E374	And	ISOTECH	double logical and
E375	Or	ISOTECH	double logical or
E376	pointint	ISOTECH	integral around a point operator
E377	quatint	ISOTECH	quaternion integral operator
E378	iiiint	MMALIAS	quadruple integral operator
E379	lopar	ISOTECH	left open parenthesis
E37A	ropar	ISOTECH	right open parenthesis
E37B	notinvb	ISOTECH	negated set membership, variant
E37C	notinvc	ISOTECH	negated set membership, variant
E37D	notnivb	ISOTECH	contains, variant
E37E	notnivc	ISOTECH	contains, variant
E380	strns	ISOTECH	straightness
E381	fltns	ISOTECH	flatness
E382	parsl	ISOTECH	parallel, slanted
E383	topcir	ISOTECH	top, circle below
E384	eparsl	ISOTECH	parallel, slanted, equal; homothetically congruent to
E385	smeparsl	ISOTECH	similar, parallel, slanted, equal
E386	eqvparsl	ISOTECH	equivalent, equal; congruent and parallel
E387	bnequiv	ISOTECH	reverse not equivalent
E388	bne	ISOTECH	reverse not equal
E389	nparsl	ISOTECH	not parallel, slanted
E38A	nedot	ISOTECH	not equal, dot
E38B	simdot	ISOTECH	similar, dot
E38C	apacir	ISOTECH	approximate, circumflex accent
E38D	nhpar	ISOTECH	not, horizontal, parallel
E38E	nvinfin	ISOTECH	not, vert, infinity
E390	npart	ISOTECH	not partial differential
E391	andv	ISOTECH	and with middle stem
E392	orv	ISOTECH	or with middle stem
E393	ord	ISOTECH	or, horizontal dash
E394	andd	ISOTECH	and, horizontal dash
E395	cirfnint	ISOTECH	circulation function
E396	fpartint	ISOTECH	finite part integral
E397	rppolint	ISOTECH	line integration, rectangular path around pole
E398	scpolint	ISOTECH	line integration, semi-circular path around pole
E399	npolint	ISOTECH	line integration, not including the pole
E39A	intlarhk	ISOTECH	integral, left arrow with hook
E39B	awint	ISOTECH	anti clock-wise integration
E39C	isindot	ISOTECH	set membership, dot above
E39D	notindot	ISOTECH	negated set membership, dot above
E39E	isinE	ISOTECH	set membership, two horizontal strokes
E3A0	disin	ISOTECH	set membership, long horizontal stroke
E3A1	nisd	ISOTECH	contains, long horizontal stroke

E3A2	isinsv	ISOTECH	large set membership, vertical bar on horizontal stroke
E3A3	xnis	ISOTECH	large contains, vertical bar on horizontal stroke
E3A4	isins	ISOTECH	set membership, vertical bar on horizontal stroke
E3A5	nis	ISOTECH	contains, vertical bar on horizontal stroke
E3A6	acd	ISOTECH	ac current
E3A7	elinters	ISOTECH	electrical intersection
E3A8	olcross	ISOTECH	circle, cross
E3A9	dsol	ISOTECH	solidus, bar above
E3AA	dwangle	ISOTECH	large downward pointing angle
E3AB	uwangle	ISOTECH	large upward pointing angle
E3AC	Not	ISOTECH	not with two horizontal strokes
E3AD	bNot	ISOTECH	reverse not with two horizontal strokes
E3AE	orslope	ISOTECH	sloping large or

E4 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
E400	cudarrr	ISOAMSA	right, curved, down arrow
E402	lbarr	ISOAMSA	left broken arrow
E405	bkarow	MMALIAS	right broken arrow
E406	tosa	ISOAMSA	SE & SW arrows
E409	olcir	ISOAMSB	large circle in circle
E40A	omid	ISOAMSB	vertical bar in circle
E40B	ovbar	ISOAMSB	circle with vertical bar
E40C	race	ISOAMSB	reverse most positive, line below
E40D	rotimes	ISOAMSB	multiply sign in right half circle
E411	gnapprox	MMALIAS	greater, not approximate
E412	npreceq	MMALIAS	not precedes, equals
E413	nsucceq	MMALIAS	not succeeds, equals
E415	nvsim	ISOAMSN	not, vert, similar
E416	solbar	ISOAMSN	solidus, bar through
E418	angrtvb	ISOAMSO	right angle-measured
E419	bbrktbrk	ISOAMSO	bottom above top square bracket
E41A	bemptyv	ISOAMSO	reversed circle, slash
E41B	cirE	ISOAMSO	circle, two horizontal stroked to the right
E41C	cirscir	ISOAMSO	circle, small circle to the right
E41D	circledS	MMALIAS	capital S in circle
E420	backepsilon	MMALIAS	such that
E421	GreaterSlantEqual	MMALIAS	gt-or-equal, slanted
E425	LessSlantEqual	MMALIAS	less-than-or-equals, slant
E426	smallfrown	MMALIAS	small down curve
E429	thicksim	MMALIAS	thick similar
E42A	benzena	ISOCHEM	benzene ring, one double binding
E42B	benzenb	ISOCHEM	benzene ring, one double binding
E42C	benzenc	ISOCHEM	benzene ring, one double binding
E42D	benzend	ISOCHEM	benzene ring, one double binding
E42E	benzene	ISOCHEM	benzene ring, one double binding
E42F	benzenf	ISOCHEM	benzene ring, one double binding
E430	benzeng	ISOCHEM	benzene ring, two double bindings
E431	benzenh	ISOCHEM	benzene ring, two double bindings
E432	benzeni	ISOCHEM	benzene ring, two double bindings
E433	benzenj	ISOCHEM	benzene ring, two double bindings
E434	benzenk	ISOCHEM	benzene ring, two double bindings
E435	benzenl	ISOCHEM	benzene ring, two double bindings
E436	benzenm	ISOCHEM	benzene ring, two double bindings
E437	benzenn	ISOCHEM	benzene ring, two double bindings
E438	benzeno	ISOCHEM	benzene ring, two double bindings
E439	benzenp	ISOCHEM	benzene ring, three double bindings
E43A	benzenq	ISOCHEM	benzene ring, three double bindings
E43B	benzenr	ISOCHEM	benzene ring, circle
E43C	benzen	ISOCHEM	benzene ring
E43D	hbenzena	ISOCHEM	horizontal benzene ring, one double binding
E43E	hbenzenb	ISOCHEM	horizontal benzene ring, one double binding
E43F	hbenzenc	ISOCHEM	horizontal benzene ring, one double binding

E440	hbenzend	ISOCHEM	horizontal benzene ring, one double binding
E441	hbenzene	ISOCHEM	horizontal benzene ring, one double binding
E442	hbenzenf	ISOCHEM	horizontal benzene ring, one double binding
E443	hbenzeng	ISOCHEM	horizontal benzene ring, two double bindings
E444	hbenzenh	ISOCHEM	horizontal benzene ring, two double bindings
E445	hbenzeni	ISOCHEM	horizontal benzene ring, two double bindings
E446	hbenzenj	ISOCHEM	horizontal benzene ring, two double bindings
E447	hbenzenk	ISOCHEM	horizontal benzene ring, two double bindings
E448	hbenzenl	ISOCHEM	horizontal benzene ring, two double bindings
E449	hbenzenm	ISOCHEM	horizontal benzene ring, two double bindings
E44A	hbenzenn	ISOCHEM	horizontal benzene ring, two double bindings
E44B	hbenzeno	ISOCHEM	horizontal benzene ring, two double bindings
E44C	hbenzenp	ISOCHEM	horizontal benzene ring, three double bindings
E44D	hbenzenq	ISOCHEM	horizontal benzene ring, three double bindings
E44E	hbenzenr	ISOCHEM	horizontal benzene ring, circle
E44F	hbenzen	ISOCHEM	horizontal benzene ring
E47C	Afr	ISOMFRK	fraktur letter A
E47D	Bfr	ISOMFRK	fraktur letter B
E47E	Cfr	ISOMFRK	fraktur letter C
E47F	Dfr	ISOMFRK	fraktur letter D
E480	Efr	ISOMFRK	fraktur letter E
E481	Ffr	ISOMFRK	fraktur letter F
E482	Gfr	ISOMFRK	fraktur letter G
E483	Hfr	ISOMFRK	fraktur letter H
E484	Ifr	ISOMFRK	fraktur letter I
E485	Jfr	ISOMFRK	fraktur letter J
E486	Kfr	ISOMFRK	fraktur letter K
E487	Lfr	ISOMFRK	fraktur letter L
E488	Mfr	ISOMFRK	fraktur letter M
E489	Nfr	ISOMFRK	fraktur letter N
E48A	Ofr	ISOMFRK	fraktur letter O
E48B	Pfr	ISOMFRK	fraktur letter P
E48C	Qfr	ISOMFRK	fraktur letter Q
E48D	Rfr	ISOMFRK	fraktur letter R
E48E	Sfr	ISOMFRK	fraktur letter S
E48F	Tfr	ISOMFRK	fraktur letter T
E490	Ufr	ISOMFRK	fraktur letter U
E491	Vfr	ISOMFRK	fraktur letter V
E492	Wfr	ISOMFRK	fraktur letter W
E493	Xfr	ISOMFRK	fraktur letter X
E494	Yfr	ISOMFRK	fraktur letter Y
E495	afr	ISOMFRK	fraktur letter a
E496	bfr	ISOMFRK	fraktur letter b
E497	cfr	ISOMFRK	fraktur letter c
E498	df	ISOMFRK	fraktur letter d
E499	efr	ISOMFRK	fraktur letter e
E49A	ffr	ISOMFRK	fraktur letter f
E49B	gfr	ISOMFRK	fraktur letter g
E49C	hfr	ISOMFRK	fraktur letter h
E49D	ifr	ISOMFRK	fraktur letter i
E49E	jfr	ISOMFRK	fraktur letter j
E49F	kfr	ISOMFRK	fraktur letter k
E4A0	lfr	ISOMFRK	fraktur letter l
E4A1	mfr	ISOMFRK	fraktur letter m
E4A2	nfr	ISOMFRK	fraktur letter n
E4A3	ofr	ISOMFRK	fraktur letter o
E4A4	pfr	ISOMFRK	fraktur letter p
E4A5	qfr	ISOMFRK	fraktur letter q
E4A6	rfr	ISOMFRK	fraktur letter r
E4A7	sfr	ISOMFRK	fraktur letter s
E4A8	tfr	ISOMFRK	fraktur letter t
E4A9	ufr	ISOMFRK	fraktur letter u
E4AA	vfr	ISOMFRK	fraktur letter v
E4AB	wfr	ISOMFRK	fraktur letter w
E4AC	xfr	ISOMFRK	fraktur letter x
E4AD	yfr	ISOMFRK	fraktur letter y

E4AE	zfr	ISOMFRK	fraktur letter z
E4AF	Aopf	ISOMOPF	open face letter A
E4B0	Bopf	ISOMOPF	open face letter B
E4B1	Dopf	ISOMOPF	open face letter D
E4B2	Eopf	ISOMOPF	open face letter E
E4B3	Fopf	ISOMOPF	open face letter F
E4B4	Gopf	ISOMOPF	open face letter G
E4B5	Hopf	ISOMOPF	open face letter H
E4B6	Iopf	ISOMOPF	open face letter I
E4B7	Jopf	ISOMOPF	open face letter J
E4B8	Kopf	ISOMOPF	open face letter K
E4B9	Lopf	ISOMOPF	open face letter L
E4BA	Mopf	ISOMOPF	open face letter M
E4BB	Nopf	ISOMOPF	open face letter N
E4BC	Oopf	ISOMOPF	open face letter O
E4BD	Sopf	ISOMOPF	open face letter S
E4BE	Topf	ISOMOPF	open face letter T
E4BF	Uopf	ISOMOPF	open face letter U
E4C0	Vopf	ISOMOPF	open face letter V
E4C1	Wopf	ISOMOPF	open face letter W
E4C2	Xopf	ISOMOPF	open face letter X
E4C3	Yopf	ISOMOPF	open face letter Y
E4C4	Zopf	ISOMOPF	open face letter Z
E4C5	Ascr	ISOMSCR	script letter A
E4C6	Bscr	ISOMSCR	script letter B
E4C7	Cscr	ISOMSCR	script letter C
E4C8	Dscr	ISOMSCR	script letter D
E4C9	Escr	ISOMSCR	script letter E
E4CA	Fscr	ISOMSCR	script letter F
E4CB	Gscr	ISOMSCR	script letter G
E4CC	Hscr	ISOMSCR	script letter H
E4CD	Iscr	ISOMSCR	script letter I
E4CE	Jscr	ISOMSCR	script letter J
E4CF	Kscr	ISOMSCR	script letter K
E4D0	Lscr	ISOMSCR	script letter L
E4D1	Mscr	ISOMSCR	script letter M
E4D2	Nscr	ISOMSCR	script letter N
E4D3	Oscr	ISOMSCR	script letter O
E4D4	Pscr	ISOMSCR	script letter P
E4D5	Qscr	ISOMSCR	script letter Q
E4D6	Rscr	ISOMSCR	script letter R
E4D7	Sscr	ISOMSCR	script letter S
E4D8	Tscr	ISOMSCR	script letter T
E4D9	Uscr	ISOMSCR	script letter U
E4DA	Vscr	ISOMSCR	script letter V
E4DB	Wscr	ISOMSCR	script letter W
E4DC	Xscr	ISOMSCR	script letter X
E4DD	Yscr	ISOMSCR	script letter Y
E4DE	Zscr	ISOMSCR	script letter Z
E4DF	ascr	ISOMSCR	script letter a
E4E0	bscr	ISOMSCR	script letter b
E4E1	cscr	ISOMSCR	script letter c
E4E2	dscr	ISOMSCR	script letter d
E4E3	escr	ISOMSCR	script letter e
E4E4	fscr	ISOMSCR	script letter f
E4E5	gscr	ISOMSCR	script letter g
E4E6	hscr	ISOMSCR	script letter h
E4E7	iscr	ISOMSCR	script letter i
E4E8	jscr	ISOMSCR	script letter j
E4E9	kscr	ISOMSCR	script letter k
E4EA	lscr	ISOMSCR	script letter l
E4EB	mscr	ISOMSCR	script letter m
E4EC	nscr	ISOMSCR	script letter n
E4ED	oscr	ISOMSCR	script letter o
E4EE	pscr	ISOMSCR	script letter p
E4EF	qscr	ISOMSCR	script letter q
E4F0	sscr	ISOMSCR	script letter s

E4F1	tscr	ISOMSCR	script letter t
E4F2	uscr	ISOMSCR	script letter u
E4F3	vscr	ISOMSCR	script letter v
E4F4	wscr	ISOMSCR	script letter w
E4F5	xscr	ISOMSCR	script letter x
E4F6	yscr	ISOMSCR	script letter y
E4F7	zscr	ISOMSCR	script letter z
E4F8	hyphen	ISONUM	hyphen
E4F9	blank	ISOPUB	significant blank symbol
E4FA	circle	ISOPUB	circle, open
<hr/>			
E4FB	diamondf	ISOPUB	diamond, filled
E4FC	diamonfb	ISOPUB	diamond, filled bottom half
E4FD	diamonfl	ISOPUB	diamond, filled left half
E4FE	diamonfr	ISOPUB	diamond, filled right half
E4FF	diamonft	ISOPUB	diamond, filled top half

E5 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
E500	fjlig	ISOPUB	small fj ligature
E501	blacklozenge	MMALIAS	lozenge, filled
E502	marker	ISOPUB	histogram marker
E503	mldr	ISOPUB	em leader
E504	rect	ISOPUB	rectangle, open
E505	sext	ISOPUB	sextile (6-pointed star)
E506	squarfb	ISOPUB	square, filled bottom left corner
E507	squarfb	ISOPUB	square, filled bottom half
E508	squarfr	ISOPUB	square, filled top right corner
E509	squarft	ISOPUB	square, filled top half
<hr/>			
E50A	andslope	ISOTECH	sloping large and
E50B	imped	ISOTECH	impedance
E50C	infintie	ISOTECH	tie, infinity
E50D	notinE	ISOTECH	negated set membership, two horizontal strokes
E50E	oror	ISOTECH	two logical or

E8 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
E844	smallsetminus	MMALIAS	sm reverse solidus

F5 [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
F505	DiacriticalLeftRight	ISODIA	left-right harpoon accent

FB [00](#) [01](#) [03](#) [20](#) [21](#) [22](#) [23](#) [25](#) [26](#) [27](#) [30](#) [E2](#) [E3](#) [E4](#) [E5](#) [FB](#)

