

Information technology - SGML support facilities
- Techniques for using SGML
Part 13: Public entity sets for mathematics and
sciences

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1 Scope

Tens of thousands of graphic characters are used in publishing text, a large proportion of which have been defined in ISO/IEC 10646. Even where standard coded representations exist, however, there may be situations in which they cannot be keyboarded conveniently or accurately, or in which it is not possible to display the desired visual depiction of the characters.

To help overcome these barriers to the successful interchange of SGML and related documents, this part of ISO/IEC TR 9573 defines character entity sets for some widely used special graphic characters regularly used in the production of scientific and mathematical documents.

Note 1: Entity repertoires are necessarily larger and more repetitious than character sets, as they deal in general with higher-level constructs. For example, unique entities have been defined for each accented Latin alphabetic character, while a character set might represent such characters as combinations of letters and diacritical mark characters.

In many instances upper- and lower-case is used to differentiate the names of entities. It is assumed that any SGML concrete syntax used in conjunction with these entity names will be case sensitive.

Note 2: The reference concrete syntax defined in ISO/IEC 8879 (SGML) is case sensitive.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC TR 9573. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC TR 9573 are encouraged to investigate the possibility of applying changes made in more recent editions of referenced standards.

ISO/IEC 8879:1986

ISO/IEC 9541-1:1991

ISO/IEC 10646-1:2000/Amd 1:2002

ISO/IEC 10646-2:2001

3 Definitions

For the purposes of this part of ISO/IEC TR 9573 the definitions given in ISO/IEC 8879 apply.

4 General considerations

This edition of the standard has been aligned with the Unicode 3.2 updates to ISO/IEC 10646:2000, as covered by Amendment 1 to the standard. For the purposes of backwards compatibility the names assigned to the characters in the original edition of the standard are shown before those assigned to the character in ISO/IEC 10646. References to characters in this part should, however, refer to the ISO/IEC 10646 name rather than the name originally assigned by ISO/IEC TR 9573.

4.1 Format of Descriptions

To follow

4.2 Corresponding Display Entity Sets

Each character has a characteristic visual description known as a "glyph". Systems using these entity sets need to be able to convert each entity reference to an appropriate glyph. Where character sets based on ISO/IEC 10646 are available this is typically done by conversion to an entity reference of the form &xnnnnn; where nnnnn is the five digit hexadecimal code listed in the column headed Unicode/10646, where the first character indicates the plane of ISO/IEC 10646 to which the character has been assigned. The entity name and descriptive comment are added to the definition, giving it the form:

```
<!ENTITY frac78 "⅞"><!-- VULGAR FRACTION SEVEN EIGHTHS-->
```

5 Comparison with other sets of entity definitions

5.1 Differences between MathML and Stix Data

The Stix consortium maintains a table of information about mathematical characters, including mappings to ISO/IEC entity sets. The following is an annotated list of cases where entity definitions appear to be different in these two collection.

During the review of this draft document these alignment issues will be reviewed and resolved.

Entity: [cudarr] [ISOAMSA]
 MathML [U+2935] [ARROW POINTING RIGHTWARDS THEN CURVING DOWNWARDS]
 Stix [U+2939] []

Entity: [larrpl] [ISOAMSA]
 MathML [U+2939] [LEFT-SIDE ARC ANTICLOCKWISE ARROW]
 Stix [U+2946] []

Entity: [nvhArr] [ISOAMSA]
 MathML [] []
 Stix [U+2904] []
 MathML (and 9573) have this as nvHarr which was probably a typo, stix has it as nvhArr

Entity: [olarr] [ISOAMSA]
 MathML [U+21BA] [ANTICLOCKWISE OPEN CIRCLE ARROW]
 Stix [U+2940] []
 I think MML is right but 9573 sample has an "almost closed" arrow, so stix went for closed rather than open,

Entity: [orarr] [ISOAMSA]
 MathML [U+21BB] [CLOCKWISE OPEN CIRCLE ARROW]
 Stix [U+2941] []
 I think MML is right but 9573 sample has an "almost closed" arrow, so stix went for closed rather than open,

Entity: [xzigrarr] [ISOAMSA]
 MathML [] []
 Stix [U+27FF] []
 MathML (and 9573) have this as dzigrarr which was probably a typo, stix has it as xzigrarr

Entity: [iprodr] [ISOAMSB]
 MathML [] []
 Stix [U+2A3D] []
 Not in MathML data

Entity: [midast] [ISOAMSB]
 MathML [U+002A] [ASTERISK]
 Stix [U+2217] []
 MathML has hyphen, Stix has figure dash (I think Stix is right).

Entity: [race] [ISOAMSB]
 MathML [U+29DA] [LEFT DOUBLE WIGGLY FENCE]
 Stix [] []

Entity: [veebar] [ISOAMSB]
 MathML [U+22BB] [XOR]
 Stix [U+2A61] []

Entity: [xcirc][ISOAMSB]
 MathML [U+25EF][LARGE CIRCLE]
 Stix [U+25CB][]

Entity: [nGt][ISOAMSN]
 MathML [<226B,20D2>][MUCH GREATER THAN with vertical line]
 Stix [<2AA2,20D2>][]
 Gt in Stix and 9573 doc has double >> with all four ends in a vertical line, MathML currently has >>. MathML change?

Entity: [nLt][ISOAMSN]
 MathML [<226A,20D2>][MUCH LESS THAN with vertical line]
 Stix [<2AA1,20D2>][]
 Gt in Stix and 9573 doc has double >> with all four ends in a vertical line, MathML currently has >>. MathML change?

Entity: [nvap][ISOAMSN]
 MathML [<224D,20D2>][EQUIVALENT TO with vertical line]
 Stix [<2248,20D2>][]
 MathML should change.

Entity: [jmath][ISOAMSO]
 MathML [U+006A][LATIN SMALL LETTER J]
 Stix [] []

Entity: [lrtri][ISOAMSO]
 MathML [U+22BF][RIGHT TRIANGLE]
 Stix [U+25FF][]

Entity: [plank][ISOAMSO]
 MathML [] []
 Stix [U+210F][]
 MathML currently only has the correct spelling, should have this plank spelling as well, for compatibility with ISO.

Entity: [trpezium][ISOAMSO]
 MathML [U+FFFD][REPLACEMENT CHARACTER]
 Stix [] []

Entity: [asymp][ISOAMSR]
 MathML [U+2248][ALMOST EQUAL TO]
 Stix [U+224D][]
 HTML compatibility

Entity: [bsolhsub][ISOAMSR]
 MathML [<005C,2282>][REVERSE SOLIDUS, SUBSET OF]
 Stix [] []

Entity: [eg][ISOAMSR]
 MathML [U+2A9A][DOUBLE-LINE EQUAL TO OR GREATER-THAN]
 Stix [U+22DD][]

Entity: [el][ISOAMSR]
 MathML [U+2A99][DOUBLE-LINE EQUAL TO OR LESS-THAN]
 Stix [U+22DC][]

Entity: [Gt][ISOAMSR]

MathML [U+226B][MUCH GREATER-THAN]
 Stix [U+2AA2][
 Gt in Stix and 9573 doc has double >> with all four ends in a vertical line, MathML currently has >>. MathML change?

Entity: [Lt][ISOAMSR]
 MathML [U+226A][MUCH LESS-THAN]
 Stix [U+2AA1][
 Gt in Stix and 9573 doc has double >> with all four ends in a vertical line, MathML currently has >>. MathML change?

Entity: [mstpos][ISOAMSR]
 MathML [U+223E][INVERTED LAZY S]
 Stix [][
 Not in MathML data

Entity: [suphsol][ISOAMSR]
 MathML [<2283,002F>][SUPERSET OF, SOLIDUS]
 Stix [][
 Not in MathML data

Entity: [benzen][ISOCHEM]
 MathML [][
 Stix [][
 Not in MathML data

Entity: [benzenr][ISOCHEM]
 MathML [][
 Stix [][
 Not in MathML data

Entity: [hbenzen][ISOCHEM]
 MathML [][
 Stix [U+2394][
 Not in MathML data

Entity: [acute][ISODIA]
 MathML [U+00B4][ACUTE ACCENT]
 Stix [U+0301][
 Stix currently uses combining characters, MathML non combining.

Entity: [breve][ISODIA]
 MathML [U+02D8][BREVE]
 Stix [U+0306][
 Stix currently uses combining characters, MathML non combining.

Entity: [caron][ISODIA]
 MathML [U+02C7][CARON]
 Stix [U+030C][
 Stix currently uses combining characters, MathML non combining.

Entity: [cedil][ISODIA]
 MathML [U+00B8][CEDILLA]
 Stix [U+0327][
 Stix currently uses combining characters, MathML non combining.

Entity: [circ][ISODIA]
 MathML [U+02C6][MODIFIER LETTER CIRCUMFLEX ACCENT]
 Stix [U+0302][
 Stix currently uses combining characters, MathML non combining.

Entity: [dblac][ISODIA]
MathML [U+02DD][DOUBLE ACUTE ACCENT]
Stix [U+030B][
Stix currently uses combining characters, MathML non combining.

Entity: [die][ISODIA]
MathML [U+00A8][DIAERESIS]
Stix [U+0308][
Stix currently uses combining characters, MathML non combining.