Code	Character Name	Group	Description
====	=====	=====	=====
FB00	fflig	ISOPUB	small ff ligature
FB01	filig	ISOPUB	small fi ligature
FB02	fllig	ISOPUB	small fl ligature
FB03	ffilig	ISOPUB	small ffi ligature
FB04	ffllig	ISOPUB	small ffl ligature
















Prev: Up: [Chapter 6](#)

















Next: [ISOAMSB Glyphs Extended](#)

















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














ISOAMSA Characters alphabetically, with glyphs

















Added Math Symbols: Arrow Relations Extended by MathML with aliases

















Name	Unicode	Glyph	Description	Entity group
angzarr	E248		angle with down zig-zag arrow	ISOAMSA
bkarow	E405		right broken arrow	MMALIAS rbarr
circlearrowleft	21BA		left arr in circle	MMALIAS olarr
circlearrowright	21BB		right arr in circle	MMALIAS orarr
cirmid	E250		circle, mid below	ISOAMSA
cdarrl	E23E		left, curved, down arrow	ISOAMSA
cdarr	E400		right, curved, down arrow	ISOAMSA
cularr	21B6		left curved arrow	ISOAMSA
cularrp	E24A		curved left arrow with plus	ISOAMSA
curarr	21B7		right curved arrow	ISOAMSA
curarrm	E249		curved right arrow with minus	ISOAMSA
curvearrowleft	21B6		left curved arrow	MMALIAS cularr
curvearrowright	21B7		right curved arrow	MMALIAS curarr
Darr	21A1		down two-headed arrow	ISOAMSA
dArr	21D3		down double arrow	ISOAMSA

















dbkarow	E207		right doubly broken arrow	MMALIAS rBarr
ddarr	21CA		two down arrows	ISOAMSA
DDotrahd	E238		right arrow with dotted stem	ISOAMSA
dfisht	E24C		down fish tail	ISOAMSA
dHar	E227		down harpoon-left, down harpoon-right	ISOAMSA
dharrl	21C3		down harpoon-left	ISOAMSA
dharr	21C2		down harpoon-rt	ISOAMSA
DoubleDownArrow	21D3		down double arrow	MMALIAS dArr
DoubleLeftRightArrow	21D4		left and right double arrow	MMALIAS hArr
DoubleLongLeftArrow	E200		long left double arrow	MMALIAS xlArr
DoubleLongLeftRightArrow	E202		long left and right double arr	MMALIAS xhArr
DoubleLongRightArrow	E204		long right double arr	MMALIAS xrArr
DoubleUpArrow	21D1		up double arrow	MMALIAS uArr
DoubleUpDownArrow	21D5		up&down double arrow	MMALIAS vArr
Downarrow	21D3		down double arrow	MMALIAS dArr
DownArrowUpArrow	E216		down arrow, up arrow	MMALIAS duarr

















downdownarrows	21CA		two down arrows	MMALIAS ddarr
downharpoonleft	21C3		down harpoon-left	MMALIAS dharl
downharpoonright	21C2		down harpoon-rt	MMALIAS dharr
DownLeftVector	21BD		left harpoon-down	MMALIAS lhard
DownRightVector	21C1		right harpoon-down	MMALIAS rhard
drbkarow	E209		twoheaded right broken arrow	MMALIAS RBarr
duarr	E216		down arrow, up arrow	ISOAMSA
duhar	E217		down harp, up harp	ISOAMSA
dzigarr	21DD		right long zig-zag arrow	ISOAMSA
Equilibrium	21CC		right harp over l	MMALIAS rlhar
erarr	E236		equal, right arrow below	ISOAMSA
hArr	21D4		left and right double arrow	ISOAMSA
harr	2194		left and right arrow	ISOAMSA
harrcir	E240		left and right arrow with a circle	ISOAMSA
harrw	21AD		left and right arr-wavy	ISOAMSA
hksearow	E20B		SE arrow-hooked	MMALIAS searhk

















hkswarow	E20A		SW arrow-hooked	MMALIAS swarhk
hoarr	E243		horizontal open arrow	ISOAMSA
hookleftarrow	21A9		left arrow-hooked	MMALIAS larrhk
hookrightarrow	21AA		right arrow-hooked	MMALIAS rarrhk
imof	22B7		image of	ISOAMSA
lAarr	21DA		left triple arrow	ISOAMSA
Larr	219E		twoheadleftarrow	ISOAMSA
larrbfs	E220		left arrow-bar, filled square	ISOAMSA
larrfs	E222		left arrow, filled square	ISOAMSA
larrhk	21A9		left arrow-hooked	ISOAMSA
larrlp	21AB		left arrow-looped	ISOAMSA
larrpl	E23F		left arrow, plus	ISOAMSA
larrsim	E24E		left arrow, similar	ISOAMSA
larrtl	21A2		left arrow-tailed	ISOAMSA
lAtail	E23D		left double arrow-tail	ISOAMSA
latail	E23C		left arrow-tail	ISOAMSA

















lBarr	E206		left doubly broken arrow	ISOAMSA
lbarr	E402		left broken arrow	ISOAMSA
ldca	E21A		left down curved arrow	ISOAMSA
ldrdhar	E22C		left harpoon-down over right harpoon-down	ISOAMSA
ldrushar	E228		left-down-right-up harpoon	ISOAMSA
ldsh	21B2		left down angled arrow	ISOAMSA
LeftArrowRightArrow	21C6		left arr over right arr	MMALIAS lrarr
leftarrowtail	21A2		left arrow-tailed	MMALIAS larrtl
LeftDownVector	21C3		down harpoon-left	MMALIAS dharl
leftharpoondown	21BD		left harpoon-down	MMALIAS lhard
leftharpoonup	21BC		left harpoon-up	MMALIAS lharu
leftleftarrows	21C7		two left arrows	MMALIAS llarr
LeftRightArrow	2194		left and right arrow	MMALIAS harr
Leftrightarrow	21D4		left and right double arrow	MMALIAS hArr
leftrightarrow	2194		left and right arrow	MMALIAS harr
leftrightharrows	21C6		left arr over right arr	MMALIAS lrarr

















leftrightharpoons	21CB		left harp over r	MMALIAS lrhar
leftrightsquigarrow	21AD		left and right arr-wavy	MMALIAS harrw
LeftUpVector	21BF		up harpoon-left	MMALIAS uharl
LeftVector	21BC		left harpoon-up	MMALIAS lharu
lfisht	E214		left fish tail	ISOAMSA
lHar	E225		left harpoon-up over left harpoon-down	ISOAMSA
lhard	21BD		left harpoon-down	ISOAMSA
lharu	21BC		left harpoon-up	ISOAMSA
lharul	E22E		left harpoon-up over long dash	ISOAMSA
llarr	21C7		two left arrows	ISOAMSA
Lleftarrow	21DA		left triple arrow	MMALIAS lAarr
llhard	E231		left harpoon-down below long dash	ISOAMSA
loarr	E242		left open arrow	ISOAMSA
LongLeftArrow	E201		long left arrow	MMALIAS xlarr
Longleftarrow	E200		long left double arrow	MMALIAS xlArr
longleftarrow	E201		long left arrow	MMALIAS xlarr

















LongLeftRightArrow	E203		long left and right arr	MMALIAS xharr
Longlefttrightarrow	E202		long left and right double arr	MMALIAS xhArr
longlefttrightarrow	E203		long left and right arr	MMALIAS xharr
longmapsto	E208		longmapsto	MMALIAS xmap
LongRightArrow	E205		long right arrow	MMALIAS xrarr
Longrightarrow	E204		long right double arr	MMALIAS xrArr
longrightarrow	E205		long right arrow	MMALIAS xrarr
looparrowleft	21AB		left arrow-looped	MMALIAS larrlp
looparrowright	21AC		right arrow-looped	MMALIAS rarrlp
LowerLeftArrow	2199		SW pointing arrow	MMALIAS swarr
LowerRightArrow	2198		SE pointing arrow	MMALIAS searr
lrarr	21C6		left arr over right arr	ISOAMSA
lrhar	21CB		left harp over r	ISOAMSA
lrhard	E22F		right harpoon-down below long dash	ISOAMSA
Lsh	21B0		Lsh	MMALIAS lsh
lsh	21B0		Lsh	ISOAMSA

















lurdshar	E229		left-up-right-down harpoon	ISOAMSA
luruhar	E22B		left harpoon-up over right harpoon-up	ISOAMSA
Map	E212		twoheaded mapsto	ISOAMSA
map	21A6		mapsto	ISOAMSA
mapsto	21A6		mapsto	MMALIAS map
midcir	E20F		mid, circle below	ISOAMSA
multimap	22B8		multimap	MMALIAS mumap
mumap	22B8		multimap	ISOAMSA
nearhk	E20D		NE arrow-hooked	ISOAMSA
neArr	21D7		NE pointing double arrow	ISOAMSA
nearr	2197		NE pointing arrow	ISOAMSA
nearrow	2197		NE pointing arrow	MMALIAS nearr
nesear	E20E		NE & SE arrows	ISOAMSA
nhArr	21CE		not left and right double arr	ISOAMSA
nharr	21AE		not left and right arrow	ISOAMSA
nlArr	21CD		not implied by	ISOAMSA

















nlarr	219A		not left arrow	ISOAMSA
nLeftarrow	21CD		not implied by	MMALIAS nlArr
nleftarrow	219A		not left arrow	MMALIAS nlarr
nLeftrightarrow	21CE		not left and right double arr	MMALIAS nhArr
nleftrightharpoon	21AE		not left and right arrow	MMALIAS nharr
nrArr	21CF		not implies	ISOAMSA
nrarr	219B		not right arrow	ISOAMSA
nrarcc	E21D		not right arrow-curved	ISOAMSA
nrarrw	E21B		not right arrow-wavy	ISOAMSA
nRightarrow	21CF		not implies	MMALIAS nrArr
nrightarrow	219B		not right arrow	MMALIAS nrarr
nvhArr*	21CE		not, vert, left and right double arrow	ISOAMSA
nvlArr	21CD		not, vert, left double arrow	ISOAMSA
nvrArr	21CF		not, vert, right double arrow	ISOAMSA
nwarhk	E20C		NW arrow-hooked	ISOAMSA
nwArr	21D6		NW pointing double arrow	ISOAMSA

















nwarr	2196		NW pointing arrow	ISOAMSA
nwarrow	2196		NW pointing arrow	MMALIAS nwarr
nwnear	E211		NW & NE arrows	ISOAMSA
olarr	21BA		left arr in circle	ISOAMSA
orarr	21BB		right arr in circle	ISOAMSA
origof	22B6		original of	ISOAMSA
rAarr	21DB		right triple arrow	ISOAMSA
Rarr	21A0		twoheadrightarrow	ISOAMSA
rarrap	E235		approximate, right arrow above	ISOAMSA
rarrbfs	E221		right arrow-bar, filled square	ISOAMSA
rarrc	E21C		right arrow-curved	ISOAMSA
rarrfs	E223		right arrow, filled square	ISOAMSA
rarrhk	21AA		right arrow-hooked	ISOAMSA
rarrlp	21AC		right arrow-looped	ISOAMSA
rarrpl	E21E		right arrow, plus	ISOAMSA
rarrsim	E24D		right arrow, similar	ISOAMSA

Rarrtl	E239		right two-headed arrow with tail	ISOAMSA
rarrtl	21A3		right arrow-tailed	ISOAMSA
rarrw	219D		right arrow-wavy	ISOAMSA
rAtail	E23B		right double arrow-tail	ISOAMSA
ratail	21A3		right arrow-tail	ISOAMSA
RBarr	E209		twoheaded right broken arrow	ISOAMSA
rBarr	E207		right doubly broken arrow	ISOAMSA
rbarr	E405		right broken arrow	ISOAMSA
rdca	E219		right down curved arrow	ISOAMSA
rdldhar	E22D		right harpoon-down over left harpoon-down	ISOAMSA
rdsh	21B3		right down angled arrow	ISOAMSA
ReverseEquilibrium	21CB		left harp over r	MMALIAS lrhar
ReverseUpEquilibrium	E217		down harp, up harp	MMALIAS duhar
rfisht	E215		right fish tail	ISOAMSA
rHar	E224		right harpoon-up over right harpoon-down	ISOAMSA
rhard	21C1		right harpoon-down	ISOAMSA

rharu	21C0		right harpoon-up	ISOAMSA
rharul	E230		right harpoon-up over long dash	ISOAMSA
RightArrowLeftArrow	21C4		right arr over left arr	MMALIAS rlarr
rightarrowtail	21A3		right arrow-tailed	MMALIAS rarrtl
RightDownVector	21C2		down harpoon-rt	MMALIAS dharr
rightharpoondown	21C1		right harpoon-down	MMALIAS rhard
rightharpoonup	21C0		right harpoon-up	MMALIAS rharu
rightleftarrows	21C4		right arr over left arr	MMALIAS rlarr
rightleftharpoons	21CC		right harp over l	MMALIAS rlhar
rightrightarrow	21C9		two right arrows	MMALIAS rrrar
rightsquigarrow	219D		right arrow-wavy	MMALIAS rarrw
RightTeeArrow	21A6		mapsto	MMALIAS map
RightUpVector	21BE		up harp-r	MMALIAS uharr
RightVector	21C0		right harpoon-up	MMALIAS rharu
rlarr	21C4		right arr over left arr	ISOAMSA
rlhar	21CC		right harp over l	ISOAMSA

roarr	E241		right open arrow	ISOAMSA
rrarr	21C9		two right arrows	ISOAMSA
Rrightarrow	21DB		right triple arrow	MMALIAS rAarr
Rsh	21B1		Rsh	MMALIAS rsh
rsh	21B1		Rsh	ISOAMSA
ruluhar	E22A		right harpoon-up over left harpoon-up	ISOAMSA
searhk	E20B		SE arrow-hooked	ISOAMSA
seArr	21D8		SE pointing double arrow	ISOAMSA
searr	2198		SE pointing arrow	ISOAMSA
searrow	2198		SE pointing arrow	MMALIAS searr
seswar	E406		SE & SW arrows	ISOAMSA
ShortLeftArrow	E233		short left arrow	MMALIAS slarr
ShortRightArrow	E232		short right arrow	MMALIAS srarr
simrarr	E234		similar, right arrow below	ISOAMSA
slarr	E233		short left arrow	ISOAMSA
srarr	E232		short right arrow	ISOAMSA

swarhk	E20A		SW arrow-hooked	ISOAMSA
swArr	21D9		SW pointing double arrow	ISOAMSA
swarr	2199		SW pointing arrow	ISOAMSA
swarrow	2199		SW pointing arrow	MMALIAS swarr
swnwar	E210		SW & NW arrows	ISOAMSA
toea	E20E		NE & SE arrows	MMALIAS nesear
tosa	E406		SE & SW arrows	MMALIAS seswar
twoheadleftarrow	219E		twoheadleftarrow	MMALIAS Larr
twoheadrightarrow	21A0		twoheadrightarrow	MMALIAS Rarr
Uarr	219F		up two-headed arrow	ISOAMSA
uArr	21D1		up double arrow	ISOAMSA
Uarrocir	E237		up two-headed arrow above circle	ISOAMSA
udarr	21C5		up arrow, down arrow	ISOAMSA
udhar	E218		up harp, down harp	ISOAMSA
ufisht	E24B		up fish tail	ISOAMSA
uHar	E226		up harpoon-left, up harpoon-right	ISOAMSA

uharl	21BF		up harpoon-left	ISOAMSA
uharr	21BE		up harp-r	ISOAMSA
Uparrow	21D1		up double arrow	MMALIAS uArr
UpArrowDownArrow	21C5		up arrow, down arrow	MMALIAS udarr
UpDownArrow	2195		up&down arrow	MMALIAS varr
Updownarrow	21D5		up&down double arrow	MMALIAS vArr
updownarrow	2195		up&down arrow	MMALIAS varr
UpEquilibrium	E218		up harp, down harp	MMALIAS udhar
upharpoonleft	21BF		up harpoon-left	MMALIAS uharl
upharpoonright	21BE		up harp-r	MMALIAS uharr
UpperLeftArrow	2196		NW pointing arrow	MMALIAS nwarr
UpperRightArrow	2197		NE pointing arrow	MMALIAS nearr
upuparrows	21C8		two up arrows	MMALIAS uuarr
uuarr	21C8		two up arrows	ISOAMSA
vArr	21D5		up&down double arrow	ISOAMSA
varr	2195		up&down arrow	ISOAMSA

xhArr	E202	\longleftrightarrow	long left and right double arr	ISOAMSA
xharr	E203	\leftrightarrow	long left and right arr	ISOAMSA
xlArr	E200	\longleftarrow	long left double arrow	ISOAMSA
xlarr	E201	\leftarrow	long left arrow	ISOAMSA
xmap	E208	\mapsto	longmapsto	ISOAMSA
xrArr	E204	\Longrightarrow	long right double arr	ISOAMSA
xrarr	E205	\longrightarrow	long right arrow	ISOAMSA
zigrarr	E244	\rightsquigarrow	right zig-zag arrow	ISOAMSA

Prev: [ISOAMSA Glyphs Extended](#)

Up: [Chapter 6](#)

















Next: [ISOAMSC Glyphs Extended](#)

















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















ISOAMSB Characters alphabetically, with glyphs

Added Math Symbols: Binary Operators Extended by MathML with aliases

















Name	Unicode	Glyph	Description	Entity group
ac	E207	\dashrightarrow	most positive	ISOAMSB
acE	E290	\cong	most positive, two lines below	ISOAMSB
amalg	E251	\amalg	amalgamation or coproduct	ISOAMSB
ast	2217	\ast	centered asterisk	MMALIAS midast
Backslash	2216	\backslash	reverse solidus	MMALIAS setmn
barvee	22BD	$\bar{\vee}$	bar, vee	ISOAMSB
Barwed	2306	$\bar{\wedge}$	logical and, double bar above	ISOAMSB
barwed	22BC	$\bar{\wedge}$	logical and, bar above	ISOAMSB
barwedge	22BC	$\bar{\wedge}$	logical and, bar above	MMALIAS barwed
bigcap	22C2	\bigcap	intersection operator	MMALIAS xcap
bigcirc	25CB	\bigcirc	large circle	MMALIAS xcirc
bigcup	22C3	\bigcup	union operator	MMALIAS xcup
bigodot	2299	\bigodot	circle dot operator	MMALIAS xodot
bigoplus	2295	\bigoplus	circle plus operator	MMALIAS xoplus
bigotimes	2297	\bigotimes	circle times operator	MMALIAS xotime

















bigscup	2294		square union operator	MMALIAS xsqcup
bigtriangledown	25BD		big down triangle, open	MMALIAS xdtri
bigtriangleup	25B3		big up triangle, open	MMALIAS xutri
biguplus	228E		biguplus	MMALIAS xuplus
bigvee	22C1		logical and operator	MMALIAS xvee
bigwedge	22C0		logical or operator	MMALIAS xwedge
boxminus	229F		minus sign in box	MMALIAS minusb
boxplus	229E		plus sign in box	MMALIAS plusb
boxtimes	22A0		multiply sign in box	MMALIAS timesb
bsolb	E280		reverse solidus in square	ISOAMSB
Cap	22D2		double intersection	ISOAMSB
capand	E281		intersection, and	ISOAMSB
capbrcup	E271		intersection, bar, union	ISOAMSB
capcap	E273		intersection, intersection, joined	ISOAMSB
capcup	E26F		intersection above union	ISOAMSB
capdot	E261		intersection, with dot	ISOAMSB

caps	E275		intersection, serifs	ISOAMSB
ccaps	E279		closed intersection, serifs	ISOAMSB
ccups	E278		closed union, serifs	ISOAMSB
ccupssm	E27A		closed union, serifs, smash product	ISOAMSB
cdot	22C5		small middle dot	MMALIAS sdot
circledast	229B		asterisk in circle	MMALIAS oast
circledcirc	229A		small circle in circle	MMALIAS ocir
circleddash	229D		hyphen in circle	MMALIAS odash
CircleDot	2299		middle dot in circle	MMALIAS odot
CircleMinus	2296		minus sign in circle	MMALIAS ominus
CirclePlus	2295		plus sign in circle	MMALIAS oplus
CircleTimes	2297		multiply sign in circle	MMALIAS otimes
coprod	2210		coproduct operator	ISOAMSB
Coproduct	2210		coproduct operator	MMALIAS coprod
Cup	22D3		double union	ISOAMSB
cupbrcap	E270		union, bar, intersection	ISOAMSB

cupcap	E26E		union above intersection	ISOAMSB
cupcup	E272		union, union, joined	ISOAMSB
cupdot	228D		union, with dot	ISOAMSB
cupor	E282		union, or	ISOAMSB
cups	E274		union, serifs	ISOAMSB
curlyvee	22CE		curly logical or	MMALIAS cuvee
curlywedge	22CF		curly logical and	MMALIAS cuwed
cuvee	22CE		curly logical or	ISOAMSB
cuwed	22CF		curly logical and	ISOAMSB
Dagger	2021		double dagger relation	ISOAMSB
dagger	2020		dagger relation	ISOAMSB
ddagger	2021		double dagger relation	MMALIAS Dagger
diam	22C4		open diamond	ISOAMSB
diamond	22C4		open diamond	MMALIAS diam
divideontimes	22C7		division on times	MMALIAS divonx
divonx	22C7		division on times	ISOAMSB

dotminus	2238	$\dot{-}$	minus sign, dot above	MMALIAS minusd
dotplus	2214	$\dot{+}$	plus sign, dot above	MMALIAS plusdo
dotsquare	22A1	\square	small dot in box	MMALIAS sdotb
doublebarwedge	2306	$\overline{\wedge}$	logical and, double bar above	MMALIAS Barwed
eplus	E268	$\overline{+}$	equal, plus	ISOAMSB
hercon	22B9	\dagger	hermitian conjugate matrix	ISOAMSB
intcal	22BA	\top	intercal	ISOAMSB
intercal	22BA	\top	intercal	MMALIAS intcal
Intersection	22C2	\cap	intersection operator	MMALIAS xcap
intprod	E259	\lrcorner	interior product	MMALIAS iprod
iprod	E259	\lrcorner	interior product	ISOAMSB
leftthreetimes	22CB	\leftthreetimes	leftthreetimes	MMALIAS lthree
loplus	E25C	\oplus	plus sign in left half circle	ISOAMSB
lotimes	E25E	\otimes	multiply sign in left half circle	ISOAMSB
lthree	22CB	\leftthreetimes	leftthreetimes	ISOAMSB
ltimes	22C9	\ltimes	times sign, left closed	ISOAMSB















midast	2217		centered asterisk	ISOAMSB
minusb	229F		minus sign in box	ISOAMSB
minusd	2238		minus sign, dot above	ISOAMSB
minusdu	E25B		minus sign, dot below	ISOAMSB
ncap	E284		bar, intersection	ISOAMSB
ncup	E283		bar, union	ISOAMSB
oast	229B		asterisk in circle	ISOAMSB
ocir	229A		small circle in circle	ISOAMSB
odash	229D		hyphen in circle	ISOAMSB
odiv	E285		divide in circle	ISOAMSB
odot	2299		middle dot in circle	ISOAMSB
odsold	E286		dot, solidus, dot in circle	ISOAMSB
ofcir	E287		filled circle in circle	ISOAMSB
ogt	E289		greater-than in circle	ISOAMSB
ohbar	E260		circle with horizontal bar	ISOAMSB
olcir	E409		large circle in circle	ISOAMSB

olt	E288		less-than in circle	ISOAMSB
omid	E40A		vertical bar in circle	ISOAMSB
ominus	2296		minus sign in circle	ISOAMSB
opar	E28A		parallel in circle	ISOAMSB
operp	E28B		perpendicular in circle	ISOAMSB
oplus	2295		plus sign in circle	ISOAMSB
oslash	2298		solidus in circle	MMALIAS osol
osol	2298		solidus in circle	ISOAMSB
Otimes	E28C		multiply sign in double circle	ISOAMSB
otimes	2297		multiply sign in circle	ISOAMSB
otimesas	E28D		multiply sign in circle, circumflex accent	ISOAMSB
ovbar	E40B		circle with vertical bar	ISOAMSB
plusacir	E26A		plus, circumflex accent above	ISOAMSB
plusb	229E		plus sign in box	ISOAMSB
pluscir	E266		plus, small circle above	ISOAMSB
plusdo	2214		plus sign, dot above	ISOAMSB

plusdu	E25A	\dagger	plus sign, dot below	ISOAMSB
pluse	E267	\pm	plus, equals	ISOAMSB
plussim	E26C	\dagger	plus, similar below	ISOAMSB
plustwo	E269	\dagger_2	plus, two; Nim-addition	ISOAMSB
race	E40C	∞	reverse most positive, line below	ISOAMSB
righthreetimes	22CC	\ltimes	righthreetimes	MMALIAS rthree
roplus	E25D	\oplus	plus sign in right half circle	ISOAMSB
rotimes	E40D	\otimes	multiply sign in right half circle	ISOAMSB
rthree	22CC	\ltimes	righthreetimes	ISOAMSB
rtimes	22CA	\rtimes	times sign, right closed	ISOAMSB
sdot	22C5	\cdot	small middle dot	ISOAMSB
sdotb	22A1	\boxdot	small dot in box	ISOAMSB
setminus	2216	\setminus	reverse solidus	MMALIAS setmn
setmn	2216	\setminus	reverse solidus	ISOAMSB
simplus	E26B	\dagger	plus, similar above	ISOAMSB
smallsetminus	E844	\setminus	sm reverse solidus	MMALIAS ssetmn

smashp	E264	\otimes	smash product	ISOAMSB
solb	E27F	\boxplus	solidus in square	ISOAMSB
sqcap	2293	\sqcap	square intersection	ISOAMSB
sqcaps	E277	\sqcap	square intersection, serifs	ISOAMSB
sqcup	2294	\sqcup	square union	ISOAMSB
sqcups	E276	\sqcup	square union, serifs	ISOAMSB
SquareIntersection	2293	\sqcap	square intersection	MMALIAS sqcap
SquareUnion	2294	\sqcup	square union	MMALIAS sqcup
ssetmn	E844	\setminus	sm reverse solidus	ISOAMSB
sstarf	22C6	\star	small star, filled, low	ISOAMSB
Star	22C6	\star	small star, filled, low	MMALIAS sstarf
star	22C6	\star	small star, filled, low	MMALIAS sstarf
subdot	E262	$\subset\!\cdot$	subset, with dot	ISOAMSB
Sum	2211	Σ	summation operator	MMALIAS sum
sum	2211	Σ	summation operator	ISOAMSB
supdot	E263	$\supset\!\cdot$	superset, with dot	ISOAMSB

timesb	22A0	\boxtimes	multiply sign in box	ISOAMSB
timesbar	E28E	\times	multiply sign, bar below	ISOAMSB
timesd	E26D	\times	times, dot	ISOAMSB
tridot	25EC	\triangle	dot in triangle	ISOAMSB
triminus	E27C	\triangle	minus in triangle	ISOAMSB
triplus	E27B	\triangle	plus in triangle	ISOAMSB
trisb	E27E	\triangle	triangle, serifs at bottom	ISOAMSB
tritime	E27D	\triangle	multiply in triangle	ISOAMSB
Union	22C3	\cup	union operator	MMALIAS xcup
UnionPlus	228E	\cup	plus sign in union	MMALIAS uplus
uplus	228E	\cup	plus sign in union	ISOAMSB
Vee	22C1	\vee	logical and operator	MMALIAS xvee
veebar	22BB	\vee	logical or, bar below	ISOAMSB
VerticalTilde	2240	\wr	wreath product	MMALIAS wreath
wedbar	E265	\triangle	wedge, bar below	ISOAMSB
Wedge	22C0	\wedge	logical or operator	MMALIAS xwedge

wr	2240		wreath product	MMALIAS wreath
wreath	2240		wreath product	ISOAMSB
xcap	22C2		intersection operator	ISOAMSB
xcirc	25CB		large circle	ISOAMSB
xcup	22C3		union operator	ISOAMSB
xdtri	25BD		big down triangle, open	ISOAMSB
xodot	2299		circle dot operator	ISOAMSB
xoplus	2295		circle plus operator	ISOAMSB
xotime	2297		circle times operator	ISOAMSB
xsqcup	2294		square union operator	ISOAMSB
xuplus	228E		biguplus	ISOAMSB
xutri	25B3		big up triangle, open	ISOAMSB
xvee	22C1		logical and operator	ISOAMSB
xwedge	22C0		logical or operator	ISOAMSB

Prev: [ISOAMSB Glyphs Extended](#)
















Up: [Chapter 6](#)


















Next: [ISOAMSN Glyphs Extended](#)

REC-MathML-19980407

ISOAMSC Characters alphabetically, with glyphs

Added Math Symbols: Delimiters Extended by MathML with aliases

Name	Unicode	Glyph	Description	Entity group
dlcorn	231E		lower left corner	ISOAMSC
drcorn	231F		lower right corner	ISOAMSC
gtlPar	E296		double left parenthesis, greater	ISOAMSC
langd	E297		left angle, dot	ISOAMSC
lbrke	E299		left bracket, equal	ISOAMSC
lbrksld	E29D		left bracket, solidus bottom corner	ISOAMSC
lbrkslu	E29B		left bracket, solidus top corner	ISOAMSC
lceil	2308		left ceiling	ISOAMSC
LeftCeiling	2308		left ceiling	MMALIAS lceil
LeftFloor	230A		left floor	MMALIAS lfloor
lfloor	230A		left floor	ISOAMSC
llcorner	231E		lower left corner	MMALIAS dlcorn
lmoust	E294		left moustache	ISOAMSC
lmoustache	E294		left moustache	MMALIAS lmoust
lparlt	E292		left parenthesis, lt	ISOAMSC

lrcorner	231F		lower right corner	MMALIAS drcorn
ltrPar	E295		double right parenthesis, less	ISOAMSC
rangd	E298		right angle, dot	ISOAMSC
rbrke	E29A		right bracket, equal	ISOAMSC
rbrksld	E29C		right bracket, solidus bottom corner	ISOAMSC
rbrkslu	E29E		right bracket, solidus top corner	ISOAMSC
rceil	2309		right ceiling	ISOAMSC
rfloor	230B		right floor	ISOAMSC
RightCeiling	2309		right ceiling	MMALIAS rceil
RightFloor	230B		right floor	MMALIAS rfloor
rmoust	E293		right moustache	ISOAMSC
rmoustache	E293		right moustache	MMALIAS rmoust
rpargt	E291		right paren, gt	ISOAMSC
ulcorn	231C		upper left corner	ISOAMSC
ulcorner	231C		upper left corner	MMALIAS ulcorn
urcorn	231D		upper right corner	ISOAMSC
urcorner	231D		upper right corner	MMALIAS urcorn

Prev: [ISOAMSC Glyphs Extended](#)

Up: [Chapter 6](#)

















Next: [ISOAMSO Glyphs Extended](#)

















REC-MathML-19980407

















ISOAMSN Characters alphabetically, with glyphs

















Added Math Symbols: Negated Relations Extended by MathML with aliases

















Name	Unicode	Glyph	Description	Entity group
gnap	E411	\napprox	greater, not approximate	ISOAMSN
gnapprox	E411	\napprox	greater, not approximate	MMALIAS gnap
gnE	2269	\nE	greater, not double equals	ISOAMSN
gne	2269	\nE	greater, not equals	ISOAMSN
gneq	2269	\nE	greater, not equals	MMALIAS gne
gneqq	2269	\nE	greater, not double equals	MMALIAS gnE
gnsim	22E7	\nsim	greater, not similar	ISOAMSN
gvertneqq	E2A1	\nE	gt, vert, not double equals	MMALIAS gvnE
gvnE	E2A1	\nE	gt, vert, not double equals	ISOAMSN
lnap	E2A2	\nlessapprox	less, not approximate	ISOAMSN
lnapprox	E2A2	\nlessapprox	less, not approximate	MMALIAS lnap
lnE	2268	\nlessE	less, not double equals	ISOAMSN
lne	2268	\nlessE	less, not equals	ISOAMSN
lneq	2268	\nlessE	less, not equals	MMALIAS lne
lneqq	2268	\nlessE	less, not double equals	MMALIAS lnE

l _{nsim}	22E6		less, not similar	ISOAMSN
l _{vertneqq}	E2A4		less, vert, not double equals	MMALIAS l _{vnE}
l _{vnE}	E2A4		less, vert, not double equals	ISOAMSN
nap	2249		not approximate	ISOAMSN
napE	E2C7		not approximately equal or equal to	ISOAMSN
napid	E2BC		not approximately identical to	ISOAMSN
n _{approx}	2249		not approximate	MMALIAS nap
n _{cong}	2247		not congruent with	ISOAMSN
n _{congdot}	E2C5		not congruent, dot	ISOAMSN
nequiv	2262		not identical with	ISOAMSN
ngE	2271		not greater, double equals	ISOAMSN
nge	E2A6		not greater-than-or-equal	ISOAMSN
ngeq	E2A6		not greater-than-or-equal	MMALIAS nge
ngeqq	2271		not greater, double equals	MMALIAS ngE
ngeqslant	2271		not gt-or-equals, slanted	MMALIAS nges
n _{ges}	2271		not gt-or-equals, slanted	ISOAMSN

