Entity: [dot][ISODIA]
MathML [U+02D9][DOT ABOVE]
Stix [U+0307][
Stix currently uses combining characters, MathML non combining.

Entity: [grave][ISODIA]
MathML [U+0060][GRAVE ACCENT]
Stix [U+0300][
Stix currently uses combining characters, MathML non combining.

Entity: [macr][ISODIA]
MathML [U+00AF][MACRON]
Stix [U+0304][
Stix currently uses combining characters, MathML non combining.

Entity: [ogon][ISODIA]
MathML [U+02DB][OGONEK]
Stix [U+0328][
Stix currently uses combining characters, MathML non combining.

Entity: [ring][ISODIA]
MathML [U+02DA][RING ABOVE]
Stix [U+030A][
Stix currently uses combining characters, MathML non combining.

Entity: [tilde][ISODIA]
MathML [U+02DC][SMALL TILDE]
Stix [U+0303][
Stix currently uses combining characters, MathML non combining.

Entity: [uml][ISODIA]
MathML [U+00A8][DIAERESIS]
Stix [U+0308][
Stix currently uses combining characters, MathML non combining.

Entity: [phi][ISOGRK3]
MathML [U+03D5][GREEK PHI SYMBOL]
Stix [U+03C6][
phi variants. MathML wrong following Unicode 3.0 usage?

Entity: [phiv][ISOGRK3]
MathML [U+03C6][GREEK SMALL LETTER PHI]
Stix [U+03D5][
phi variants. MathML wrong following Unicode 3.0 usage?

Entity: [sung][ISONUM]
MathML [U+266A][EIGHTH NOTE]

Stix [U+2669][
 Entity: [caret][ISOPUB]
 MathML [U+2041][CARET INSERTION POINT]
 Stix [U+2038][
 Entity: [circle][ISOPUB]
 MathML [][]
 Stix [U+2218][
 Not in MathML data
 Entity: [circlef][ISOPUB]
 MathML [][]
 Stix [U+25CF][
 Not in MathML data
 Entity: [circlefb][ISOPUB]
 MathML [][]
 Stix [U+25D2][
 Not in MathML data
 Entity: [circlefl][ISOPUB]
 MathML [][]
 Stix [U+25D0][
 Not in MathML data
 Entity: [circlefr][ISOPUB]
 MathML [][]
 Stix [U+25D1][
 Not in MathML data
 Entity: [circleft][ISOPUB]
 MathML [][]
 Stix [U+25D3][
 Not in MathML data
 Entity: [cross][ISOPUB]
 MathML [U+2717][BALLOT X]
 Stix [U+2612][
 Entity: [dash][ISOPUB]
 MathML [U+2010][HYPHEN]
 Stix [U+2012][
 MathML has hyphen, Stix has figure dash (I think Stix is right).
 Entity: [diamond][ISOPUB]
 MathML [][]
 Stix [U+25CA][
 Not in MathML data
 Entity: [diamondf][ISOPUB]
 MathML [][]
 Stix [U+25C6][
 Not in MathML data
 Entity: [diamonfb][ISOPUB]
 MathML [][]
 Stix [][]

Not in MathML data

Entity: [diamonfl][ISOPUB]

MathML [][]

Stix [][]

Not in MathML data

Entity: [diamonfr][ISOPUB]

MathML [][]

Stix [][]

Not in MathML data

Entity: [diamonft][ISOPUB]

MathML [][]

Stix [][]

Not in MathML data

Entity: [diams][ISOPUB]

MathML [U+2666][BLACK DIAMOND SUIT]

Stix [U+2662][]

HTML compatibility

Entity: [fjlig][ISOPUB]

MathML [][]

Stix [][]

Not in MathML data

Entity: [hearts][ISOPUB]

MathML [U+2665][BLACK HEART SUIT]

Stix [U+2661][]

HTML compatibility

Entity: [rdquor][ISOPUB]

MathML [U+201D][RIGHT DOUBLE QUOTATION MARK]

Stix [U+201F][]

Entity: [rect][ISOPUB]

MathML [U+25AD][WHITE RECTANGLE]

Stix [U+25AF][]

Entity: [rsquor][ISOPUB]

MathML [U+2019][RIGHT SINGLE QUOTATION MARK]

Stix [U+201B][]

Entity: [sext][ISOPUB]

MathML [U+2736][SIX POINTED BLACK STAR]

Stix [][]

Entity: [squarf][ISOPUB]

MathML [U+25AA][BLACK SMALL SQUARE]

Stix [U+25A0][]

Entity: [squarfb][ISOPUB]

MathML [][]

Stix [][]

Not in MathML data

Entity: [squarfb1][ISOPUB]

MathML [][]
 Stix [][]
 Not in MathML data

Entity: [squarfbr][ISOPUB]
 MathML [][]
 Stix [U+25EA] []
 Not in MathML data

Entity: [squarfll][ISOPUB]
 MathML [][]
 Stix [U+25E7] []
 Not in MathML data

Entity: [squarfr][ISOPUB]
 MathML [][]
 Stix [U+25E8] []
 Not in MathML data

Entity: [squarft][ISOPUB]
 MathML [][]
 Stix [] []
 Not in MathML data

Entity: [squarftl][ISOPUB]
 MathML [][]
 Stix [U+25E9] []
 Not in MathML data

Entity: [squarftr][ISOPUB]
 MathML [][]
 Stix [] []
 Not in MathML data

Entity: [cir][ISOPUB*]
 MathML [U+25CB][WHITE CIRCLE]
 Stix [U+2218] []

Entity: [acd][ISOTECH]
 MathML [U+223F][SINE WAVE]
 Stix [] []

Entity: [Dot][ISOTECH]
 MathML [U+00A8][DIAERESIS]
 Stix [U+0308] []
 Stix currently uses combining characters, MathML non combining.

Entity: [elinters][ISOTECH]
 MathML [U+FFFD][REPLACEMENT CHARACTER]
 Stix [] []

Entity: [fltns][ISOTECH]
 MathML [U+25B1][WHITE PARALLELOGRAM]
 Stix [] []

Entity: [fnof][ISOTECH]
 MathML [U+0192][LATIN SMALL LETTER F WITH HOOK]
 Stix [U+1D453] []

Entity: [imped][ISOTECH]
 MathML [U+01B5][LATIN CAPITAL LETTER Z WITH STROKE]
 Stix [][]

Entity: [isin][ISOTECH]
 MathML [U+2208][ELEMENT OF]
 Stix [U+220A][]
 MathML defines isin incorrectly for HTML compat
 This skews variant and negated forms.

Entity: [Lang][ISOTECH]
 MathML [U+300A][LEFT DOUBLE ANGLE BRACKET]
 Stix [U+27EA][]
 Stix is right, but see rang.

Entity: [lang][ISOTECH]
 MathML [U+2329][LEFT-POINTING ANGLE BRACKET]
 Stix [U+27E8][]
 HTML compatibility

Entity: [lobrk][ISOTECH]
 MathML [U+301A][LEFT WHITE SQUARE BRACKET]
 Stix [U+27E6][]
 Stix is right, but see rang.

Entity: [lowast][ISOTECH]
 MathML [U+2217][ASTERISK OPERATOR]
 Stix [U+204E][]
 MathML has hyphen, Stix has figure dash (I think Stix is right).

Entity: [ni][ISOTECH]
 MathML [U+220B][CONTAINS AS MEMBER]
 Stix [U+220D][]
 MathML defines isin incorrectly for HTML compat
 This skews variant and negated forms.

Entity: [notinva][ISOTECH]
 MathML [U+2209][NOT AN ELEMENT OF]
 Stix [<2208,20D2>][]
 MathML defines isin incorrectly for HTML compat
 This skews variant and negated forms.

Entity: [notniva][ISOTECH]
 MathML [U+220C][DOES NOT CONTAIN AS MEMBER]
 Stix [<220B,20D2>][]
 MathML defines isin incorrectly for HTML compat
 This skews variant and negated forms.

Entity: [Rang][ISOTECH]
 MathML [U+300B][RIGHT DOUBLE ANGLE BRACKET]
 Stix [U+27EB][]
 Stix is right, but see rang.

Entity: [rang][ISOTECH]
 MathML [U+232A][RIGHT-POINTING ANGLE BRACKET]
 Stix [U+27E9][]
 HTML compatibility

Entity: [robrk][ISOTECH]
MathML [U+301B][RIGHT WHITE SQUARE BRACKET]
Stix [U+27E7][
Stix is right, but see rang.

Entity: [strns][ISOTECH]
MathML [U+00AF][MACRON]
Stix [][

5.2 Differences between MathML and DocBook Data

OASIS distribute a set of entity declarations for use with the DocBook markup language. <http://www.oasis-open.org/docbook/specs/wd-docbook-xmlcharent-0.3.html>

The following table lists the current differences between this set and the definitions described in this document.