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ngsim	2275		not greater, similar	ISOAMSN
nGt	E2CA		not, vert, much greater than	ISOAMSN
ngt	226F		not greater-than	ISOAMSN
ngtr	226F		not greater-than	MMALIAS ngt
nGtv	E2CC		not much greater than, variant	ISOAMSN
nIE	2270		not less, double equals	ISOAMSN
nle	E2A7		not less-than-or-equal	ISOAMSN
nleq	E2A7		not less-than-or-equal	MMALIAS nle
nleqq	2270		not less, double equals	MMALIAS nIE
nleqslant	2270		not less-or-equals, slant	MMALIAS nles
nles	2270		not less-or-equals, slant	ISOAMSN
nless	226E		not less-than	MMALIAS nlt
nLl	E2CD		not triple less than	ISOAMSN
nlsim	2274		not less, similar	ISOAMSN
nLt	E2C9		not, vert, much less than	ISOAMSN

















nlt	226E		not less-than	ISOAMSN
nltri	22EA		not left triangle	ISOAMSN
nltrie	22EC		not left triangle, equals	ISOAMSN
nLtv	E2CB		not much less than, variant	ISOAMSN
nmid	2224		negated mid	ISOAMSN
NotCongruent	2262		not identical with	MMALIAS nequiv
NotDoubleVerticalBar	2226		not parallel	MMALIAS npar
NotGreater	226F		not greater-than	MMALIAS ngt
NotGreaterEqual	E2A6		not greater-than-or-equal	MMALIAS nge
NotGreaterFullEqual	2271		not greater, double equals	MMALIAS ngE
NotGreaterGreater	E2CC		not much greater than, variant	MMALIAS nGtv
NotGreaterLess	2279		not, vert, greater, less	MMALIAS ntvgl
NotGreaterSlantEqual	2271		not gt-or-equals, slanted	MMALIAS nges
NotGreaterTilde	2275		not greater, similar	MMALIAS ngsim
NotLeftTriangle	22EA		not left triangle	MMALIAS nltri
NotLeftTriangleEqual	22EC		not left triangle, equals	MMALIAS nltrie

















NotLess	226E		not less-than	MMALIAS nlt
NotLessEqual	E2A7		not less-than-or-equal	MMALIAS nle
NotLessFullEqual	2270		not less, double equals	MMALIAS nIE
NotLessGreater	2278		not, vert, less, greater	MMALIAS ntvlg
NotLessLess	E2CB		not much less than, variant	MMALIAS nLtv
NotLessSlantEqual	2270		not less-or-equals, slant	MMALIAS nles
NotLessTilde	2274		not less, similar	MMALIAS nlsim
NotPrecedes	2280		not precedes	MMALIAS npr
NotPrecedesEqual	E412		not precedes, equals	MMALIAS npre
NotPrecedesSlantEqual	22E0		not curly precedes, equals	MMALIAS nprcue
NotRightTriangle	22EB		not right triangle	MMALIAS nrtri
NotRightTriangleEqual	22ED		not right triangle, equals	MMALIAS nrtrie
NotSquareSubsetEqual	22E2		not, square subset, equals	MMALIAS nsqsube
NotSquareSupersetEqual	22E3		not, square superset, equals	MMALIAS nsqsupe
NotSubset	2284		not subset, variant	MMALIAS vnsub
NotSucceeds	2281		not succeeds	MMALIAS nsc


















NotSucceedsEqual	E413		not succeeds, equals	MMALIAS nsce
NotSucceedsSlantEqual	22E1		not succeeds, curly equals	MMALIAS nscue
NotSuperset	2285		not superset, variant	MMALIAS vnsup
NoTilde	2241		not similar	MMALIAS nsim
NoTildeEqual	2244		not similar, equals	MMALIAS nsime
NoTildeFullEqual	2247		not congruent with	MMALIAS ncong
NoTildeTilde	2249		not approximate	MMALIAS nap
NotVerticalBar	2224		negated mid	MMALIAS nmid
npar	2226		not parallel	ISOAMSN
nparallel	2226		not parallel	MMALIAS npar
npr	2280		not precedes	ISOAMSN
nprcue	22E0		not curly precedes, equals	ISOAMSN
npre	E412		not precedes, equals	ISOAMSN
nprec	2280		not precedes	MMALIAS npr
npreceq	E412		not precedes, equals	MMALIAS npre
nrtri	22EB		not right triangle	ISOAMSN

nrtie	22ED	\nexists	not right triangle, equals	ISOAMSN
nsc	2281	\nexists	not succeeds	ISOAMSN
nscue	22E1	\nexists	not succeeds, curly equals	ISOAMSN
nsce	E413	\nexists	not succeeds, equals	ISOAMSN
nshortmid	E2AA	\nexists	negated short mid	MMALIAS nsmid
nshortparallel	E2AB	\nexists	not short par	MMALIAS nspar
nsim	2241	\nexists	not similar	ISOAMSN
nsime	2244	\nexists	not similar, equals	ISOAMSN
nsimeq	2244	\nexists	not similar, equals	MMALIAS nsime
nsmid	E2AA	\nexists	negated short mid	ISOAMSN
nspar	E2AB	\nexists	not short par	ISOAMSN
nsqsube	22E2	\nexists	not, square subset, equals	ISOAMSN
nsqsupe	22E3	\nexists	not, square superset, equals	ISOAMSN
nsub	2284	\nexists	not subset	ISOAMSN
nsubE	2288	\nexists	not subset, double equals	ISOAMSN
nsube	2288	\nexists	not subset, equals	ISOAMSN

nsubset	2284		not subset, variant	MMALIAS vnsub
nsubseteq	2288		not subset, equals	MMALIAS nsube
nsubseteqq	2288		not subset, double equals	MMALIAS nsubE
nsucc	2281		not succeeds	MMALIAS nsc
nsucceq	E413		not succeeds, equals	MMALIAS nsce
nsup	2285		not superset	ISOAMSN
nsupE	2289		not superset, double equals	ISOAMSN
nsupe	2289		not superset, equals	ISOAMSN
nsupset	2285		not superset, variant	MMALIAS vnsup
nsupseteq	2289		not superset, equals	MMALIAS nsupe
nsupseteqq	2289		not superset, double equals	MMALIAS nsupE
ntgl	2279		not greater, less	ISOAMSN
ntlg	2278		not less, greater	ISOAMSN
ntriangleleft	22EA		not left triangle	MMALIAS nltri
ntrianglelefteq	22EC		not left triangle, equals	MMALIAS nltrie
ntriangleright	22EB		not right triangle	MMALIAS nrtri

ntrianglerighteq	22ED		not right triangle, equals	MMALIAS nrtrie
ntvgl	2279		not, vert, greater, less	ISOAMSN
ntvlg	2278		not, vert, less, greater	ISOAMSN
nvap	E2C6		not, vert, approximate	ISOAMSN
nVDash	22AF		not double vert, double dash	ISOAMSN
nVdash	22AE		not double vertical, dash	ISOAMSN
nvDash	22AD		not vertical, double dash	ISOAMSN
nvdash	22AC		not vertical, dash	ISOAMSN
nvge	2271		not, vert, greater-than-or-equal	ISOAMSN
nvgt	226F		not, vert, greater-than	ISOAMSN
nvle	2270		not, vert, less-than-or-equal	ISOAMSN
nvlt	226E		not, vert, less-than	ISOAMSN
nvltrie	E2D0		not, vert, left triangle, equals	ISOAMSN
nvtrtrie	E2CF		not, vert, right triangle, equals	ISOAMSN
nvsim	E415		not, vert, similar	ISOAMSN
parsim	E2C8		parallel, similar	ISOAMSN

precnapprox	22E8		precedes, not approx	MMALIAS prnap
precneqq	E2B3		precedes, not double equals	MMALIAS prnE
precnsim	22E8		precedes, not similar	MMALIAS prnsim
prnap	22E8		precedes, not approx	ISOAMSN
prnE	E2B3		precedes, not double equals	ISOAMSN
prnsim	22E8		precedes, not similar	ISOAMSN
rnmid	E2D1		reverse nmid	ISOAMSN
scnap	22E9		succeeds, not approx	ISOAMSN
scnE	E2B5		succeeds, not double equals	ISOAMSN
scnsim	22E9		succeeds, not similar	ISOAMSN
simne	2246		similar, not equals	ISOAMSN
solbar	E416		solidus, bar through	ISOAMSN
subnE	228A		subset, not double equals	ISOAMSN
subne	228A		subset, not equals	ISOAMSN
subsetneq	228A		subset, not equals	MMALIAS subne
subsetneqq	228A		subset, not double equals	MMALIAS subnE

succnapprox	22E9		succeeds, not approx	MMALIAS scnap
succneqq	E2B5		succeeds, not double equals	MMALIAS scnE
succnsim	22E9		succeeds, not similar	MMALIAS scnsim
supnE	228B		superset, not double equals	ISOAMSN
supne	228B		superset, not equals	ISOAMSN
supsetneq	228B		superset, not equals	MMALIAS supne
supsetneqq	228B		superset, not double equals	MMALIAS supnE
varsubsetneq	E2B9		subset, not equals, variant	MMALIAS vsubne
varsubsetneqq	E2B8		subset not double equals, variant	MMALIAS vsubnE
varsupsetneq	E2BA		superset, not equals, variant	MMALIAS vsupne
varsupsetneqq	E2BB		super not double equals, variant	MMALIAS vsupnE
vnsup	2284		not subset, variant	ISOAMSN
vnsup	2285		not superset, variant	ISOAMSN
vsubnE	E2B8		subset not double equals, variant	ISOAMSN
vsubne	E2B9		subset, not equals, variant	ISOAMSN
vsupnE	E2BB		super not double equals, variant	ISOAMSN
vsupne	E2BA		superset, not equals, variant	ISOAMSN

Prev: [ISOAMSN Glyphs Extended](#)

Up: [Chapter 6](#)

















Next: [ISOAMSR Glyphs Extended](#)

















REC-MathML-19980407

ISOAMSO Characters alphabetically, with glyphs

Added Math Symbols: Ordinary Extended by MathML with aliases

Name	Unicode	Glyph	Description	Entity group
ang	2220	\sphericalangle	angle	ISOAMSO
ange	E2D6	\sphericalangle	angle, equal	ISOAMSO
angle	2220	\sphericalangle	angle	MMALIAS ang
angmsd	2221	\sphericalangle	angle-measured	ISOAMSO
angmsdaa	E2D9	\sphericalangle	angle-measured, arrow, up, right	ISOAMSO
angmsdab	E2DA	\sphericalangle	angle-measured, arrow, up, left	ISOAMSO
angmsdac	E2DB	\sphericalangle	angle-measured, arrow, down, right	ISOAMSO
angmsdad	E2DC	\sphericalangle	angle-measured, arrow, down, left	ISOAMSO
angmsdae	E2DD	\sphericalangle	angle-measured, arrow, right, up	ISOAMSO
angmsdaf	E2DE	\sphericalangle	angle-measured, arrow, left, up	ISOAMSO
angmsdag	E2DF	\sphericalangle	angle-measured, arrow, right, down	ISOAMSO
angmsdah	E2E0	\sphericalangle	angle-measured, arrow, left, down	ISOAMSO
angrtvb	E418	\sphericalangle	right angle-measured	ISOAMSO
angrtvbd	E2E1	\sphericalangle	right angle-measured, dot	ISOAMSO
backprime	2035	\sphericalangle	reverse prime	MMALIAS bprime

bbrk	E2EE		bottom square bracket	ISOAMSO
bbrktbrk	E419		bottom above top square bracket	ISOAMSO
bemptyv	E41A		reversed circle, slash	ISOAMSO
beth	2136		beth, Hebrew	ISOAMSO
boxbox	E2E6		two joined squares	ISOAMSO
bprime	2035		reverse prime	ISOAMSO
bsemi	E2ED		reverse semi-colon	ISOAMSO
cemptyv	E2E8		circle, slash, small circle above	ISOAMSO
circledS	E41D		capital S in circle	MMALIAS oS
cirE	E41B		circle, two horizontal stroked to the right	ISOAMSO
circscir	E41C		circle, small circle to the right	ISOAMSO
comp	2201		complement sign	ISOAMSO
complement	2201		complement sign	MMALIAS comp
daleth	2138		daleth, Hebrew	ISOAMSO
demptyv	E2E7		circle, slash, bar above	ISOAMSO
ell	2113		cursive small l	ISOAMSO

empty	E2D3		letter O slashed	ISOAMSO
emptyset	E2D3		letter O slashed	MMALIAS empty
emptyv	2205		circle, slash	ISOAMSO
gimel	2137		gimel, Hebrew	ISOAMSO
hbar	E2D5		Planck's over 2pi	MMALIAS plank
hslash	210F		variant Planck's over 2pi	MMALIAS plankv
iiota	2129		inverted iota	ISOAMSO
Im	2111		imaginary	MMALIAS image
image	2111		imaginary	ISOAMSO
imath	0131		small i, no dot	ISOAMSO
jmath	E2D4		small j, no dot	ISOAMSO
laemptyv	E2EA		circle, slash, left arrow above	ISOAMSO
lltri	E2E5		lower left triangle	ISOAMSO
lrtri	E2E3		lower right triangle	ISOAMSO
measuredangle	2221		angle-measured	MMALIAS angmsd
mho	2127		conductance	ISOAMSO

nang	E2D8	\nexists	not, vert, angle	ISOAMSO
nexist	2204	\nexists	negated exists	ISOAMSO
nexists	2204	\nexists	negated exists	MMALIAS nexist
NotExists	2204	\nexists	negated exists	MMALIAS nexist
oS	E41D	\textcircled{S}	capital S in circle	ISOAMSO
plank	E2D5	\hbar	Planck's over 2pi	ISOAMSO
plankv	210F	\hbar	variant Planck's over 2pi	ISOAMSO
raemptyv	E2E9	\emptyset	circle, slash, right arrow above	ISOAMSO
range	E2D7	\supseteq	reverse angle, equal	ISOAMSO
Re	211C	\mathbb{R}	real	MMALIAS real
real	211C	\mathbb{R}	real	ISOAMSO
tbrk	E2EF	\lrcorner	top square bracket	ISOAMSO
trpezium	E2EC	\trapezium	trapezium	ISOAMSO
ultri	E2E4	\triangleleft	upper left triangle	ISOAMSO
urtri	E2E2	\triangleright	upper right triangle	ISOAMSO
varnothing	2205	\emptyset	circle, slash	MMALIAS emptyv
vzigzag	E2EB	\zigzag	vertical zig-zag line	ISOAMSO
weierp	2118	\wp	Weierstrass p	ISOAMSO
wp	2118	\wp	Weierstrass p	MMALIAS weierp

Prev: [ISOAMSO Glyphs Extended](#)

Up: [Chapter 6](#)

Next: [ISOTECH Glyphs Extended](#)

