During the review of this draft document these alignment issues will be reviewed and resolved.

```

darr2
  dkb=[U+21CA] [DOWNWARDS PAIRED ARROWS]
  mml=[] []
larr2
  dkb=[U+21C7] [LEFTWARDS PAIRED ARROWS]
  mml=[] []
lrarr2
  dkb=[U+21C6] [LEFTWARDS ARROW OVER RIGHTWARDS ARROW]
  mml=[] []
rlarr2
  dkb=[U+21C4] [RIGHTWARDS ARROW OVER LEFTWARDS ARROW]
  mml=[] []
rlhar2
  dkb=[U+21CC] [RIGHTWARDS HARPOON OVER LEFTWARDS HARPOON]
  mml=[] []
lrhar2
  dkb=[U+21CB] [LEFTWARDS HARPOON OVER RIGHTWARDS HARPOON]
  mml=[] []
rarr2
  dkb=[U+21C9] [RIGHTWARDS PAIRED ARROWS]
  mml=[] []
drarr
  dkb=[U+2198] [SOUTH EAST ARROW]
  mml=[] []
dlarr
  dkb=[U+2199] [SOUTH WEST ARROW]
  mml=[] []
uarr2
  dkb=[U+21C8] [UPWARDS PAIRED ARROWS]
  mml=[] []
xlArr
  dkb=[U+21D0] [LEFTWARDS DOUBLE ARROW]
  mml=[U+27F8] [LONG LEFTWARDS DOUBLE ARROW]
xhArr
  dkb=[U+2194] [LEFT RIGHT ARROW]
  mml=[U+27FA] [LONG LEFT RIGHT DOUBLE ARROW]
xharr
  dkb=[U+2194] [LEFT RIGHT ARROW]
  mml=[U+27F7] [LONG LEFT RIGHT ARROW]
xrArr
  dkb=[U+21D2] [RIGHTWARDS DOUBLE ARROW]
  mml=[U+27F9] [LONG RIGHTWARDS DOUBLE ARROW]
amalg
  dkb=[U+2210] [N-ARY COPRODUCT]
  mml=[U+2A3F] [AMALGAMATION OR COPRODUCT]
barwed
  dkb=[U+22BC] [NAND]

```

```

    mml=[U+2305] [PROJECTIVE]
xcirc
    dkb=[U+25CB] [WHITE CIRCLE]
    mml=[U+25EF] [LARGE CIRCLE]
rpargt
    dkb=[U+E291] []
    mml=[U+2994] [RIGHT ARC GREATER-THAN BRACKET]
gnap
    dkb=[U+E411] []
    mml=[U+2A8A] [GREATER-THAN AND NOT APPROXIMATE]
gne
    dkb=[U+2269] [GREATER-THAN BUT NOT EQUAL TO]
    mml=[U+2A88] [GREATER-THAN AND SINGLE-LINE NOT EQUAL TO]
gvnE
    dkb=[U+2269] [GREATER-THAN BUT NOT EQUAL TO]
    mml=[<2269,FE00>] [GREATER-THAN BUT NOT EQUAL TO - with vertical stroke]
lnap
    dkb=[U+E2A2] []
    mml=[U+2A89] [LESS-THAN AND NOT APPROXIMATE]
lne
    dkb=[U+2268] [LESS-THAN BUT NOT EQUAL TO]
    mml=[U+2A87] [LESS-THAN AND SINGLE-LINE NOT EQUAL TO]
lvnE
    dkb=[U+2268] [LESS-THAN BUT NOT EQUAL TO]
    mml=[<2268,FE00>] [LESS-THAN BUT NOT EQUAL TO - with vertical stroke]
ngeE
    dkb=[U+2271] [NEITHER GREATER-THAN NOR EQUAL TO]
    mml=[<2267,0338>] [GREATER-THAN OVER EQUAL TO with slash]
nges
    dkb=[U+2271] [NEITHER GREATER-THAN NOR EQUAL TO]
    mml=[<2A7E,0338>] [GREATER-THAN OR SLANTED EQUAL TO with slash]
nlE
    dkb=[U+2270] [NEITHER LESS-THAN NOR EQUAL TO]
    mml=[<2266,0338>] [LESS-THAN OVER EQUAL TO with slash]
nles
    dkb=[U+2270] [NEITHER LESS-THAN NOR EQUAL TO]
    mml=[<2A7D,0338>] [LESS-THAN OR SLANTED EQUAL TO with slash]
npre
    dkb=[U+22E0] [DOES NOT PRECEDE OR EQUAL]
    mml=[<2AAF,0338>] [PRECEDES ABOVE SINGLE-LINE EQUALS SIGN with slash]
nsce
    dkb=[U+22E1] [DOES NOT SUCCEED OR EQUAL]
    mml=[<2AB0,0338>] [SUCCEEDS ABOVE SINGLE-LINE EQUALS SIGN with slash]
nsmid
    dkb=[U+E2AA] []
    mml=[U+2224] [DOES NOT DIVIDE]
nsubE
    dkb=[U+2288] [NEITHER A SUBSET OF NOR EQUAL TO]
    mml=[<2AC5,0338>] [SUBSET OF ABOVE EQUALS SIGN with slash]
nsupE
    dkb=[U+2289] [NEITHER A SUPERSET OF NOR EQUAL TO]
    mml=[<2AC6,0338>] [SUPERSET OF ABOVE EQUALS SIGN with slash]
prnap
    dkb=[U+22E8] [PRECEDES BUT NOT EQUIVALENT TO]
    mml=[U+2AB9] [PRECEDES ABOVE NOT ALMOST EQUAL TO]
prnE
    dkb=[U+E2B3] []
    mml=[U+2AB5] [PRECEDES ABOVE NOT EQUAL TO]

```



```

scnap
  dkb=[U+22E9] [SUCCEEDS BUT NOT EQUIVALENT TO]
  mml=[U+2ABA] [SUCCEEDS ABOVE NOT ALMOST EQUAL TO]
scnE
  dkb=[U+E2B5] []
  mml=[U+2AB6] [SUCCEEDS ABOVE NOT EQUAL TO]
subnE
  dkb=[U+228A] [SUBSET OF WITH NOT EQUAL TO]
  mml=[U+2ACB] [SUBSET OF ABOVE NOT EQUAL TO]
supnE
  dkb=[U+228B] [SUPERSET OF WITH NOT EQUAL TO]
  mml=[U+2ACC] [SUPERSET OF ABOVE NOT EQUAL TO]
vsubnE
  dkb=[U+E2B8] []
  mml=[<2ACB,FE00>] [SUBSET OF ABOVE NOT EQUAL TO - variant with stroke through bottom members]
vsubne
  dkb=[U+228A] [SUBSET OF WITH NOT EQUAL TO]
  mml=[<228A,FE00>] [SUBSET OF WITH NOT EQUAL TO - variant with stroke through bottom members]
vsupne
  dkb=[U+228B] [SUPERSET OF WITH NOT EQUAL TO]
  mml=[<228B,FE00>] [SUPERSET OF WITH NOT EQUAL TO - variant with stroke through bottom members]
vsupnE
  dkb=[U+228B] [SUPERSET OF WITH NOT EQUAL TO]
  mml=[<2ACC,FE00>] [SUPERSET OF ABOVE NOT EQUAL TO - variant with stroke through bottom members]
sbsol
  dkb=[U+FE68] [SMALL REVERSE SOLIDUS]
  mml=[] []
vprime
  dkb=[U+2032] [PRIME]
  mml=[] []
asymp
  dkb=[U+224D] [EQUIVALENT TO]
  mml=[U+2248] [ALMOST EQUAL TO]
bepsi
  dkb=[U+220D] [SMALL CONTAINS AS MEMBER]
  mml=[U+03F6] [GREEK REVERSED LUNATE EPSILON SYMBOL]
cupre
  dkb=[U+227C] [PRECEDES OR EQUAL TO]
  mml=[] []
egs
  dkb=[U+22DD] [EQUAL TO OR GREATER-THAN]
  mml=[U+2A96] [SLANTED EQUAL TO OR GREATER-THAN]
els
  dkb=[U+22DC] [EQUAL TO OR LESS-THAN]
  mml=[U+2A95] [SLANTED EQUAL TO OR LESS-THAN]
gap
  dkb=[U+2273] [GREATER-THAN OR EQUIVALENT TO]
  mml=[U+2A86] [GREATER-THAN OR APPROXIMATE]
gsdot
  dkb=[U+22D7] [GREATER-THAN WITH DOT]
  mml=[] []
gEl
  dkb=[U+22DB] [GREATER-THAN EQUAL TO OR LESS-THAN]
  mml=[U+2A8C] [GREATER-THAN ABOVE DOUBLE-LINE EQUAL ABOVE LESS-THAN]
ges
  dkb=[U+2265] [GREATER-THAN OR EQUAL TO]
  mml=[U+2A7E] [GREATER-THAN OR SLANTED EQUAL TO]
lap