REC-MathML-19980407

ISOAMSR Characters alphabetically, with glyphs

















Added Math Symbols: Relations Extended by MathML with aliases

















Name	Unicode	Glyph	Description	Entity group
apE	E315	\approx	approximately equal or equal to	ISOAMSR
ape	224A	\approx	approximate, equals	ISOAMSR
apid	224B	\approx	approximately identical to	ISOAMSR
approxeq	224A	\approx	approximate, equals	MMALIAS ape
asympt	224D	\asymp	asymptotically equal to	ISOAMSR
backcong	224C	\cong	reverse congruent	MMALIAS bcong
backepsilon	E420	\backsimeq	such that	MMALIAS bepsi
backsim	223D	\sim	reverse similar	MMALIAS bsim
backsimeq	22CD	\backsimeq	reverse similar, equals	MMALIAS bsime
Barv	E311	$\overline{\text{T}}$	vert, double bar (over)	ISOAMSR
bcong	224C	\cong	reverse congruent	ISOAMSR
bepsi	E420	\backsimeq	such that	ISOAMSR
between	226C	Q	between	MMALIAS twixt
bowtie	22C8	\bowtie	bowtie	ISOAMSR
bsim	223D	\sim	reverse similar	ISOAMSR

bsime	22CD	\equiv	reverse similar, equals	ISOAMSR
bsolhsub	E34D	∇	reverse solidus, subset	ISOAMSR
bump	224E	\pm	bumpy equals	ISOAMSR
bumpe	224F	\mp	bumpy equals, equals	ISOAMSR
Bumpeq	224E	\pm	bumpy equals	MMALIAS bump
bumpeq	224F	\mp	bumpy equals, equals	MMALIAS bumpe
circeq	2257	\circ	circle, equals	MMALIAS cire
cire	2257	\circ	circle, equals	ISOAMSR
Colon	2237	$::$	/Colon, two colons	ISOAMSR
Colone	E30E	$::=$	double colon, equals	ISOAMSR
colone	2254	$:=$	colon, equals	ISOAMSR
coloneq	2254	$:=$	colon, equals	MMALIAS colone
congdot	E314	$\cong\cdot$	congruent, dot	ISOAMSR
csub	E351	\sqsubset	subset, closed	ISOAMSR
csube	E353	\sqsubseteq	subset, closed, equals	ISOAMSR
csup	E352	\sqsupset	superset, closed	ISOAMSR

















csupe	E354		superset, closed, equals	ISOAMSR
cuepr	22DE		curly equals, precedes	ISOAMSR
cuesc	22DF		curly equals, succeeds	ISOAMSR
Cup	2323		up curve	MMALIAS smile
CupCap	224D		asymptotically equal to	MMALIAS asymp
curlyeqprec	22DE		curly equals, precedes	MMALIAS cuepr
curlyeqsucc	22DF		curly equals, succeeds	MMALIAS cuesc
Dashv	E30F		double dash, vertical	ISOAMSR
dashv	22A3		dash, vertical	ISOAMSR
ddotseq	E309		equal with four dots	MMALIAS eDDot
doteq	2250		equals, single dot above	MMALIAS esdot
doteqdot	2251		equals, even dots	MMALIAS eDot
DotEqual	2250		equals, single dot above	MMALIAS esdot
DoubleRightTee	22A8		vertical, double dash	MMALIAS vDash
easter	225B		equal, asterisk above	ISOAMSR
ecir	2256		circle on equals sign	ISOAMSR

















eColon	2255	\equiv	equals, colon	ISOAMSR
eDDot	E309	$\equiv\equiv$	equal with four dots	ISOAMSR
eDot	2251	$\equiv\cdot$	equals, even dots	ISOAMSR
efDot	2252	$\equiv\cdot$	equals, falling dots	ISOAMSR
eg	E328	\geq	equal-or-greater	ISOAMSR
egs	22DD	\geq	equal-or-gtr, slanted	ISOAMSR
egsdot	E324	$\geq\cdot$	equal-or-greater, slanted, dot inside	ISOAMSR
el	E327	\leq	equal-or-less	ISOAMSR
els	22DC	\leq	eq-or-less, slanted	ISOAMSR
elsdot	E323	$\leq\cdot$	equal-or-less, slanted, dot inside	ISOAMSR
eqcirc	2256	$\equiv\circ$	circle on equals sign	MMALIAS ecir
eqColon	2255	\equiv	equals, colon	MMALIAS eColon
eqsim	2242	\approx	equals, similar	MMALIAS esim
eqslantgtr	22DD	\geq	equal-or-gtr, slanted	MMALIAS egs
eqslantless	22DC	\leq	eq-or-less, slanted	MMALIAS els
EqualTilde	2242	\approx	equals, similar	MMALIAS esim

















equest	225F		equal with questionmark	ISOAMSR
equivDD	E318		equivalent, four dots above	ISOAMSR
erDot	2253		equals, rising dots	ISOAMSR
esdot	2250		equals, single dot above	ISOAMSR
Esim	E317		equal, similar	ISOAMSR
esim	2242		equals, similar	ISOAMSR
fallingdotseq	2252		equals, falling dots	MMALIAS efDot
fork	22D4		pitchfork	ISOAMSR
forkv	E31B		fork, variant	ISOAMSR
frown	2322		down curve	ISOAMSR
gap	2273		greater, approximate	ISOAMSR
gE	2267		greater, double equals	ISOAMSR
gEl	22DB		gt, double equals, less	ISOAMSR
gel	22DB		greater, equals, less	ISOAMSR
geqq	2267		greater, double equals	MMALIAS gE
geqslant	E421		gt-or-equal, slanted	MMALIAS ges

















ges	E421		gt-or-equal, slanted	ISOAMSR
gescc	E358		greater than, closed by curve, equal, slanted	ISOAMSR
gesdot	E31E		greater-than-or-equal, slanted, dot inside	ISOAMSR
gesdoto	E320		greater-than-or-equal, slanted, dot above	ISOAMSR
gesdotol	E322		greater-than-or-equal, slanted, dot above left	ISOAMSR
gesl	E32C		greater, equal, slanted, less	ISOAMSR
gesles	E332		greater, equal, slanted, less, equal, slanted	ISOAMSR
Gg	22D9		triple gtr-than	ISOAMSR
gg	226B		double greater-than sign	MMALIAS Gt
ggg	22D9		triple gtr-than	MMALIAS Gg
gl	2277		greater, less	ISOAMSR
gla	E330		greater, less, apart	ISOAMSR
glE	E32E		greater, less, equal	ISOAMSR
glj	E32F		greater, less, overlapping	ISOAMSR
GreaterEqualLess	22DB		greater, equals, less	MMALIAS gel
GreaterFullEqual	2267		greater, double equals	MMALIAS gE

















GreaterLess	2277	\gg	greater, less	MMALIAS gl
GreaterSlantEqual	E421	\gtrsim	gt-or-equal, slanted	MMALIAS ges
GreaterTilde	2273	\gtrsim	greater, similar	MMALIAS gsim
gsim	2273	\gtrsim	greater, similar	ISOAMSR
gsime	E334	\gtrsim	greater, similar, equal	ISOAMSR
gsiml	E336	\gtrsim	greater, similar, less	ISOAMSR
Gt	226B	\gg	double greater-than sign	ISOAMSR
gtcc	E356	\gtrsim	greater than, closed by curve	ISOAMSR
gtcir	E326	\gtrsim	greater than, circle inside	ISOAMSR
gtdot	22D7	\gtrsim	greater than, with dot	ISOAMSR
gtquest	E32A	\gtrsim	greater than, questionmark above	ISOAMSR
gtrapprox	2273	\gtrsim	greater, approximate	MMALIAS gap
gtrarr	E35F	\gtrsim	greater than, right arrow	ISOAMSR
gtrdot	22D7	\gtrsim	greater than, with dot	MMALIAS gtdot
gtreqless	22DB	\gtrsim	greater, equals, less	MMALIAS gel
gtreqqless	22DB	\gtrsim	gt, double equals, less	MMALIAS gEl

















gtrless	2277		greater, less	MMALIAS gl
gtrsim	2273		greater, similar	MMALIAS gsim
homtht	223B		homothetic	ISOAMSR
HumpDownHump	224E		bumpy equals	MMALIAS bump
HumpEqual	224F		bumpy equals, equals	MMALIAS bumpe
lap	2272		less, approximate	ISOAMSR
lat	E33A		larger than	ISOAMSR
late	E33C		larger than or equal	ISOAMSR
lates	E33E		larger than or equal, slanted	ISOAMSR
lE	2266		less, double equals	ISOAMSR
LeftTee	22A3		dash, vertical	MMALIAS dashv
LeftTriangle	22B2		left triangle, open, variant	MMALIAS vltri
LeftTriangleEqual	22B4		left triangle, equals	MMALIAS ltrie
lEg	22DA		less, double equals, greater	ISOAMSR
leg	22DA		less, equals, greater	ISOAMSR
leqq	2266		less, double equals	MMALIAS lE

















leqslant	E425		less-than-or-equals, slant	MMALIAS les
les	E425		less-than-or-equals, slant	ISOAMSR
lescc	E357		less than, closed by curve, equal, slanted	ISOAMSR
lesdot	E31D		less-than-or-equal, slanted, dot inside	ISOAMSR
lesdoto	E31F		less-than-or-equal, slanted, dot above	ISOAMSR
lesdotor	E321		less-than-or-equal, slanted, dot above right	ISOAMSR
lesg	E32B		less, equal, slanted, greater	ISOAMSR
lesges	E331		less, equal, slanted, greater, equal, slanted	ISOAMSR
lessapprox	2272		less, approximate	MMALIAS lap
lessdot	22D6		less than, with dot	MMALIAS ltdot
lesseqgtr	22DA		less, equals, greater	MMALIAS leg
lesseqgtr	22DA		less, double equals, greater	MMALIAS lEg
LessEqualGreater	22DA		less, equals, greater	MMALIAS leg
LessFullEqual	2266		less, double equals	MMALIAS lE
LessGreater	2276		less, greater	MMALIAS lg
lessgtr	2276		less, greater	MMALIAS lg

















lesssim	2272		less, similar	MMALIAS lsim
LessSlantEqual	E425		less-than-or-equals, slant	MMALIAS les
LessTilde	2272		less, similar	MMALIAS lsim
lg	2276		less, greater	ISOAMSR
lgE	E32D		less, greater, equal	ISOAMSR
Ll	22D8		triple less-than	ISOAMSR
ll	226A		double less-than sign	MMALIAS Lt
lsim	2272		less, similar	ISOAMSR
lsime	E333		less, similar, equal	ISOAMSR
lsimg	E335		less, similar, greater	ISOAMSR
Lt	226A		double less-than sign	ISOAMSR
ltcc	E355		less than, closed by curve	ISOAMSR
ltcir	E325		less than, circle inside	ISOAMSR
ltdot	22D6		less than, with dot	ISOAMSR
lflarr	E35E		less than, left arrow	ISOAMSR
ltquest	E329		less than, questionmark above	ISOAMSR

















ltrie	22B4		left triangle, equals	ISOAMSR
mcomma	E31A		minus, comma above	ISOAMSR
mDDot	223A		minus with four dots, geometric properties	ISOAMSR
mid	2223		mid	ISOAMSR
mlcp	E30A		transversal intersection	ISOAMSR
models	22A7		models	ISOAMSR
mstpos	223E		most positive	ISOAMSR
NestedGreaterGreater	226B		double greater-than sign	MMALIAS Gt
NestedLessLess	226A		double less-than sign	MMALIAS Lt
pitchfork	22D4		pitchfork	MMALIAS fork
Pr	E35C		double precedes	ISOAMSR
pr	227A		precedes	ISOAMSR
prap	227E		precedes, approximate	ISOAMSR
prcue	227C		precedes, curly equals	ISOAMSR
prE	227C		precedes, double equals	ISOAMSR
pre	227C		precedes, equals	ISOAMSR

prec	227A		precedes	MMALIAS pr
precapprox	227E		precedes, approximate	MMALIAS prap
preccurlyeq	227C		precedes, curly equals	MMALIAS prcue
Precedes	227A		precedes	MMALIAS pr
PrecedesEqual	227C		precedes, equals	MMALIAS pre
PrecedesSlantEqual	227C		precedes, curly equals	MMALIAS prcue
PrecedesTilde	227E		precedes, similar	MMALIAS prsim
preceq	227C		precedes, equals	MMALIAS pre
precsim	227E		precedes, similar	MMALIAS prsim
Proportion	2237		/Colon, two colons	MMALIAS Colon
prsim	227E		precedes, similar	ISOAMSR
prurel	22B0		element precedes under relation	ISOAMSR
questeq	225F		equal with questionmark	MMALIAS equest
ratio	2236		ratio	ISOAMSR
RightTee	22A2		vertical, dash	MMALIAS vdash
RightTriangle	22B3		right triangle, open, variant	MMALIAS vrtri





















RightTriangleEqual	22B5		right triangle, equals	MMALIAS rtrie
risingdotseq	2253		equals, rising dots	MMALIAS erDot
rtrie	22B5		right triangle, equals	ISOAMSR
rtriltri	E359		right triangle above left triangle	ISOAMSR
Sc	E35D		double succeeds	ISOAMSR
sc	227B		succeeds	ISOAMSR
scap	227F		succeeds, approximate	ISOAMSR
sccue	227D		succeeds, curly equals	ISOAMSR
scE	227E		succeeds, double equals	ISOAMSR
sce	227D		succeeds, equals	ISOAMSR
scsim	227F		succeeds, similar	ISOAMSR
sdote	E319		equal, dot below	ISOAMSR
sfrown	E426		small down curve	ISOAMSR
shortmid	E301		shortmid	MMALIAS smid
shortparallel	E302		short parallel	MMALIAS spar
simg	E30C		similar, greater	ISOAMSR

simgE	E338		similar, greater, equal	ISOAMSR
siml	E30B		similar, less	ISOAMSR
simlE	E337		similar, less, equal	ISOAMSR
smallfrown	E426		small down curve	MMALIAS sfrown
smallsmile	E303		small up curve	MMALIAS ssmile
smid	E301		shortmid	ISOAMSR
smile	2323		up curve	ISOAMSR
smt	E339		smaller than	ISOAMSR
snte	E33B		smaller than or equal	ISOAMSR
sntes	E33D		smaller than or equal, slanted	ISOAMSR
spar	E302		short parallel	ISOAMSR
sqsub	228F		square subset	ISOAMSR
sqsube	2291		square subset, equals	ISOAMSR
sqsubset	228F		square subset	MMALIAS sqsub
sqsubseteq	2291		square subset, equals	MMALIAS sqsube
sqsup	2290		square superset	ISOAMSR

sqsupe	2292		square superset, equals	ISOAMSR
sqsupset	2290		square superset	MMALIAS sqsup
sqsupseteq	2292		square superset, equals	MMALIAS sqsupe
SquareSubset	228F		square subset	MMALIAS sqsub
SquareSubsetEqual	2291		square subset, equals	MMALIAS sqsube
SquareSuperset	2290		square superset	MMALIAS sqsup
SquareSupersetEqual	2292		square superset, equals	MMALIAS sqsupe
ssmile	E303		small up curve	ISOAMSR
Sub	22D0		double subset	ISOAMSR
subE	2286		subset, double equals	ISOAMSR
subedot	E34F		subset, equals, dot	ISOAMSR
submult	E343		subset, multiply	ISOAMSR
subplus	E341		subset, plus	ISOAMSR
subrarr	E33F		subset, right arrow	ISOAMSR
Subset	22D0		double subset	MMALIAS Sub
subteqq	2286		subset, double equals	MMALIAS subE

subsim	E345		subset, similar	ISOAMSR
subsub	E349		subset above subset	ISOAMSR
subsup	E347		subset above superset	ISOAMSR
succ	227B		succeeds	MMALIAS sc
succapprox	227F		succeeds, approximate	MMALIAS scap
succcurlyeq	227D		succeeds, curly equals	MMALIAS scue
Succeeds	227B		succeeds	MMALIAS sc
SucceedsEqual	227D		succeeds, equals	MMALIAS sce
SucceedsSlantEqual	227D		succeeds, curly equals	MMALIAS scue
SucceedsTilde	227F		succeeds, similar	MMALIAS scsim
succeq	227D		succeeds, equals	MMALIAS sce
succsim	227F		succeeds, similar	MMALIAS scsim
Sup	22D1		double superset	ISOAMSR
supsub	E34C		superset, subset, dash joining them	ISOAMSR
supE	2287		superset, double equals	ISOAMSR
supedot	E350		superset, equals, dot	ISOAMSR

suphsol	E34E	$\not\supseteq$	superset, solidus	ISOAMSR
suphsub	E34B	\supseteqsubset	superset, subset	ISOAMSR
suplarr	E340	\supseteqleftarrow	superset, left arrow	ISOAMSR
supmult	E344	\supseteqtimes	superset, multiply	ISOAMSR
supplus	E342	\supseteqplus	superset, plus	ISOAMSR
Supset	22D1	\supseteqsupseteq	double superset	MMALIAS Sup
supseteqq	2287	\equivsupseteq	superset, double equals	MMALIAS supE
supsim	E346	\supseteqsim	superset, similar	ISOAMSR
supsub	E348	\supseteqsub	superset above subset	ISOAMSR
supsup	E34A	\supseteqsup	superset above superset	ISOAMSR
thickapprox	E306	\thickapprox	thick approximate	MMALIAS thkap
thicksim	E429	\thicksim	thick similar	MMALIAS thksim
thkap	E306	\thickapprox	thick approximate	ISOAMSR
thksim	E429	\thicksim	thick similar	ISOAMSR
topfork	E31C	\pitchforktop	fork with top	ISOAMSR
trianglelefteq	22B4	\trianglelefteq	left triangle, equals	MMALIAS ltrie

triangleq	225C		triangle, equals	MMALIAS trie
trianglerighteq	22B5		right triangle, equals	MMALIAS rtrie
trie	225C		triangle, equals	ISOAMSR
twixt	226C		between	ISOAMSR
varpropto	221D		proportional, variant	MMALIAS vprop
vartriangleleft	22B2		left triangle, open, variant	MMALIAS vltri
vartriangleright	22B3		right triangle, open, variant	MMALIAS vrtri
Vbar	E30D		double vert, bar (under)	ISOAMSR
vBar	E310		vert, double bar (under)	ISOAMSR
vBarv	E312		double bar, vert over and under	ISOAMSR
VDash	22AB		double vert, double dash	ISOAMSR
Vdash	22A9		double vertical, dash	ISOAMSR
vDash	22A8		vertical, double dash	ISOAMSR
vdash	22A2		vertical, dash	ISOAMSR
Vdashl	E313		vertical, dash (long)	ISOAMSR
VerticalBar	2223		mid	MMALIAS mid
vltri	22B2		left triangle, open, variant	ISOAMSR
vprop	221D		proportional, variant	ISOAMSR
vrtri	22B3		right triangle, open, variant	ISOAMSR
Vvdash	22AA		triple vertical, dash	ISOAMSR
















Prev: [ISOAMSR Glyphs Extended](#)

















Up: [Chapter 6](#)

















Next: [MMALIAS Glyphs](#)
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













ISOTECH Characters alphabetically, with glyphs

General Technical Extended by MathML with aliases

Name	Unicode	Glyph	Description	Entity group
acd	E3A6		ac current	ISOTECH
aleph	2135		/aleph aleph, Hebrew	ISOTECH
And	E374		double logical and	ISOTECH
and	2227		logical and	ISOTECH
andand	E36E		two logical and	ISOTECH
andd	E394		and, horizontal dash	ISOTECH
andslope	E50A		sloping large and	ISOTECH
andv	E391		and with middle stem	ISOTECH
angrt	221F		right (90 degree) angle	ISOTECH
angsph	2222		/sphericalangle angle-spherical	ISOTECH
angst	212B		Angstrom capital A, ring	ISOTECH
ap	2248		approximate	ISOTECH
apacir	E38C		approximate, circumflex accent	ISOTECH
approx	2248		approximate	MMALIAS ap
awconint	2233		contour integral, anti-clockwise	ISOTECH

awint	E39B		anti clock-wise integration	ISOTECH
becaus	2235		because	ISOTECH
Because	2235		because	MMALIAS becaus
because	2235		because	MMALIAS becaus
bernou	212C		Bernoulli function (script capital B)	ISOTECH
blacksquare	25A0		square, filled	MMALIAS squarf
bne	E388		reverse not equal	ISOTECH
bnequiv	E387		reverse not equivalent	ISOTECH
bNot	E3AD		reverse not with two horizontal strokes	ISOTECH
bnot	2310		reverse not	ISOTECH
bot	22A5		bottom	MMALIAS bottom
bottom	22A5		bottom	ISOTECH
cap	2229		intersection	ISOTECH
Cconint	2230		triple contour integral operator	ISOTECH
circ	2218		composite function (small circle)	MMALIAS compfn
cirfnint	E395		circulation function	ISOTECH

ClockwiseContourIntegral	2232		contour integral, clockwise	MMALIAS cwconint
compfn	2218		composite function (small circle)	ISOTECH
cong	2245		congruent with	ISOTECH
Congruent	2261		identical with	MMALIAS equiv
Conint	222F		double contour integral operator	ISOTECH
conint	222E		contour integral operator	ISOTECH
ContourIntegral	222E		contour integral operator	MMALIAS conint
CounterClockwiseContourIntegral	2233		contour integral, anti-clockwise	MMALIAS awconint
ctdot	22EF		/cdots, three dots, centered	ISOTECH
cup	222A		union or logical sum	ISOTECH
cwconint	2232		contour integral, clockwise	ISOTECH
cwint	2231		clockwise integral	ISOTECH
cylcty	232D		cylindricity	ISOTECH
Del	2207		del, Hamilton operator	MMALIAS nabla
disin	E3A0		set membership, long horizontal stroke	ISOTECH
Dot	0308		dieresis or umlaut mark	ISOTECH

















DotDot	20DC		four dots above	ISOTECH
DoubleContourIntegral	222F		double contour integral operator	MMALIAS Conint
DoubleLeftArrow	21D0		is implied by	MMALIAS lArr
DoubleRightArrow	21D2		implies	MMALIAS rArr
DoubleVerticalBar	2225		parallel	MMALIAS par
DownTee	22A4		top	MMALIAS top
dsol	E3A9		solidus, bar above	ISOTECH
dtidot	22F1		/ddots, three dots, descending	ISOTECH
dwangle	E3AA		large downward pointing angle	ISOTECH
Element	2208		set membership, variant	MMALIAS isinv
elinters	E3A7		electrical intersection	ISOTECH
epar	22D5		parallel, equal; equal or parallel	ISOTECH
eparsl	E384		parallel, slanted, equal; homothetically congruent to	ISOTECH
equiv	2261		identical with	ISOTECH
eqvparsl	E386		equivalent, equal; congruent and parallel	ISOTECH
exist	2203		/exists at least one exists	ISOTECH

Exists	2203	\exists	/exists at least one exists	MMALIAS exist
fltns	E381	\square	flatness	ISOTECH
ForAll	2200	\forall	/forall for all	MMALIAS forall
forall	2200	\forall	/forall for all	ISOTECH
fpartint	E396	\int	finite part integral	ISOTECH
ge	2265	\geq	greater-than-or-equal	ISOTECH
geq	2265	\geq	greater-than-or-equal	MMALIAS ge
GreaterEqual	2265	\geq	greater-than-or-equal	MMALIAS ge
hamilt	210B	\mathcal{H}	Hamiltonian (script capital H)	ISOTECH
iff	E365	\Leftrightarrow	/iff if and only if	ISOTECH
iiiiint	E378	\iiint	quadruple integral operator	MMALIAS qint
iiint	222D	\iiint	triple integral operator	MMALIAS tint
iinfin	E372	∞	infinity sign, incomplete	ISOTECH
imped	E50B	\mathcal{Z}	impedance	ISOTECH
Implies	21D2	\Rightarrow	implies	MMALIAS rArr
in	220A	\in	set membership	MMALIAS isin

infin	221E	∞	/infty infinity	ISOTECH
infintie	E50C	∞	tie, infinity	ISOTECH
Int	222C	\iint	double integral operator	ISOTECH
int	222B	\int	integral operator	ISOTECH
Integral	222B	\int	integral operator	MMALIAS int
intlarhk	E39A	\int	integral, left arrow with hook	ISOTECH
isin	220A	\in	set membership	ISOTECH
isindot	E39C	$\dot{\in}$	set membership, dot above	ISOTECH
isinE	E39E	\E	set membership, two horizontal strokes	ISOTECH
isins	E3A4	\E	set membership, vertical bar on horizontal stroke	ISOTECH
isinsv	E3A2	\E	large set membership, vertical bar on horizontal stroke	ISOTECH
isinv	2208	\in	set membership, variant	ISOTECH
lagran	2112	\mathcal{L}	Lagrangian (script capital L)	ISOTECH
Lang	300A	$\langle\langle$	left angle bracket, double	ISOTECH
lang	3008	\langle	left angle bracket	ISOTECH
langle	3008	\langle	left angle bracket	MMALIAS lang

















lArr	21D0	\Leftarrow	is implied by	ISOTECH
lbrk	3014	\lbrack	left broken bracket	ISOTECH
le	2264	\leq	less-than-or-equal	ISOTECH
LeftAngleBracket	3008	\langle	left angle bracket	MMALIAS lang
Leftarrow	21D0	\Leftarrow	is implied by	MMALIAS lArr
leq	2264	\leq	less-than-or-equal	MMALIAS le
loang	3018	\lrcorner	left open angular bracket	ISOTECH
lobrk	301A	\lbrack	left open bracket	ISOTECH
lopar	E379	\lpar	left open parenthesis	ISOTECH
lowast	2217	\ast	low asterisk	ISOTECH
minus	2212	$-$	minus sign	ISOTECH
MinusPlus	2213	\mp	minus-or-plus sign	MMALIAS mnplus
mnplus	2213	\mp	minus-or-plus sign	ISOTECH
mp	2213	\mp	minus-or-plus sign	MMALIAS mnplus
nabla	2207	∇	del, Hamilton operator	ISOTECH
ne	2260	\neq	not equal	ISOTECH

nedot	E38A	\neq	not equal, dot	ISOTECH
nhpar	E38D	\parallel	not, horizontal, parallel	ISOTECH
ni	220D	\ni	contains	ISOTECH
nis	E3A5	\ni	contains, vertical bar on horizontal stroke	ISOTECH
nisd	E3A1	\ni	contains, long horizontal stroke	ISOTECH
niv	220B	\ni	contains, variant	ISOTECH
Not	E3AC	\neg	not with two horizontal strokes	ISOTECH
NotElement	2209	\notin	negated set membership	MMALIAS notin
NotEqual	2260	\neq	not equal	MMALIAS ne
notin	2209	\notin	negated set membership	ISOTECH
notin _{dot}	E39D	\notin	negated set membership, dot above	ISOTECH
notin _E	E50D	\notin	negated set membership, two horizontal strokes	ISOTECH
notin _{va}	E370	\notin	negated set membership, variant	ISOTECH
notin _{vb}	E37B	\notin	negated set membership, variant	ISOTECH
notin _{vc}	E37C	\notin	negated set membership, variant	ISOTECH
notni	220C	\ni	negated contains	ISOTECH

notniva	220C		negated contains, variant	ISOTECH
notnivb	E37D		contains, variant	ISOTECH
notnive	E37E		contains, variant	ISOTECH
NotReverseElement	220C		negated contains, variant	MMALIAS notniva
nparsl	E389		not parallel, slanted	ISOTECH
npart	E390		not partial differential	ISOTECH
npolint	E399		line integration, not including the pole	ISOTECH
nvinfin	E38E		not, vert, infinity	ISOTECH
oint	222E		contour integral operator	MMALIAS conint
olcross	E3A8		circle, cross	ISOTECH
Or	E375		double logical or	ISOTECH
or	2228		logical or	ISOTECH
ord	E393		or, horizontal dash	ISOTECH
order	2134		order of (script small o)	ISOTECH
oror	E50E		two logical or	ISOTECH
orslope	E3AE		sloping large or	ISOTECH

orv	E392	∇	or with middle stem	ISOTECH
par	2225	\parallel	parallel	ISOTECH
parallel	2225	\parallel	parallel	MMALIAS par
parsl	E382	\parallel	parallel, slanted	ISOTECH
part	2202	∂	/partial partial differential	ISOTECH
PartialD	2202	∂	/partial partial differential	MMALIAS part
permil	2030	‰	per thousand	ISOTECH
perp	22A5	\perp	perpendicular	ISOTECH
pertenk	2031	‱	per 10 thousand	ISOTECH
phmmat	2133	\mathcal{M}	physics M-matrix (script capital M)	ISOTECH
pointint	E376	\oint	integral around a point operator	ISOTECH
Prime	2033	''	double prime or second	ISOTECH
prime	2032	'''	/prime prime or minute	ISOTECH
profalar	232E	⊖	all-around profile	ISOTECH
proflin	2312	⤿	profile of a line	ISOTECH
profsurf	2313	⤿	profile of a surface	ISOTECH

prop	221D	\propto	is proportional to	ISOTECH
Proportional	221D	\propto	is proportional to	MMALIAS prop
propto	221D	\propto	is proportional to	MMALIAS prop
qint	E378	$\int\int\int\int$	quadruple integral operator	ISOTECH
qprime	E371	''''	quadruple prime	ISOTECH
quatint	E377	\oint	quaternion integral operator	ISOTECH
radic	221A	$\sqrt{\quad}$	/surd radical	ISOTECH
Rang	300B	$\rangle\rangle$	right angle bracket, double	ISOTECH
rang	3009	\rangle	right angle bracket	ISOTECH
rangle	3009	\rangle	right angle bracket	MMALIAS rang
rArr	21D2	\Rightarrow	implies	ISOTECH
rbbrk	3015	$\})$	right broken bracket	ISOTECH
ReverseElement	220B	\ni	contains, variant	MMALIAS niv
RightAngleBracket	3009	\rangle	right angle bracket	MMALIAS rang
Rightarrow	21D2	\Rightarrow	implies	MMALIAS rArr
roang	3019	$\})$	right open angular bracket	ISOTECH

robrk	301B		right open bracket	ISOTECH
ropar	E37A		right open parenthesis	ISOTECH
rppolint	E397		line integration, rectangular path around pole	ISOTECH
scpolint	E398		line integration, semi-circular path around pole	ISOTECH
sim	223C		similar	ISOTECH
simdot	E38B		similar, dot	ISOTECH
sime	2243		similar, equals	ISOTECH
simeq	2243		similar, equals	MMALIAS sime
SmallCircle	2218		composite function (small circle)	MMALIAS compfn
smeparsl	E385		similar, parallel, slanted, equal	ISOTECH
Sqrt	221A		/surd radical	MMALIAS radic
square	25A1		square	ISOTECH
squarf	25A0		square, filled	ISOTECH
strns	E380		straightness	ISOTECH
sub	2282		subset or is implied by	ISOTECH
sube	2286		subset, equals	ISOTECH

Subset	2282	\subset	subset or is implied by	MMALIAS sub
subset	2282	\subset	subset or is implied by	MMALIAS sub
subseteq	2286	\subseteq	subset, equals	MMALIAS sube
SubsetEqual	2286	\subseteq	subset, equals	MMALIAS sube
SuchThat	220D	\ni	contains	MMALIAS ni
sup	2283	\supset	superset or implies	ISOTECH
supe	2287	\supseteq	superset, equals	ISOTECH
Superset	2283	\supset	superset or implies	MMALIAS sup
SupersetEqual	2287	\supseteq	superset, equals	MMALIAS supe
supset	2283	\supset	superset or implies	MMALIAS sup
supseteq	2287	\supseteq	superset, equals	MMALIAS supe
tdot	20DB	$\ddot{\cdot}$	three dots above	ISOTECH
there4	2234	\therefore	therefore	ISOTECH
Therefore	2234	\therefore	therefore	MMALIAS there4
therefore	2234	\therefore	therefore	MMALIAS there4
Tilde	223C	\sim	similar	MMALIAS sim

TildeEqual	2243	\approx	similar, equals	MMALIAS sime
TildeFullEqual	2245	\cong	congruent with	MMALIAS cong
TildeTilde	2248	\approx	approximate	MMALIAS ap
tint	222D	\iiint	triple integral operator	ISOTECH
top	22A4	\top	top	ISOTECH
topbot	2336	\top	top and bottom	ISOTECH
topcir	E383	\top	top, circle below	ISOTECH
tprime	2034	$\#$	triple prime	ISOTECH
TripleDot	20DB	$\ddot{\cdot}$	three dots above	MMALIAS tdot
UpTee	22A5	\perp	perpendicular	MMALIAS perp
utdot	22F0	$\cdot^{\cdot^{\cdot}}$	three dots, ascending	ISOTECH
uwangle	E3AB	\sphericalangle	large upward pointing angle	ISOTECH
vangrt	22BE	\lrcorner	right angle, variant (with arc)	ISOTECH
vee	2228	\vee	logical or	MMALIAS or
veeeq	225A	\vee	logical or, equals	ISOTECH
Verbar	2016	$\ $	double vertical bar	ISOTECH
Vert	2016	$\ $	double vertical bar	MMALIAS Verbar
wedge	2227	\wedge	logical and	MMALIAS and
wedgeq	2259	\triangleq	corresponds to (wedge, equals)	ISOTECH
xnis	E3A3	\supseteq	large contains, vertical bar on horizontal stroke	ISOTECH

Prev: [ISOTECH Extended Glyphs](#)

















Up: [Chapter 6](#)

