```

dkb=[U+2272] [LESS-THAN OR EQUIVALENT TO]
 mml=[U+2A85] [LESS-THAN OR APPROXIMATE]

ldot

dkb=[U+22D6] [LESS-THAN WITH DOT]
 mml=[] []

lEg

dkb=[U+22DA] [LESS-THAN EQUAL TO OR GREATER-THAN]
 mml=[U+2A8B] [LESS-THAN ABOVE DOUBLE-LINE EQUAL ABOVE GREATER-THAN]

les

dkb=[U+2264] [LESS-THAN OR EQUAL TO]
 mml=[U+2A7D] [LESS-THAN OR SLANTED EQUAL TO]

prap

dkb=[U+227E] [PRECEDES OR EQUIVALENT TO]
 mml=[U+2AB7] [PRECEDES ABOVE ALMOST EQUAL TO]

pre

dkb=[U+227C] [PRECEDES OR EQUAL TO]
 mml=[U+2AAF] [PRECEDES ABOVE SINGLE-LINE EQUALS SIGN]

samalg

dkb=[U+2210] [N-ARY COPRODUCT]
 mml=[] []

scap

dkb=[U+227F] [SUCCEEDS OR EQUIVALENT TO]
 mml=[U+2AB8] [SUCCEEDS ABOVE ALMOST EQUAL TO]

sce

dkb=[U+227D] [SUCCEEDS OR EQUAL TO]
 mml=[U+2AB0] [SUCCEEDS ABOVE SINGLE-LINE EQUALS SIGN]

smid

dkb=[U+E301] []
 mml=[U+2223] [DIVIDES]

subE

dkb=[U+2286] [SUBSET OF OR EQUAL TO]
 mml=[U+2AC5] [SUBSET OF ABOVE EQUALS SIGN]

supE

dkb=[U+2287] [SUPERSET OF OR EQUAL TO]
 mml=[U+2AC6] [SUPERSET OF ABOVE EQUALS SIGN]

boxhU

dkb=[U+2567] [BOX DRAWINGS UP SINGLE AND HORIZONTAL DOUBLE]
 mml=[U+2568] [BOX DRAWINGS UP DOUBLE AND HORIZONTAL SINGLE]

boxhD

dkb=[U+2564] [BOX DRAWINGS DOWN SINGLE AND HORIZONTAL DOUBLE]
 mml=[U+2565] [BOX DRAWINGS DOWN DOUBLE AND HORIZONTAL SINGLE]

boxUR

dkb=[U+2558] [BOX DRAWINGS UP SINGLE AND RIGHT DOUBLE]
 mml=[U+255A] [BOX DRAWINGS DOUBLE UP AND RIGHT]

boxUL

dkb=[U+255B] [BOX DRAWINGS UP SINGLE AND LEFT DOUBLE]
 mml=[U+255D] [BOX DRAWINGS DOUBLE UP AND LEFT]

boxDL

dkb=[U+2555] [BOX DRAWINGS DOWN SINGLE AND LEFT DOUBLE]
 mml=[U+2557] [BOX DRAWINGS DOUBLE DOWN AND LEFT]

boxDR

dkb=[U+2552] [BOX DRAWINGS DOWN SINGLE AND RIGHT DOUBLE]
 mml=[U+2554] [BOX DRAWINGS DOUBLE DOWN AND RIGHT]

boxVR

dkb=[U+255F] [BOX DRAWINGS VERTICAL DOUBLE AND RIGHT SINGLE]
 mml=[U+2560] [BOX DRAWINGS DOUBLE VERTICAL AND RIGHT]

boxHU

dkb=[U+2568] [BOX DRAWINGS UP DOUBLE AND HORIZONTAL SINGLE]

mml=[U+2569] [BOX DRAWINGS DOUBLE UP AND HORIZONTAL]
 boxVL
 dkb=[U+2562] [BOX DRAWINGS VERTICAL DOUBLE AND LEFT SINGLE]
 mml=[U+2563] [BOX DRAWINGS DOUBLE VERTICAL AND LEFT]
 boxHD
 dkb=[U+2565] [BOX DRAWINGS DOWN DOUBLE AND HORIZONTAL SINGLE]
 mml=[U+2566] [BOX DRAWINGS DOUBLE DOWN AND HORIZONTAL]
 boxVH
 dkb=[U+256B] [BOX DRAWINGS VERTICAL DOUBLE AND HORIZONTAL SINGLE]
 mml=[U+256C] [BOX DRAWINGS DOUBLE VERTICAL AND HORIZONTAL]
 boxVr
 dkb=[U+2560] [BOX DRAWINGS DOUBLE VERTICAL AND RIGHT]
 mml=[U+255F] [BOX DRAWINGS VERTICAL DOUBLE AND RIGHT SINGLE]
 boxHu
 dkb=[U+2569] [BOX DRAWINGS DOUBLE UP AND HORIZONTAL]
 mml=[U+2567] [BOX DRAWINGS UP SINGLE AND HORIZONTAL DOUBLE]
 boxVl
 dkb=[U+2563] [BOX DRAWINGS DOUBLE VERTICAL AND LEFT]
 mml=[U+2562] [BOX DRAWINGS VERTICAL DOUBLE AND LEFT SINGLE]
 boxHd
 dkb=[U+2566] [BOX DRAWINGS DOUBLE DOWN AND HORIZONTAL]
 mml=[U+2564] [BOX DRAWINGS DOWN SINGLE AND HORIZONTAL DOUBLE]
 boxVh
 dkb=[U+256C] [BOX DRAWINGS DOUBLE VERTICAL AND HORIZONTAL]
 mml=[U+256B] [BOX DRAWINGS VERTICAL DOUBLE AND HORIZONTAL SINGLE]
 boxuR
 dkb=[U+2559] [BOX DRAWINGS UP DOUBLE AND RIGHT SINGLE]
 mml=[U+2558] [BOX DRAWINGS UP SINGLE AND RIGHT DOUBLE]
 boxdL
 dkb=[U+2556] [BOX DRAWINGS DOWN DOUBLE AND LEFT SINGLE]
 mml=[U+2555] [BOX DRAWINGS DOWN SINGLE AND LEFT DOUBLE]
 boxUr
 dkb=[U+255A] [BOX DRAWINGS DOUBLE UP AND RIGHT]
 mml=[U+2559] [BOX DRAWINGS UP DOUBLE AND RIGHT SINGLE]
 boxuL
 dkb=[U+255D] [BOX DRAWINGS DOUBLE UP AND LEFT]
 mml=[U+255B] [BOX DRAWINGS UP SINGLE AND LEFT DOUBLE]
 boxDl
 dkb=[U+2557] [BOX DRAWINGS DOUBLE DOWN AND LEFT]
 mml=[U+2556] [BOX DRAWINGS DOWN DOUBLE AND LEFT SINGLE]
 boxdR
 dkb=[U+2554] [BOX DRAWINGS DOUBLE DOWN AND RIGHT]
 mml=[U+2552] [BOX DRAWINGS DOWN SINGLE AND RIGHT DOUBLE]
 circ
 dkb=[U+005E] [CIRCUMFLEX ACCENT]
 mml=[U+02C6] [MODIFIER LETTER CIRCUMFLEX ACCENT]
 gammad
 dkb=[U+03DC] [GREEK LETTER DIGAMMA]
 mml=[U+03DD] [GREEK SMALL LETTER DIGAMMA]
 epsi
 dkb=[U+220A] [SMALL ELEMENT OF]
 mml=[U+03F5] [GREEK LUNATE EPSILON SYMBOL]
 epsis
 dkb=[U+220A] [SMALL ELEMENT OF]
 mml=[] []
 thetas
 dkb=[U+03B8] [GREEK SMALL LETTER THETA]
 mml=[] []

phis
 dkb=[U+03C6] [GREEK SMALL LETTER PHI]
 mml=[] []
 phiv
 dkb=[U+03D5] [GREEK PHI SYMBOL]
 mml=[U+03C6] [GREEK SMALL LETTER PHI]
 b.alpha
 dkb=[U+03B1] [GREEK SMALL LETTER ALPHA]
 mml=[U+1D6C2] [MATHEMATICAL BOLD SMALL ALPHA]
 b.beta
 dkb=[U+03B2] [GREEK SMALL LETTER BETA]
 mml=[U+1D6C3] [MATHEMATICAL BOLD SMALL BETA]
 b.gamma
 dkb=[U+03B3] [GREEK SMALL LETTER GAMMA]
 mml=[U+1D6C4] [MATHEMATICAL BOLD SMALL GAMMA]
 b.Gamma
 dkb=[U+0393] [GREEK CAPITAL LETTER GAMMA]
 mml=[U+1D6AA] [MATHEMATICAL BOLD CAPITAL GAMMA]
 b.gammad
 dkb=[U+03DC] [GREEK LETTER DIGAMMA]
 mml=[U+03DD] [GREEK SMALL LETTER DIGAMMA]
 b.delta
 dkb=[U+03B4] [GREEK SMALL LETTER DELTA]
 mml=[U+1D6C5] [MATHEMATICAL BOLD SMALL DELTA]
 b.Delta
 dkb=[U+0394] [GREEK CAPITAL LETTER DELTA]
 mml=[U+1D6AB] [MATHEMATICAL BOLD CAPITAL DELTA]
 b.epsi
 dkb=[U+03B5] [GREEK SMALL LETTER EPSILON]
 mml=[U+1D6C6] [MATHEMATICAL BOLD SMALL EPSILON]
 b.epsiv
 dkb=[U+03B5] [GREEK SMALL LETTER EPSILON]
 mml=[U+1D6DC] [MATHEMATICAL BOLD EPSILON SYMBOL]
 b.epsis
 dkb=[U+03B5] [GREEK SMALL LETTER EPSILON]
 mml=[] []
 b.zeta
 dkb=[U+03B6] [GREEK SMALL LETTER ZETA]
 mml=[U+1D6C7] [MATHEMATICAL BOLD SMALL ZETA]
 b.eta
 dkb=[U+03B7] [GREEK SMALL LETTER ETA]
 mml=[U+1D6C8] [MATHEMATICAL BOLD SMALL ETA]
 b.thetas
 dkb=[U+03B8] [GREEK SMALL LETTER THETA]
 mml=[U+1D6C9] [MATHEMATICAL BOLD SMALL THETA]
 b.Theta
 dkb=[U+0398] [GREEK CAPITAL LETTER THETA]
 mml=[U+1D6AF] [MATHEMATICAL BOLD CAPITAL THETA]
 b.thetav
 dkb=[U+03D1] [GREEK THETA SYMBOL]
 mml=[U+1D6DD] [MATHEMATICAL BOLD THETA SYMBOL]
 b.iota
 dkb=[U+03B9] [GREEK SMALL LETTER IOTA]
 mml=[U+1D6CA] [MATHEMATICAL BOLD SMALL IOTA]
 b.kappa
 dkb=[U+03BA] [GREEK SMALL LETTER KAPPA]
 mml=[U+1D6CB] [MATHEMATICAL BOLD SMALL KAPPA]
 b.kappav