Next: [ISOGRK3 Glyphs](#)
REC-MathML-19980407

















MMALIAS Characters alphabetically, with glyphs

MathML Aliases

Name	Unicode	Glyph	Description
And	2227	\wedge	logical and
angle	2220	\sphericalangle	angle
approx	2248	\approx	approximate
approxeq	224A	$\approx\! =$	approximate, equals
ast	2217	\ast	centered asterisk
backcong	224C	$\cong\! \leftarrow$	reverse congruent
backepsilon	E420	\backsimeq	such that
backprime	2035	$\prime\! \leftarrow$	reverse prime
backsim	223D	$\sim\! \leftarrow$	reverse similar
backsimeq	22CD	\backsimeq	reverse similar, equals
Backslash	2216	\backslash	reverse solidus
barwedge	22BC	$\bar{\wedge}$	logical and, bar above
Because	2235	\because	because
because	2235	\because	because
between	226C	\oslash	between

bigcap	22C2		intersection operator
bigcirc	25CB		large circle
bigcup	22C3		union operator
bigodot	2299		circle dot operator
bigoplus	2295		circle plus operator
bigotimes	2297		circle times operator
bigsqcup	2294		square union operator
bigstar	2605		star, filled
bigtriangledown	25BD		big down triangle, open
bigtriangleup	25B3		big up triangle, open
biguplus	228E		biguplus
bigvee	22C1		logical and operator
bigwedge	22C0		logical or operator
bkarow	E405		right broken arrow
blacklozenge	E501		lozenge, filled
blacksquare	25A0		square, filled

blacktriangle	25B4		up triangle, filled
blacktriangledown	25BE		down triangle, filled
blacktriangleleft	25C2		left triangle, filled
blacktriangleright	25B8		right triangle, filled
bot	22A5		bottom
boxminus	229F		minus sign in box
boxplus	229E		plus sign in box
boxtimes	22A0		multiply sign in box
Breve	0306		breve
bullet	2022		round bullet, filled
Bumpeq	224E		bumpy equals
bumpeq	224F		bumpy equals, equals
cdot	22C5		small middle dot
Cedilla	0327		cedilla
CenterDot	00B7		middle dot
centerdot	00B7		middle dot

















checkmark	2713		tick, check mark
circ	2218		composite function (small circle)
circpeq	2257		circle, equals
circlearrowleft	21BA		left arr in circle
circlearrowright	21BB		right arr in circle
circledast	229B		asterisk in circle
circledcirc	229A		small circle in circle
circleddash	229D		hyphen in circle
CircleDot	2299		middle dot in circle
circledR	00AF		registered sign
circledS	E41D		capital S in circle
CircleMinus	2296		minus sign in circle
CirclePlus	2295		plus sign in circle
CircleTimes	2297		multiply sign in circle
ClockwiseContourIntegral	2232		contour integral, clockwise
CloseCurlyDoubleQuote	201D		double quotation mark, right

CloseCurlyQuote	2019	'	single quotation mark, right
clubsuit	2663	♣	club suit symbol
coloneq	2254	:=	colon, equals
complement	2201	∁	complement sign
Congruent	2261	≡	identical with
ContourIntegral	222E	∮	contour integral operator
Coproduct	2210	∐	coproduct operator
CounterClockwiseContourIntegral	2233	∮	contour integral, anti-clockwise

















Cup	2323	∪	up curve
CupCap	224D	∩	asymptotically equal to
curlyeqprec	22DE	⋈	curly equals, precedes
curlyeqsucc	22DF	⋉	curly equals, succeeds
curlyvee	22CE	∨	curly logical or
curlywedge	22CF	∧	curly logical and
curvearrowleft	21B6	↷	left curved arrow
curvearrowright	21B7	↶	right curved arrow

















dbkarow	E207	\dashrightarrow	right doubly broken arrow
ddagger	2021	\ddagger	double dagger
ddotseq	E309	\equiv	equal with four dots
Del	2207	∇	del, Hamilton operator
DiacriticalAcute	0301	$\acute{\circ}$	acute accent
DiacriticalDot	0307	$\dot{\circ}$	dot above
DiacriticalDoubleAcute	030B	$\ddot{\circ}$	double acute accent
DiacriticalGrave	0300	$\grave{\circ}$	grave accent
DiacriticalTilde	0303	$\tilde{\circ}$	tilde
diamond	22C4	\blacklozenge	open diamond
diamondsuit	2662	\blacklozenge	diamond suit symbol
digamma	03DC	\digamma	digamma, old Greek
div	00F7	\div	divide sign
divideontimes	22C7	\div	division on times
doteq	2250	\doteq	equals, single dot above
doteqdot	2251	\doteqdot	equals, even dots

















DotEqual	2250	\doteq	equals, single dot above
dotminus	2238	$\dot{-}$	minus sign, dot above
dotplus	2214	$\dot{+}$	plus sign, dot above
dotsquare	22A1	\boxdot	small dot in box
doublebarwedge	2306	$\bar{\wedge}$	logical and, double bar above
DoubleContourIntegral	222F	\oiint	double contour integral operator
DoubleDot	0308	$\ddot{\cdot}$	dieresis
DoubleDownArrow	21D3	\Downarrow	down double arrow
DoubleLeftArrow	21D0	\Leftarrow	is implied by
DoubleLeftRightArrow	21D4	\Leftrightarrow	left and right double arrow
DoubleLongLeftArrow	E200	\Longleftarrow	long left double arrow
DoubleLongLeftRightArrow	E202	\Longleftrightarrow	long left and right double arr
DoubleLongRightArrow	E204	\Longrightarrow	long right double arr
DoubleRightArrow	21D2	\Rightarrow	implies
DoubleRightTee	22A8	\vDash	vertical, double dash
DoubleUpArrow	21D1	\Uparrow	up double arrow

















DoubleUpDownArrow	21D5		up&down double arrow
DoubleVerticalBar	2225		parallel
DownArrow	2193		downward arrow
Downarrow	21D3		down double arrow
downarrow	2193		downward arrow
DownArrowUpArrow	E216		down arrow, up arrow
downdownarrows	21CA		two down arrows
downharpoonleft	21C3		down harpoon-left
downharpoonright	21C2		down harpoon-rt
DownLeftVector	21BD		left harpoon-down
DownRightVector	21C1		right harpoon-down
DownTee	22A4		top
DownTeeArrow			
drbkarow	E209		twoheaded right broken arrow
Element	2208		set membership, variant
emptyset	E2D3		letter O slashed

















eqcirc	2256	⊘	circle on equals sign
eqcolon	2255	⌵	equals, colon
eqsim	2242	⋈	equals, similar
eqslantgtr	22DD	⋗	equal-or-gtr, slanted
eqslantless	22DC	⋖	eq-or-less, slanted
EqualTilde	2242	⋈	equals, similar
Equilibrium	21CC	⌚	right harp over l
Exists	2203	∃	/exists at least one exists
fallingdotseq	2252	⋎	equals, falling dots
ForAll	2200	∀	/forall for all
geq	2265	⩾	greater-than-or-equal
geqq	2267	⩵	greater, double equals
geqslant	E421	⩷	gt-or-equal, slanted
gg	226B	⩹	double greater-than sign
ggg	22D9	⩻	triple gtr-than
gnapprox	E411	⩺	greater, not approximate

















gneq	2269		greater, not equals
gneqq	2269		greater, not double equals
GreaterEqual	2265		greater-than-or-equal
GreaterEqualLess	22DB		greater, equals, less
GreaterFullEqual	2267		greater, double equals
GreaterLess	2277		greater, less
GreaterSlantEqual	E421		gt-or-equal, slanted
GreaterTilde	2273		greater, similar
gtrapprox	2273		greater, approximate
gtrdot	22D7		greater than, with dot
gtreqless	22DB		greater, equals, less
gtreqqless	22DB		gt, double equals, less
gtrless	2277		greater, less
gtrsim	2273		greater, similar
gvertneqq	E2A1		gt, vert, not double equals
Hacek	030C		caron

















Hat	0302		circumflex accent
hbar	E2D5		Planck's over 2pi
heartsuit	2661		heart suit symbol
hksearrow	E20B		SE arrow-hooked
hkswarrow	E20A		SW arrow-hooked
hookleftarrow	21A9		left arrow-hooked
hookrightarrow	21AA		right arrow-hooked
hslash	210F		variant Planck's over 2pi
HumpDownHump	224E		bumpy equals
HumpEqual	224F		bumpy equals, equals
iiiiint	E378		quadruple integral operator
iiint	222D		triple integral operator
Im	2111		imaginary
Implies	21D2		implies
in	220A		set membership
Integral	222B		integral operator

















intercal	22BA		intercal
Intersection	22C2		intersection operator
intprod	E259		interior product
langle	3008		left angle bracket
lbrace	007B		left curly bracket
lbrack	005B		left square bracket
LeftAngleBracket	3008		left angle bracket
LeftArrow	2190		leftward arrow
Leftarrow	21D0		is implied by
leftarrow	2190		leftward arrow
LeftArrowRightArrow	21C6		left arr over right arr
leftarrowtail	21A2		left arrow-tailed
LeftCeiling	2308		left ceiling
LeftDownVector	21C3		down harpoon-left
LeftFloor	230A		left floor
leftharpoondown	21BD		left harpoon-down

leftharpoonup	21BC		left harpoon-up
leftleftarrows	21C7		two left arrows
LeftRightArrow	2194		left and right arrow
Leftrightarrow	21D4		left and right double arrow
leftrightarrow	2194		left and right arrow
leftrightarrows	21C6		left arr over right arr
leftrightharpoons	21CB		left harp over r
leftrightsquigarrow	21AD		left and right arr-wavy
LeftTee	22A3		dash, vertical
LeftTeeArrow			
leftthreetimes	22CB		leftthreetimes
LeftTriangle	22B2		left triangle, open, variant
LeftTriangleEqual	22B4		left triangle, equals
LeftUpVector	21BF		up harpoon-left
LeftVector	21BC		left harpoon-up
leq	2264		less-than-or-equal

















leqq	2266		less, double equals
leqslant	E425		less-than-or-equals, slant
lessapprox	2272		less, approximate
lessdot	22D6		less than, with dot
lesseqgtr	22DA		less, equals, greater
lesseqgtr	22DA		less, double equals, greater
LessEqualGreater	22DA		less, equals, greater
LessFullEqual	2266		less, double equals
LessGreater	2276		less, greater
lessgtr	2276		less, greater
lesssim	2272		less, similar
LessSlantEqual	E425		less-than-or-equals, slant
LessTilde	2272		less, similar
ll	226A		double less-than sign
llcorner	231E		lower left corner
Lleftarrow	21DA		left triple arrow

lmoustache	E294		left moustache
lnapprox	E2A2		less, not approximate
lneq	2268		less, not equals
lneqq	2268		less, not double equals
LongLeftArrow	E201		long left arrow
Longleftarrow	E200		long left double arrow
longleftarrow	E201		long left arrow
LongLeftRightArrow	E203		long left and right arr
Longleftrightarrow	E202		long left and right double arr
longleftrightarrow	E203		long left and right arr
longmapsto	E208		longmapsto
LongRightArrow	E205		long right arrow
Longrightarrow	E204		long right double arr
longrightarrow	E205		long right arrow
looparrowleft	21AB		left arrow-looped
looparrowright	21AC		right arrow-looped

















LowerLeftArrow	2199		SW pointing arrow
LowerRightArrow	2198		SE pointing arrow
lozenge	25CA		lozenge or total mark
lrcorner	231F		lower right corner
Lsh	21B0		Lsh
lvertneqq	E2A4		less, vert, not double equals
maltese	2720		maltese cross
mapsto	21A6		mapsto
measuredangle	2221		angle-measured
MinusPlus	2213		minus-or-plus sign
mp	2213		minus-or-plus sign
multimap	22B8		multimap
napprox	2249		not approximate
natural	266E		music natural
nearrow	2197		NE pointing arrow
NestedGreaterGreater	226B		double greater-than sign

















NestedLessLess	226A		double less-than sign
nexists	2204		negated exists
ngeq	E2A6		not greater-than-or-equal
ngeqq	2271		not greater, double equals
ngeqslant	2271		not gt-or-equals, slanted
ngtr	226F		not greater-than
nLeftarrow	21CD		not implied by
nleftarrow	219A		not left arrow
nLeftrightarrow	21CE		not left and right double arr
nlefttrightarrow	21AE		not left and right arrow
nleq	E2A7		not less-than-or-equal
nleqq	2270		not less, double equals
nleqslant	2270		not less-or-equals, slant
nless	226E		not less-than
NotCongruent	2262		not identical with
NotCupCap			

NotDoubleVerticalBar	2226	\nparallel	not parallel
NotElement	2209	\notin	negated set membership
NotEqual	2260	\neq	not equal
NotEqualTilde		$\not\sim$	
NotExists	2204	\nexists	negated exists
NotGreater	226F	\nlessgtr	not greater-than
NotGreaterEqual	E2A6	\nlessgtr	not greater-than-or-equal
NotGreaterFullEqual	2270	\nlessgtr	not less, double equals
NotGreaterGreater	E2CC	\nlessgtr	not much greater than, variant
NotGreaterLess	2279	\nlessgtr	not, vert, greater, less
NotGreaterSlantEqual	2271	\nlessgtr	not gt-or-equals, slanted
NotGreaterTilde	2275	\nlessgtr	not greater, similar
NotHumpDownHump		\nlessgtr	
NotHumpEqual		\nlessgtr	
NotLeftTriangle	22EA	\nlessgtr	not left triangle
NotLeftTriangleEqual	22EC	\nlessgtr	not left triangle, equals

















NotLess	226E		not less-than
NotLessEqual	E2A7		not less-than-or-equal
NotLessGreater	2278		not, vert, less, greater
NotLessLess	E2CB		not much less than, variant
NotLessSlantEqual	2270		not less-or-equals, slant
NotLessTilde	2274		not less, similar
NotPrecedes	2280		not precedes
NotPrecedesEqual	E412		not precedes, equals
NotPrecedesSlantEqual	22E0		not curly precedes, equals
NotReverseElement	220C		negated contains, variant
NotRightTriangle	22EB		not right triangle
NotRightTriangleEqual	22ED		not right triangle, equals
NotSquareSubsetEqual	22E2		not, square subset, equals
NotSquareSuperset			
NotSquareSupersetEqual	22E3		not, square superset, equals
NotSubset	2284		not subset, variant

















NotSucceeds	2281	\nrightarrow	not succeeds
NotSucceedsEqual	E413	\nrightarrow	not succeeds, equals
NotSucceedsSlantEqual	22E1	\nrightarrow	not succeeds, curly equals
NotSuperset	2285	$\not\supset$	not superset, variant
NotTilde	2241	\napprox	not similar
NotTildeEqual	2244	\napprox	not similar, equals
NotTildeFullEqual	2247	\ncong	not congruent with
NotTildeTilde	2249	\napprox	not approximate
NotVerticalBar	2224	\nmid	negated mid
nparallel	2226	\nparallel	not parallel
nprec	2280	\nprec	not precedes
npreceq	E412	\nprec	not precedes, equals
nRightarrow	21CF	\nrightarrow	not implies
nrightarrow	219B	\rightarrow	not right arrow
nshortmid	E2AA	\nmid	negated short mid
nshortparallel	E2AB	\nparallel	not short par

nsimeq	2244		not similar, equals
nsubset	2284		not subset, variant
nsubseteq	2288		not subset, equals
nsubseteqq	2288		not subset, double equals
nsucc	2281		not succeeds
nsucceq	E413		not succeeds, equals
nsupset	2285		not superset, variant
nsupseteq	2289		not superset, equals
nsupseteqq	2289		not superset, double equals
ntriangleleft	22EA		not left triangle
ntrianglelefteq	22EC		not left triangle, equals
ntriangleright	22EB		not right triangle
ntrianglerighteq	22ED		not right triangle, equals
nwarrow	2196		NW pointing arrow
oint	222E		contour integral operator
OpenCurlyDoubleQuote	201C		double quotation mark, left

















OpenCurlyQuote	2018		single quotation mark, left
oslash	2298		solidus in circle
parallel	2225		parallel
PartialD	2202		/partial partial differential
pitchfork	22D4		pitchfork
PlusMinus	00B1		plus-or-minus sign
pm	00B1		plus-or-minus sign
prec	227A		precedes
precapprox	227E		precedes, approximate
preccurlyeq	227C		precedes, curly equals
Precedes	227A		precedes
PrecedesEqual	227C		precedes, equals
PrecedesSlantEqual	227C		precedes, curly equals
PrecedesTilde	227E		precedes, similar
preceq	227C		precedes, equals
precnapprox	22E8		precedes, not approx

















precneqq	E2B3	\neq	precedes, not double equals
precnsim	22E8	\nnsim	precedes, not similar
precsim	227E	\sim	precedes, similar
Proportion	2237	$::$	/Colon, two colons
Proportional	221D	\propto	is proportional to
propto	221D	\propto	is proportional to
questeq	225F	$\stackrel{?}{=}$	equal with questionmark
rangle	3009	\rangle	right angle bracket
rbrace	007D	$\}$	right curly bracket
rbrack	005D	$\]$	right square bracket
Re	211C	\mathbb{R}	real
ReverseElement	220B	\ni	contains, variant
ReverseEquilibrium	21CB	\rightleftharpoons	left harp over r
ReverseUpEquilibrium	E217	\updownarrow	down harp, up harp
RightAngleBracket	3009	\rangle	right angle bracket
RightArrow	2192	\rightarrow	rightward arrow

