dkb=[U+03F0][GREEK KAPPA SYMBOL]
 mml=[U+1D6DE][MATHEMATICAL BOLD KAPPA SYMBOL]

b.lambda
 dkb=[U+03BB][GREEK SMALL LETTER LAMDA]
 mml=[U+1D6CC][MATHEMATICAL BOLD SMALL LAMDA]

b.Lambda
 dkb=[U+039B][GREEK CAPITAL LETTER LAMDA]
 mml=[U+1D6B2][MATHEMATICAL BOLD CAPITAL LAMDA]

b.mu
 dkb=[U+03BC][GREEK SMALL LETTER MU]
 mml=[U+1D6CD][MATHEMATICAL BOLD SMALL MU]

b.nu
 dkb=[U+03BD][GREEK SMALL LETTER NU]
 mml=[U+1D6CE][MATHEMATICAL BOLD SMALL NU]

b.xi
 dkb=[U+03BE][GREEK SMALL LETTER XI]
 mml=[U+1D6CF][MATHEMATICAL BOLD SMALL XI]

b.Xi
 dkb=[U+039E][GREEK CAPITAL LETTER XI]
 mml=[U+1D6B5][MATHEMATICAL BOLD CAPITAL XI]

b.pi
 dkb=[U+03C0][GREEK SMALL LETTER PI]
 mml=[U+1D6D1][MATHEMATICAL BOLD SMALL PI]

b.Pi
 dkb=[U+03A0][GREEK CAPITAL LETTER PI]
 mml=[U+1D6B7][MATHEMATICAL BOLD CAPITAL PI]

b.piv
 dkb=[U+03D6][GREEK PI SYMBOL]
 mml=[U+1D6E1][MATHEMATICAL BOLD PI SYMBOL]

b.rho
 dkb=[U+03C1][GREEK SMALL LETTER RHO]
 mml=[U+1D6D2][MATHEMATICAL BOLD SMALL RHO]

b.rhov
 dkb=[U+03F1][GREEK RHO SYMBOL]
 mml=[U+1D6E0][MATHEMATICAL BOLD RHO SYMBOL]

b.sigma
 dkb=[U+03C3][GREEK SMALL LETTER SIGMA]
 mml=[U+1D6D4][MATHEMATICAL BOLD SMALL SIGMA]

b.Sigma
 dkb=[U+03A3][GREEK CAPITAL LETTER SIGMA]
 mml=[U+1D6BA][MATHEMATICAL BOLD CAPITAL SIGMA]

b.sigmav
 dkb=[U+03C2][GREEK SMALL LETTER FINAL SIGMA]
 mml=[U+1D6D3][MATHEMATICAL BOLD SMALL FINAL SIGMA]

b.tau
 dkb=[U+03C4][GREEK SMALL LETTER TAU]
 mml=[U+1D6D5][MATHEMATICAL BOLD SMALL TAU]

b.upsilon
 dkb=[U+03C5][GREEK SMALL LETTER UPSILON]
 mml=[U+1D6D6][MATHEMATICAL BOLD SMALL UPSILON]

b.Upsilon
 dkb=[U+03D2][GREEK UPSILON WITH HOOK SYMBOL]
 mml=[U+1D6BC][MATHEMATICAL BOLD CAPITAL UPSILON]

b.phis
 dkb=[U+03C6][GREEK SMALL LETTER PHI]
 mml=[] []

b.Phi
 dkb=[U+03A6][GREEK CAPITAL LETTER PHI]

mml=[U+1D6BD][MATHEMATICAL BOLD CAPITAL PHI]
 b.phiv
 dkb=[U+03D5][GREEK PHI SYMBOL]
 mml=[U+1D6DF][MATHEMATICAL BOLD PHI SYMBOL]
 b.chi
 dkb=[U+03C7][GREEK SMALL LETTER CHI]
 mml=[U+1D6D8][MATHEMATICAL BOLD SMALL CHI]
 b.psi
 dkb=[U+03C8][GREEK SMALL LETTER PSI]
 mml=[U+1D6D9][MATHEMATICAL BOLD SMALL PSI]
 b.Psi
 dkb=[U+03A8][GREEK CAPITAL LETTER PSI]
 mml=[U+1D6BF][MATHEMATICAL BOLD CAPITAL PSI]
 b.omega
 dkb=[U+03C9][GREEK SMALL LETTER OMEGA]
 mml=[U+1D6DA][MATHEMATICAL BOLD SMALL OMEGA]
 b.Omega
 dkb=[U+03A9][GREEK CAPITAL LETTER OMEGA]
 mml=[U+1D6C0][MATHEMATICAL BOLD CAPITAL OMEGA]
 sung
 dkb=[U+2669][QUARTER NOTE]
 mml=[U+266A][EIGHTH NOTE]
 hyphen
 dkb=[U+002D][HYPHEN-MINUS]
 mml=[U+2010][HYPHEN]
 star
 dkb=[U+22C6][STAR OPERATOR]
 mml=[U+2606][WHITE STAR]
 rdquor
 dkb=[U+201C][LEFT DOUBLE QUOTATION MARK]
 mml=[U+201D][RIGHT DOUBLE QUOTATION MARK]
 rsquor
 dkb=[U+2018][LEFT SINGLE QUOTATION MARK]
 mml=[U+2019][RIGHT SINGLE QUOTATION MARK]
 lozf
 dkb=[U+2726][BLACK FOUR POINTED STAR]
 mml=[U+29EB][BLACK LOZENGE]
 ang90
 dkb=[U+221F][RIGHT ANGLE]
 mml=[]
 isin
 dkb=[U+220A][SMALL ELEMENT OF]
 mml=[U+2208][ELEMENT OF]
 lang
 dkb=[U+3008][LEFT ANGLE BRACKET]
 mml=[U+2329][LEFT-POINTING ANGLE BRACKET]
 ni
 dkb=[U+220D][SMALL CONTAINS AS MEMBER]
 mml=[U+220B][CONTAINS AS MEMBER]
 rang
 dkb=[U+3009][RIGHT ANGLE BRACKET]
 mml=[U+232A][RIGHT-POINTING ANGLE BRACKET]

5.3 Differences between MathML and XHTML 1.1 Data

W3C distribute a set of entity declarations for use with the (X)HTML markup language.
http://www.w3.org/TR/2001/REC-xhtml-modularization-20010410/dtd_module_defs.html#a_xhtml_character_entities

The following table lists the current differences between this set and the definitions described in this document.

During the review of this draft document these alignment issues will be reviewed and resolved.

```

zwnj
  xht=[U+200C][ZERO WIDTH NON-JOINER]
  mml=[] []
zwj
  xht=[U+200D][ZERO WIDTH JOINER]
  mml=[] []
lrm
  xht=[U+200E][LEFT-TO-RIGHT MARK]
  mml=[] []
rlm
  xht=[U+200F][RIGHT-TO-LEFT MARK]
  mml=[] []
sbquo
  xht=[U+201A][SINGLE LOW-9 QUOTATION MARK]
  mml=[] []
bdquo
  xht=[U+201E][DOUBLE LOW-9 QUOTATION MARK]
  mml=[] []
lsaquo
  xht=[U+2039][SINGLE LEFT-POINTING ANGLE QUOTATION MARK]
  mml=[] []
rsaquo
  xht=[U+203A][SINGLE RIGHT-POINTING ANGLE QUOTATION MARK]
  mml=[] []
euro
  xht=[U+20AC][EURO SIGN]
  mml=[] []
Alpha
  xht=[U+0391][GREEK CAPITAL LETTER ALPHA]
  mml=[] []
Beta
  xht=[U+0392][GREEK CAPITAL LETTER BETA]
  mml=[] []
Epsilon
  xht=[U+0395][GREEK CAPITAL LETTER EPSILON]
  mml=[] []
Zeta
  xht=[U+0396][GREEK CAPITAL LETTER ZETA]
  mml=[] []
Eta
  xht=[U+0397][GREEK CAPITAL LETTER ETA]
  mml=[] []
Iota
  xht=[U+0399][GREEK CAPITAL LETTER IOTA]
  mml=[] []
Kappa
  xht=[U+039A][GREEK CAPITAL LETTER KAPPA]