Rightarrow	21D2		implies
rightarrow	2192		rightward arrow
RightArrowLeftArrow	21C4		right arr over left arr
rightarrowtail	21A3		right arrow-tailed
RightCeiling	2309		right ceiling
RightDownVector	21C2		down harpoon-rt
RightFloor	230B		right floor
rightharpoondown	21C1		right harpoon-down
rightharpoonup	21C0		right harpoon-up
rightleftarrows	21C4		right arr over left arr
rightleftharpoons	21CC		right harp over l
rightrightarrow	21C9		two right arrows
rightsquigarrow	219D		right arrow-wavy
RightTee	22A2		vertical, dash
RightTeeArrow	21A6		mapsto
rightthreetimes	22CC		righthreetimes

















RightTriangle	22B3		right triangle, open, variant
RightTriangleEqual	22B5		right triangle, equals
RightUpVector	21BE		up harp-r
RightVector	21C0		right harpoon-up
risingdotseq	2253		equals, rising dots
rmoustache	E293		right moustache
Rrightarrow	21DB		right triple arrow
Rsh	21B1		Rsh
searrow	2198		SE pointing arrow
setminus	2216		reverse solidus
ShortLeftArrow	E233		short left arrow
shortmid	E301		shortmid
shortparallel	E302		short parallel
ShortRightArrow	E232		short right arrow
simeq	2243		similar, equals
SmallCircle	2218		composite function (small circle)

















smallfrown	E426	⤿	small down curve
smallsetminus	E844	∖	sm reverse solidus
smallsmile	E303	⤿	small up curve
spadesuit	2660	♠	spades suit symbol
Sqrt	221A	√	/surd radical
sqsubset	228F	⊆	square subset
sqsubseteq	2291	⊆	square subset, equals
sqsupset	2290	⊇	square superset
sqsupseteq	2292	⊇	square superset, equals
SquareIntersection	2293	⊠	square intersection
SquareSubset	228F	⊆	square subset
SquareSubsetEqual	2291	⊆	square subset, equals
SquareSuperset	2290	⊇	square superset
SquareSupersetEqual	2292	⊇	square superset, equals
SquareUnion	2294	⊎	square union
Star	22C6	★	small star, filled, low









star	22C6		small star, filled, low
straightepsilon	220A		small epsilon, Greek
straightphi	03C6		small phi, Greek
Subset	22D0		double subset
subset	2282		subset or is implied by
subseteq	2286		subset, equals
subseteqq	2286		subset, double equals
SubsetEqual	2286		subset, equals
subsetneq	228A		subset, not equals
subsetneqq	228A		subset, not double equals
succ	227B		succeeds
succapprox	227F		succeeds, approximate
succcurlyeq	227D		succeeds, curly equals
Succeeds	227B		succeeds
SucceedsEqual	227D		succeeds, equals
SucceedsSlantEqual	227D		succeeds, curly equals

SucceedsTilde	227F		succeeds, similar
succeq	227D		succeeds, equals
succnapprox	22E9		succeeds, not approx
succneqq	E2B5		succeeds, not double equals
succnsim	22E9		succeeds, not similar
succsim	227F		succeeds, similar
SuchThat	220D		contains
Sum	2211		summation operator
Superset	2283		superset or implies
SupersetEqual	2287		superset, equals
Supset	22D1		double superset
supset	2283		superset or implies
supseteq	2287		superset, equals
supseteqq	2287		superset, double equals
supsetneq	228B		superset, not equals
supsetneqq	228B		superset, not double equals

swarrow	2199		SW pointing arrow
Therefore	2234		therefore
therefore	2234		therefore
thickapprox	E306		thick approximate
thicksim	E429		thick similar
Tilde	223C		similar
TildeEqual	2243		similar, equals
TildeFullEqual	2245		congruent with
TildeTilde	2248		approximate
toea	E20E		NE & SE arrows
tosa	E20F		SE & SW arrows
triangle	25B5		up triangle, open
triangledown	25BF		down triangle, open
triangleleft	25C3		left triangle, open
trianglelefteq	22B4		left triangle, equals
triangleq	225C		triangle, equals

triangleright	25B9		right triangle, open
trianglerighteq	22B5		right triangle, equals
TripleDot	20DB		three dots above
twoheadleftarrow	219E		twoheadleftarrow
twoheadrightarrow	21A0		twoheadrightarrow
ulcorner	231C		upper left corner
Union	22C3		union operator
UnionPlus	228E		plus sign in union
UpArrow	2191		upward arrow
Uparrow	21D1		up double arrow
uparrow	2191		upward arrow
UpArrowDownArrow	21C5		up arrow, down arrow
UpDownArrow	2195		up&down arrow
Updownarrow	21D5		up&down double arrow
updownarrow	2195		up&down arrow
UpEquilibrium	E218		up harp, down harp

upharpoonleft	21BF		up harpoon-left
upharpoonright	21BE		up harp-r
UpperLeftArrow	2196		NW pointing arrow
UpperRightArrow	2197		NE pointing arrow
Upsilon	03D2		capital Upsilon, Greek
upsilon	03C5		small upsilon, Greek
UpTee	22A5		perpendicular
upuparrows	21C8		two up arrows
urcorner	231D		upper right corner
varepsilon	03B5		rounded small epsilon, Greek
varkappa	03F0		rounded small kappa, Greek
varnothing	2205		circle, slash
varphi	03D5		curly or open small phi, Greek
varpi	03D6		rounded small pi (pomega), Greek
varpropto	221D		proportional, variant
varrho	03F1		rounded small rho, Greek

varsigma	03C2		terminal sigma, Greek
varsubsetneq	E2B9		subset, not equals, variant
varsubsetneqq	E2B8		subset not double equals, variant
varsupsetneq	E2BA		superset, not equals, variant
varsupsetneqq	E2BB		super not double equals, variant
vartheta	03D1		curly or open theta
vartriangleleft	22B2		left triangle, open, variant
vartriangleright	22B3		right triangle, open, variant

<TD

Prev: [MMALIAS Glyphs](#)

Up: [Chapter 6](#)

Next: [ISOMOPF Glyphs](#)
REC-MathML-19980407

ISOGRK3 Characters alphabetically, with glyphs

Greek Letter Symbols

Name	Unicode	Glyph	Description
alpha	03B1	α	small alpha, Greek
beta	03B2	β	small beta, Greek
chi	03C7	χ	small chi, Greek
Delta	0394	Δ	capital Delta, Greek
delta	03B4	δ	small delta, Greek
epsi	220A	ε	small epsilon, Greek
epsiv	03B5	ε	rounded small epsilon, Greek
eta	03B7	η	small eta, Greek
Gamma	0393	Γ	capital Gamma, Greek
gamma	03B3	γ	small gamma, Greek
Gammad	03DC	Ϝ	capital digamma
gammad	03DC	ϝ	digamma, old Greek
iota	03B9	ι	small iota, Greek
kappa	03BA	κ	small kappa, Greek
kappav	03F0	ϕ	rounded small kappa , Greek

Lambda	039B	Λ	capital Lambda, Greek
lambda	03BB	λ	small lambda, Greek
mu	03BC	μ	small mu, Greek
nu	03BD	ν	small nu, Greek
Omega	03A9	Ω	capital Omega, Greek
omega	03C9	ω	small omega, Greek
omicron	03BE	ξ	small omicron, Greek
Phi	03A6	Φ	capital Phi, Greek
phi	03C6	ϕ	small phi, Greek
phiv	03D5	φ	curly or open small phi, Greek
Pi	03A0	Π	capital Pi, Greek
pi	03C0	π	small pi, Greek
piv	03D6	ϖ	rounded small pi (pomega), Greek
Psi	03A8	Ψ	capital Psi, Greek
psi	03C8	ψ	small psi, Greek
rho	03C1	ρ	small rho, Greek

rhov	03F1	$\var�$	rounded small rho, Greek
Sigma	03A3	Σ	capital Sigma, Greek
sigma	03C3	σ	small sigma, Greek
sigmav	03C2	ς	terminal sigma, Greek
tau	03C4	τ	small tau, Greek
Theta	0398	Θ	capital Theta, Greek
theta	03B8	θ	straight theta, small theta, Greek
thetav	03D1	ϑ	curly or open theta
Upsi	03D2	Υ	capital Upsilon, Greek
upsi	03C5	υ	small upsilon, Greek
Xi	039E	Ξ	capital Xi, Greek
xi	03BE	ξ	small xi, Greek
zeta	03B6	ζ	small zeta, Greek

Prev: [ISOGRK3 Glyphs](#)

Up: [Chapter 6](#)

Next: [ISOMOPF Glyphs](#)
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ISOMSCR Characters alphabetically, with glyphs

Mathematical Script Font

Name	Unicode	Glyph	Description
Ascr	E4C5	<i>A</i>	script letter A
ascr	E4DF	<i>a</i>	script letter a
Bscr	E4C6	<i>B</i>	script letter B
bscr	E4E0	<i>b</i>	script letter b
Cscr	E4C7	<i>C</i>	script letter C
cscr	E4E1	<i>c</i>	script letter c
Dscr	E4C8	<i>D</i>	script letter D
dscr	E4E2	<i>d</i>	script letter d
Escr	E4C9	<i>E</i>	script letter E
escr	E4E3	<i>e</i>	script letter e
Fscr	E4CA	<i>F</i>	script letter F
fscr	E4E4	<i>f</i>	script letter f
Gscr	E4CB	<i>G</i>	script letter G
gscr	E4E5	<i>g</i>	script letter g
Hscr	E4CC	<i>H</i>	script letter H

hscr	E4E6	<i>h</i>	script letter h
Iscr	E4CD	<i>I</i>	script letter I
iscr	E4E7	<i>i</i>	script letter i
Jscr	E4CE	<i>J</i>	script letter J
jscr	E4E8	<i>j</i>	script letter j
Kscr	E4CF	<i>K</i>	script letter K
kscr	E4E9	<i>k</i>	script letter k
Lscr	E4D0	<i>L</i>	script letter L
lscr	E4EA	<i>l</i>	script letter l
Mscr	E4D1	<i>M</i>	script letter M
mscr	E4EB	<i>m</i>	script letter m
Nscr	E4D2	<i>N</i>	script letter N
nscr	E4EC	<i>n</i>	script letter n
Oscr	E4D3	<i>O</i>	script letter O
oscr	E4ED	<i>o</i>	script letter o
Pscr	E4D4	<i>P</i>	script letter P

pscr	E4EE	<i>p</i>	script letter p
Qscr	E4D5	<i>Q</i>	script letter Q
qscr	E4EF	<i>q</i>	script letter q
Rscr	E4D6	<i>R</i>	script letter R
rscr	211B	<i>r</i>	script letter r
Sscr	E4D7	<i>S</i>	script letter S
sscr	E4F0	<i>s</i>	script letter s
Tscr	E4D8	<i>T</i>	script letter T
tscr	E4F1	<i>t</i>	script letter t
Uscr	E4D9	<i>U</i>	script letter U
user	E4F2	<i>u</i>	script letter u
Vscr	E4DA	<i>V</i>	script letter V
vscr	E4F3	<i>v</i>	script letter v
Wscr	E4DB	<i>W</i>	script letter W
wscr	E4F4	<i>w</i>	script letter w
Xscr	E4DC	<i>X</i>	script letter X

xscr	E4F5	<i>x</i>	script letter x
Yscr	E4DD	<i>Y</i>	script letter Y
yscr	E4F6	<i>y</i>	script letter y
Zscr	E4DE	<i>Z</i>	script letter Z
zscr	E4F7	<i>z</i>	script letter z

Prev: [ISOMSCR Glyphs](#)












Up: [Chapter 6](#)

Next: [ISOMFRK Glyphs](#)
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ISOMOPF Characters alphabetically, with glyphs

Mathematical Open Face

Name	Unicode	Glyph	Description
Aopf	E4AF	Ⓐ	open face letter A
Bopf	E4B0	Ⓑ	open face letter B
Copf	2102	Ⓒ	open face letter C
Dopf	E4B1	Ⓓ	open face letter D
Eopf	E4B2	Ⓔ	open face letter E
Fopf	E4B3	Ⓕ	open face letter F
Gopf	E4B4	Ⓖ	open face letter G
Hopf	E4B5	Ⓖ	open face letter H
Iopf	E4B6	Ⓖ	open face letter I
Jopf	E4B7	Ⓖ	open face letter J
Kopf	E4B8	Ⓖ	open face letter K
Lopf	E4B9	Ⓖ	open face letter L
Mopf	E4BA	Ⓖ	open face letter M
Nopf	E4BB	Ⓖ	open face letter N
Oopf	E4BC	Ⓖ	open face letter O

Popf	2119		open face letter P
Qopf	211A		open face letter Q
Ropf	211D		open face letter R
Sopf	E4BD		open face letter S
Topf	E4BE		open face letter T
Uopf	E4BF		open face letter U
Vopf	E4C0		open face letter V
Wopf	E4C1		open face letter W
Xopf	E4C2		open face letter X
Yopf	E4C3		open face letter Y
Zopf	E4C4		open face letter Z

Prev: [ISOMOPF Glyphs](#)

Up: [Chapter 6](#)

Next:

REC-MathML-19980407

ISOMFRK Characters alphabetically, with glyphs

Mathematical Fraktur

Name	Unicode	Glyph	Description
Afr	E47C	ⱦ	fraktur letter A
afr	E495	ⱦ	fraktur letter a
Bfr	E47D	Ⱨ	fraktur letter B
bfr	E496	Ⱨ	fraktur letter b
Cfr	E47E	ⱨ	fraktur letter C
cfr	E497	ⱨ	fraktur letter c
Dfr	E47F	Ⱪ	fraktur letter D
dfr	E498	Ⱪ	fraktur letter d
Efr	E480	ⱪ	fraktur letter E
efr	E499	ⱪ	fraktur letter e
Ffr	E481	Ⱬ	fraktur letter F
ffr	E49A	Ⱬ	fraktur letter f
Gfr	E482	ⱬ	fraktur letter G
gfr	E49B	ⱬ	fraktur letter g
Hfr	E483	Ɑ	fraktur letter H

hfr	E49C	ℎ	fraktur letter h
Ifr	E484	ℑ	fraktur letter I
ifr	E49D	ℐ	fraktur letter i
Jfr	E485	ℐ	fraktur letter J
jfr	E49E	ℓ	fraktur letter j
Kfr	E486	℔	fraktur letter K
kfr	E49F	ℕ	fraktur letter k
Lfr	E487	ℒ	fraktur letter L
lfr	E4A0	ℓ	fraktur letter l
Mfr	E488	℔	fraktur letter M
mfr	E4A1	ℓ	fraktur letter m
Nfr	E489	℔	fraktur letter N
nfr	E4A2	ℓ	fraktur letter n
Ofr	E48A	℔	fraktur letter O
ofr	E4A3	℔	fraktur letter o
Pfr	E48B	℔	fraktur letter P

pfr	E4A4	Ɔ	fraktur letter p
Qfr	E48C	Ɔ	fraktur letter Q
qfr	E4A5	Ɔ	fraktur letter q
Rfr	E48D	Ɔ	fraktur letter R
rfr	E4A6	Ɔ	fraktur letter r
Sfr	E48E	Ɔ	fraktur letter S
sfr	E4A7	Ɔ	fraktur letter s
Tfr	E48F	Ɔ	fraktur letter T
tfr	E4A8	Ɔ	fraktur letter t
Ufr	E490	Ɔ	fraktur letter U
ufr	E4A9	Ɔ	fraktur letter u
Vfr	E491	Ɔ	fraktur letter V
vfr	E4AA	Ɔ	fraktur letter v
Wfr	E492	Ɔ	fraktur letter W
wfr	E4AB	Ɔ	fraktur letter w
Xfr	E493	Ɔ	fraktur letter X

xfr	E4AC	⌘	fraktur letter x
Yfr	E494	Ÿ	fraktur letter Y
yfr	E4AD	ÿ	fraktur letter y
Zfr	2124	Z	fraktur letter Z
zfr	E4AE	z	fraktur letter z