```

```

mml=[] []
Mu
xht=[U+039C] [GREEK CAPITAL LETTER MU]
mml=[] []
Nu
xht=[U+039D] [GREEK CAPITAL LETTER NU]
mml=[] []
Omicron
xht=[U+039F] [GREEK CAPITAL LETTER OMICRON]
mml=[] []
Rho
xht=[U+03A1] [GREEK CAPITAL LETTER RHO]
mml=[] []
Tau
xht=[U+03A4] [GREEK CAPITAL LETTER TAU]
mml=[] []
Upsilon
xht=[U+03A5] [GREEK CAPITAL LETTER UPSILON]
mml=[] []
Chi
xht=[U+03A7] [GREEK CAPITAL LETTER CHI]
mml=[] []
epsilon
xht=[U+03B5] [GREEK SMALL LETTER EPSILON]
mml=[] []
omicron
xht=[U+03BF] [GREEK SMALL LETTER OMICRON]
mml=[] []
sigmaf
xht=[U+03C2] [GREEK SMALL LETTER FINAL SIGMA]
mml=[] []
upsilon
xht=[U+03C5] [GREEK SMALL LETTER UPSILON]
mml=[] []
phi
xht=[U+03C6] [GREEK SMALL LETTER PHI]
mml=[U+03D5] [GREEK PHI SYMBOL]
thetasym
xht=[U+03D1] [GREEK THETA SYMBOL]
mml=[] []
upsih
xht=[U+03D2] [GREEK UPSILON WITH HOOK SYMBOL]
mml=[] []
oline
xht=[U+203E] [OVERLINE]
mml=[] []
fracl
xht=[U+2044] [FRACTION SLASH]
mml=[] []
alefsym
xht=[U+2135] [ALEF SYMBOL]
mml=[] []
crarr
xht=[U+21B5] [DOWNWARDS ARROW WITH CORNER LEFTWARDS]
mml=[] []

```


6 Character definitions requiring special review

6.1 Duplicate entities mapped to same code point

This section details cases where two entities with different names have been mapped to the same code point (so become indistinguishable to most XML applications, even if SGML applications could differentiate the original SGML SDATA entities).

In many cases these unifications are acceptable or intentional, for example for reasons of convenience and compatibility the “mathematical greek” set ISOGRK3 is mapped to the standard Greek characters in the BMP (so clashing with the ISOGRK1 definitions) rather than the Math Italic alphabet in the 1Dxxx range. Similarly, the same character can have different logical uses in different scientific disciplines, but sometimes the duplication has occurred because it has not been possible to retain differences foreseen in ISO/IEC TR 9573 within the ISO/IEC 10646 character set. During the review of this draft the need for duplication of these entities will be reviewed and resolved.

```

U+002A: ast(9573-2003-isonum): midast(9573-2003-isoamsb)
U+00A8: Dot(9573-2003-isotech): die(9573-2003-isodia): uml(9573-2003-isodia)
U+00AF: macr(9573-2003-isodia): strns(9573-2003-isotech)
U+00BD: frac12(9573-2003-isonum): half(9573-2003-isonum)
U+0131: imath(9573-2003-isoamso): inodot(9573-2003-isolat2)
U+0393: Gamma(9573-2003-isogr3): Ggr(9573-2003-isogr1)
U+0394: Delta(9573-2003-isogr3): Dgr(9573-2003-isogr1)
U+0398: THgr(9573-2003-isogr1): Theta(9573-2003-isogr3)
U+039B: Lambda(9573-2003-isogr3): Lgr(9573-2003-isogr1)
U+039E: Xgr(9573-2003-isogr1): Xi(9573-2003-isogr3)
U+03A0: Pgr(9573-2003-isogr1): Pi(9573-2003-isogr3)
U+03A3: Sgr(9573-2003-isogr1): Sigma(9573-2003-isogr3)
U+03A6: PHgr(9573-2003-isogr1): Phi(9573-2003-isogr3)
U+03A8: PSgr(9573-2003-isogr1): Psi(9573-2003-isogr3)
U+03A9: OHgr(9573-2003-isogr1): Omega(9573-2003-isogr3)
U+03B1: agr(9573-2003-isogr1): alpha(9573-2003-isogr3)
U+03B2: beta(9573-2003-isogr3): bgr(9573-2003-isogr1)
U+03B3: gamma(9573-2003-isogr3): ggr(9573-2003-isogr1)
U+03B4: delta(9573-2003-isogr3): dgr(9573-2003-isogr1)
U+03B5: egr(9573-2003-isogr1): epsiv(9573-2003-isogr3)
U+03B6: zeta(9573-2003-isogr3): zgr(9573-2003-isogr1)
U+03B7: eegr(9573-2003-isogr1): eta(9573-2003-isogr3)
U+03B8: theta(9573-2003-isogr3): thgr(9573-2003-isogr1)
U+03B9: igr(9573-2003-isogr1): iota(9573-2003-isogr3)
U+03BA: kappa(9573-2003-isogr3): kgr(9573-2003-isogr1)
U+03BB: lambda(9573-2003-isogr3): lgr(9573-2003-isogr1)
U+03BC: mgr(9573-2003-isogr1): mu(9573-2003-isogr3)
U+03BD: ngr(9573-2003-isogr1): nu(9573-2003-isogr3)
U+03BE: xgr(9573-2003-isogr1): xi(9573-2003-isogr3)
U+03C0: pgr(9573-2003-isogr1): pi(9573-2003-isogr3)
U+03C1: rgr(9573-2003-isogr1): rho(9573-2003-isogr3)
U+03C2: sfgr(9573-2003-isogr1): sigmav(9573-2003-isogr3)
U+03C3: sgr(9573-2003-isogr1): sigma(9573-2003-isogr3)
U+03C4: tau(9573-2003-isogr3): tgr(9573-2003-isogr1)
U+03C5: ugr(9573-2003-isogr1): upsi(9573-2003-isogr3)
U+03C6: phgr(9573-2003-isogr1): phiv(9573-2003-isogr3)
U+03C7: chi(9573-2003-isogr3): khgr(9573-2003-isogr1)
U+03C8: psgr(9573-2003-isogr1): psi(9573-2003-isogr3)
U+03C9: ohgr(9573-2003-isogr1): omega(9573-2003-isogr3)
U+03DC: Gammad(9573-2003-isogr3): b.Gammad(9573-2003-isogr4)
U+03DD: gammad(9573-2003-isogr3): b.gammad(9573-2003-isogr4)

```

U+2010: hyphen (9573-2003-isonum): dash (9573-2003-isopub)
U+2019: rsquo (9573-2003-isonum): rsquor (9573-2003-isopub)
U+201D: rdquo (9573-2003-isonum): rdquor (9573-2003-isopub)
U+2026: hellip (9573-2003-isopub): mldr (9573-2003-isopub)
U+210B: hamilt (9573-2003-isotech): Hscr (9573-2003-isomscr)
U+210F: planck (9573-2003-isoamso): plankv (9573-2003-isoamso)
U+2111: image (9573-2003-isoamso): Ifr (9573-2003-isomfrk)
U+2112: Lscr (9573-2003-isomscr): lagran (9573-2003-isotech)
U+211C: real (9573-2003-isoamso): Rfr (9573-2003-isomfrk)
U+212C: bernou (9573-2003-isotech): Bscr (9573-2003-isomscr)
U+2133: phmmat (9573-2003-isotech): Mscr (9573-2003-isomscr)
U+2134: order (9573-2003-isotech): oscr (9573-2003-isomscr)
U+2190: larr (9573-2003-isonum): slarr (9573-2003-isoamsa)
U+2192: rarr (9573-2003-isonum): srarr (9573-2003-isoamsa)
U+21D4: hArr (9573-2003-isoamsa): iff (9573-2003-isotech)
U+2205: empty (9573-2003-isoamso): emptyv (9573-2003-isoamso)
U+2208: isin (9573-2003-isotech): isinv (9573-2003-isotech)
U+2209: notin (9573-2003-isotech): notinva (9573-2003-isotech)
U+220B: niv (9573-2003-isotech): ni (9573-2003-isotech)
U+220C: notni (9573-2003-isotech): notniva (9573-2003-isotech)
U+2216: setmn (9573-2003-isoamsb): ssetmn (9573-2003-isoamsb)
U+221D: prop (9573-2003-isotech): vprop (9573-2003-isoamsr)
U+2223: mid (9573-2003-isoamsr): smid (9573-2003-isoamsr)
U+2224: nmid (9573-2003-isoamsn): nsmid (9573-2003-isoamsn)
U+2225: par (9573-2003-isotech): spar (9573-2003-isoamsr)
U+2226: npar (9573-2003-isoamsn): nspar (9573-2003-isoamsn)
U+223C: sim (9573-2003-isotech): thksim (9573-2003-isoamsr)
U+223E: ac (9573-2003-isoamsb): mstpos (9573-2003-isoamsr)
U+2248: asymp (9573-2003-isoamsr): ap (9573-2003-isotech): thkap (9573-2003-isoamsr)
U+22A5: bottom (9573-2003-isotech): perp (9573-2003-isotech)
U+2322: frown (9573-2003-isoamsr): sfrown (9573-2003-isoamsr)
U+2323: smile (9573-2003-isoamsr): smile (9573-2003-isoamsr)
U+25A1: squ (9573-2003-isopub): square (9573-2003-isotech)
U+25AA: squf (9573-2003-isopub): squarf (9573-2003-isotech)
U+FFFD: elinters (9573-2003-isotech): trpezium (9573-2003-isoamso)

6.2 Entity definitions starting with a combining character

It is generally a bad idea to start an entity definition with a combining character as it makes normalisation dependent on the order of entity expansion, and in worst cases the combining character can combine with the markup, resulting in a normalised form that is no longer well formed XML.

In the current version of these entities, the entity definitions are defined to consist of a single space character (U+0020) followed by the combining character

U+20DB: tdot [COMBINING THREE DOTS ABOVE]

U+20DC: DotDot [COMBINING FOUR DOTS ABOVE]

6.3 Possible new characters

There are several new characters planned for Unicode and ISO/IEC 10646 that may affect these definitions. See <http://www.unicode.org/alloc/Pipeline.html>.

In particular, *jmath* (ISOAMSO) which is currently defined to be “j” could more usefully be defined to be the proposed character “LATIN SMALL LETTER DOTLESS J” at code point U+0237 and *perp* (ISOTECH) could be defined to use “PERPENDICULAR” at code point U+27C2 (and so allow it to be distinguished from *bottom* (also in ISOTECH).

7 Character listings

Each character set is shown as four column table.

- The first column gives the entity name, these names are as used in previous versions of this report, and use the following abbreviation scheme:
 - Prefixes
 - l = left; r = right; u = up; d = down; h = horizontal; v = vertical;
 - b = back, reversed;
 - cu = curly;
 - cw = clock-wise; aw = anti clock-wise;
 - g = greater than; l = less than;
 - n = negated;
 - o = in circle;
 - s = small, short:
 - sq = square shaped;
 - thk = thick.;
 - x = extended, long, big;
 - Bodies
 - ap = approx;
 - arr = arrow; har = harpoon;
 - pr = precedes; sc = succeeds;
 - sub = subset; sup = superset;
 - Suffixes
 - b = boxed;
 - f = filled, black, solid;
 - e = single equals; E = double equals;
 - hk = hook;
 - s = slant;
 - t = tail;
 - v = variant;
 - w = wavy, squiggly;
 - 2 = two of;
 - Upper-case letter means “doubled” (or sometimes “two of”).
- The second column gives the code points of the corresponding character as 5 digit hexadecimal numbers, separated by “-”.
- The third column gives a sample glyph representation of the character.
- The fourth column gives the name of the character in two forms, Firstly the entity description as used in previous editions of this report. secondly (in uppercase) The name of the character as given in Unicode and ISO/IEC 10646. In the case of combinations with combining characters or variant selectors, the name of the base character is given in uppercase, followed by an indication (in lower case) of the variant form.

7.1 isoamsa



























isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
angzarr	0237C		angle with down zig-zag arrow RIGHT ANGLE WITH DOWNWARDS ZIGZAG ARROW
cirmid	02AEF		circle, mid below VERTICAL LINE WITH CIRCLE ABOVE
cudarrl	02938		left, curved, down arrow RIGHT-SIDE ARC CLOCKWISE ARROW
cudarr	02935		right, curved, down arrow ARROW POINTING RIGHTWARDS THEN CURVING DOWNWARDS
cularr	021B6		/curvearrowleft A: left curved arrow ANTICLOCKWISE TOP SEMICIRCLE ARROW
cularrp	0293D		curved left arrow with plus TOP ARC ANTICLOCKWISE ARROW WITH PLUS
curarr	021B7		/curvearrowright A: rt curved arrow CLOCKWISE TOP SEMICIRCLE ARROW
curarrm	0293C		curved right arrow with minus TOP ARC CLOCKWISE ARROW WITH MINUS
Darr	021A1		down two-headed arrow DOWNWARDS TWO HEADED ARROW
dArr	021D3		/Downarrow A: down dbl arrow DOWNWARDS DOUBLE ARROW
ddarr	021CA		/downdownarrows A: two down arrows DOWNWARDS PAIRED ARROWS
DDotrahd	02911		right arrow with dotted stem RIGHTWARDS ARROW WITH DOTTED STEM
dfisht	0297F		down fish tail DOWN FISH TAIL
dHar	02965		down harpoon-left, down harpoon-right DOWNWARDS HARPOON WITH BARB LEFT BESIDE DOWNWARDS HARPOON WITH BARB RIGHT
dharl	021C3		/downharpoonleft A: dn harpoon-left DOWNWARDS HARPOON WITH BARB LEFTWARDS
dharr	021C2		/downharpoonright A: down harpoon-rt DOWNWARDS HARPOON WITH BARB RIGHTWARDS
duarr	021F5		down arrow, up arrow DOWNWARDS ARROW LEFTWARDS OF UPWARDS ARROW
duhar	0296F		down harp, up harp DOWNWARDS HARPOON WITH BARB LEFT BESIDE UPWARDS HARPOON WITH BARB RIGHT
dzigrarr	027FF		right long zig-zag arrow LONG RIGHTWARDS SQUIGGLE ARROW
erarr	02971		equal, right arrow below EQUALS SIGN ABOVE RIGHTWARDS ARROW
hArr	021D4		/Leftrightarrow A: l&r dbl arrow LEFT RIGHT DOUBLE ARROW
harr	02194		/leftrightharpoon A: l&r arrow LEFT RIGHT ARROW
harrcir	02948		left and right arrow with a circle LEFT RIGHT ARROW THROUGH SMALL CIRCLE
harrw	021AD		/leftrightsquigarrow A: l&r arr-wavy LEFT RIGHT WAVE ARROW
hoarr	021FF		horizontal open arrow LEFT RIGHT OPEN-HEADED ARROW



























isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
imof	022B7		image of IMAGE OF
lAarr	021DA		/Leftarrow A: left triple arrow LEFTWARDS TRIPLE ARROW
Larr	0219E		/twoheadleftarrow A: LEFTWARDS TWO HEADED ARROW
larrbfs	0291F		left arrow-bar, filled square LEFTWARDS ARROW FROM BAR TO BLACK DIAMOND
larrfs	0291D		left arrow, filled square LEFTWARDS ARROW TO BLACK DIAMOND
larrhk	021A9		/hookleftarrow A: left arrow-hooked LEFTWARDS ARROW WITH HOOK
larrlp	021AB		/looparrowleft A: left arrow-looped LEFTWARDS ARROW WITH LOOP
larrpl	02939		left arrow, plus LEFT-SIDE ARC ANTICLOCKWISE ARROW
larrsim	02973		left arrow, similar LEFTWARDS ARROW ABOVE TILDE OPERATOR
larrtl	021A2		/leftarrowtail A: left arrow-tailed LEFTWARDS ARROW WITH TAIL
lAtail	0291B		left double arrow-tail LEFTWARDS DOUBLE ARROW-TAIL
latail	02919		left arrow-tail LEFTWARDS ARROW-TAIL
lBarr	0290E		left doubly broken arrow LEFTWARDS TRIPLE DASH ARROW
lbarr	0290C		left broken arrow LEFTWARDS DOUBLE DASH ARROW
ldca	02936		left down curved arrow ARROW POINTING DOWNWARDS THEN CURVING LEFT- WARDS
ldrdhar	02967		left harpoon-down over right harpoon-down LEFTWARDS HARPOON WITH BARB DOWN ABOVE RIGHTWARDS HARPOON WITH BARB DOWN
ldrushar	0294B		left-down-right-up harpoon LEFT BARB DOWN RIGHT BARB UP HARPOON
ldsh	021B2		left down angled arrow DOWNWARDS ARROW WITH TIP LEFTWARDS
lfisht	0297C		left fish tail LEFT FISH TAIL
lHar	02962		left harpoon-up over left harpoon-down LEFTWARDS HARPOON WITH BARB UP ABOVE LEFT- WARDS HARPOON WITH BARB DOWN
lhard	021BD		/leftharpoondown A: l harpoon-down LEFTWARDS HARPOON WITH BARB DOWNWARDS
lharu	021BC		/leftharpoonup A: left harpoon-up LEFTWARDS HARPOON WITH BARB UPWARDS
lharul	0296A		left harpoon-up over long dash LEFTWARDS HARPOON WITH BARB UP ABOVE LONG DASH
llarr	021C7		/leftleftarrows A: two left arrows LEFTWARDS PAIRED ARROWS
llhard	0296B		left harpoon-down below long dash LEFTWARDS HARPOON WITH BARB DOWN BELOW LONG DASH
loarr	021FD		left open arrow LEFTWARDS OPEN-HEADED ARROW

isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
lrarr	021C6		/leftarrows A: l arr over r arr LEFTWARDS ARROW OVER RIGHTWARDS ARROW
lrhar	021CB		/leftharpoons A: l harp over r LEFTWARDS HARPOON OVER RIGHTWARDS HARPOON
lrhard	0296D		right harpoon-down below long dash RIGHTWARDS HARPOON WITH BARB DOWN BELOW LONG DASH
lsh	021B0		/Lsh A: UPWARDS ARROW WITH TIP LEFTWARDS
lurdshar	0294A		left-up-right-down harpoon LEFT BARB UP RIGHT BARB DOWN HARPOON
luruhar	02966		left harpoon-up over right harpoon-up LEFTWARDS HARPOON WITH BARB UP ABOVE RIGHTWARDS HARPOON WITH BARB UP
Map	02905		twoheaded mapsto RIGHTWARDS TWO-HEADED ARROW FROM BAR
map	021A6		/mapsto A: RIGHTWARDS ARROW FROM BAR
midcir	02AF0		mid, circle below VERTICAL LINE WITH CIRCLE BELOW
mumap	022B8		/multimap A: MULTIMAP
nearhk	02924		NE arrow-hooked NORTH EAST ARROW WITH HOOK
neArr	021D7		NE pointing dbl arrow NORTH EAST DOUBLE ARROW
nearr	02197		/nearrow A: NE pointing arrow NORTH EAST ARROW
nesear	02928		/toea A: NE & SE arrows NORTH EAST ARROW AND SOUTH EAST ARROW
nhArr	021CE		/nLeftrightarrow A: not l&r dbl arr LEFT RIGHT DOUBLE ARROW WITH STROKE
nharr	021AE		/nletrightarrow A: not l&r arrow LEFT RIGHT ARROW WITH STROKE
nlArr	021CD		/nLeftarrow A: not implied by LEFTWARDS DOUBLE ARROW WITH STROKE
nlarr	0219A		/nleftarrow A: not left arrow LEFTWARDS ARROW WITH STROKE
nrArr	021CF		/nRightarrow A: not implies RIGHTWARDS DOUBLE ARROW WITH STROKE
nrarr	0219B		/nrightharpoon A: not right arrow RIGHTWARDS ARROW WITH STROKE
nrarrc	02933-00338		not right arrow-curved WAVE ARROW POINTING DIRECTLY RIGHT with slash
nrarrw	0219D-00338		not right arrow-wavy RIGHTWARDS WAVE ARROW with slash
nvHarr	02904		not, vert, left and right double arrow LEFT RIGHT DOUBLE ARROW WITH VERTICAL STROKE
nvlArr	02902		not, vert, left double arrow LEFTWARDS DOUBLE ARROW WITH VERTICAL STROKE
nvrArr	02903		not, vert, right double arrow RIGHTWARDS DOUBLE ARROW WITH VERTICAL STROKE
nwarhk	02923		NW arrow-hooked NORTH WEST ARROW WITH HOOK

















isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
nwArr	021D6		NW pointing dbl arrow NORTH WEST DOUBLE ARROW
nwarr	02196		/nwarrow A: NW pointing arrow NORTH WEST ARROW
nwnear	02927		NW & NE arrows NORTH WEST ARROW AND NORTH EAST ARROW
olarr	021BA		/circlearrowleft A: l arr in circle ANTICLOCKWISE OPEN CIRCLE ARROW
orarr	021BB		/circlearrowright A: r arr in circle CLOCKWISE OPEN CIRCLE ARROW
origof	022B6		original of ORIGINAL OF
rAarr	021DB		/Rightarrow A: right triple arrow RIGHTWARDS TRIPLE ARROW
Rarr	021A0		/twoheadrightarrow A: RIGHTWARDS TWO HEADED ARROW
rarrap	02975		approximate, right arrow above RIGHTWARDS ARROW ABOVE ALMOST EQUAL TO
rarrbfs	02920		right arrow-bar, filled square RIGHTWARDS ARROW FROM BAR TO BLACK DIAMOND
rarrc	02933		right arrow-curved WAVE ARROW POINTING DIRECTLY RIGHT
rarrfs	0291E		right arrow, filled square RIGHTWARDS ARROW TO BLACK DIAMOND
rarrhk	021AA		/hookrightarrow A: rt arrow-hooked RIGHTWARDS ARROW WITH HOOK
rarrlp	021AC		/looparrowright A: rt arrow-looped RIGHTWARDS ARROW WITH LOOP
rarrpl	02945		right arrow, plus RIGHTWARDS ARROW WITH PLUS BELOW
rarrsim	02974		right arrow, similar RIGHTWARDS ARROW ABOVE TILDE OPERATOR
Rarrtl	02916		right two-headed arrow with tail RIGHTWARDS TWO-HEADED ARROW WITH TAIL
rarrtl	021A3		/rightarrowtail A: rt arrow-tailed RIGHTWARDS ARROW WITH TAIL
rarrw	0219D		/rightsquigarrow A: rt arrow-wavy RIGHTWARDS WAVE ARROW
rAtail	0291C		right double arrow-tail RIGHTWARDS DOUBLE ARROW-TAIL
ratail	0291A		right arrow-tail RIGHTWARDS ARROW-TAIL
RBarr	02910		/drbkarow A: twoheaded right broken arrow RIGHTWARDS TWO-HEADED TRIPLE DASH ARROW
rBarr	0290F		/dbkarow A: right doubly broken arrow RIGHTWARDS TRIPLE DASH ARROW
rbarr	0290D		/bkarow A: right broken arrow RIGHTWARDS DOUBLE DASH ARROW
rdca	02937		right down curved arrow ARROW POINTING DOWNWARDS THEN CURVING RIGHTWARDS
rdldhar	02969		right harpoon-down over left harpoon-down RIGHTWARDS HARPOON WITH BARB DOWN ABOVE LEFTWARDS HARPOON WITH BARB DOWN
rdsh	021B3		right down angled arrow DOWNWARDS ARROW WITH TIP RIGHTWARDS

isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
rfisht	0297D	→	right fish tail RIGHT FISH TAIL
rHar	02964	⇒	right harpoon-up over right harpoon-down RIGHTWARDS HARPOON WITH BARB UP ABOVE RIGHTWARDS HARPOON WITH BARB DOWN
rhard	021C1	→	/rightharpoondown A: rt harpoon-down RIGHTWARDS HARPOON WITH BARB DOWNWARDS
rharu	021C0	→	/rightharpoonup A: rt harpoon-up RIGHTWARDS HARPOON WITH BARB UPWARDS
rharul	0296C	⇒	right harpoon-up over long dash RIGHTWARDS HARPOON WITH BARB UP ABOVE LONG DASH
rlarr	021C4	⇌	/rightleftarrows A: r arr over l arr RIGHTWARDS ARROW OVER LEFTWARDS ARROW
rlhar	021CC	⇒	/rightleftharpoons A: r harp over l RIGHTWARDS HARPOON OVER LEFTWARDS HARPOON
roarr	021FE	→	right open arrow RIGHTWARDS OPEN-HEADED ARROW
rrarr	021C9	⇒	/rightrightarrows A: two rt arrows RIGHTWARDS PAIRED ARROWS
rsh	021B1	↑	/Rsh A: UPWARDS ARROW WITH TIP RIGHTWARDS
ruluhar	02968	⇒	right harpoon-up over left harpoon-up RIGHTWARDS HARPOON WITH BARB UP ABOVE LEFTWARDS HARPOON WITH BARB UP
searhk	02925	↘	/hksearrow A: SE arrow-hooked SOUTH EAST ARROW WITH HOOK
seArr	021D8	↘	SE pointing dbl arrow SOUTH EAST DOUBLE ARROW
searr	02198	↘	/searrow A: SE pointing arrow SOUTH EAST ARROW
seswar	02929	↘↙	/tosa A: SE & SW arrows SOUTH EAST ARROW AND SOUTH WEST ARROW
simrarr	02972	⇒	similar, right arrow below TILDE OPERATOR ABOVE RIGHTWARDS ARROW
slarr	02190	←	short left arrow LEFTWARDS ARROW
srarr	02192	→	short right arrow RIGHTWARDS ARROW
swarhk	02926	↙	/hkswarrow A: SW arrow-hooked SOUTH WEST ARROW WITH HOOK
swArr	021D9	↙	SW pointing dbl arrow SOUTH WEST DOUBLE ARROW
swarr	02199	↙	/swarrow A: SW pointing arrow SOUTH WEST ARROW
swnwar	0292A	↙↖	SW & NW arrows SOUTH WEST ARROW AND NORTH WEST ARROW
Uarr	0219F	↑	up two-headed arrow UPWARDS TWO HEADED ARROW
uArr	021D1	↑	/Uparrow A: up dbl arrow UPWARDS DOUBLE ARROW
Uarrocir	02949	↑	up two-headed arrow above circle UPWARDS TWO-HEADED ARROW FROM SMALL CIRCLE
udarr	021C5	↑	up arrow, down arrow UPWARDS ARROW LEFTWARDS OF DOWNWARDS ARROW

isoamsa

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
udhar	0296E		up harp, down harp UPWARDS HARPOON WITH BARB LEFT BESIDE DOWN- WARDS HARPOON WITH BARB RIGHT
ufisht	0297E		up fish tail UP FISH TAIL
uHar	02963		up harpoon-left, up harpoon-right UPWARDS HARPOON WITH BARB LEFT BESIDE UP- WARDS HARPOON WITH BARB RIGHT
uharl	021BF		/upharpoonleft A: up harpoon-left UPWARDS HARPOON WITH BARB LEFTWARDS
uharr	021BE		/upharpoonright /restriction A: up harp-r UPWARDS HARPOON WITH BARB RIGHTWARDS
uuarr	021C8		/uparrows A: two up arrows UPWARDS PAIRED ARROWS
vArr	021D5		/Updownarrow A: up&down dbl arrow UP DOWN DOUBLE ARROW
varr	02195		/updownarrow A: up&down arrow UP DOWN ARROW
xhArr	027FA		/Longleftrightarrow A: long l&r dbl arr LONG LEFT RIGHT DOUBLE ARROW
xharr	027F7		/longleftrightarrow A: long l&r arr LONG LEFT RIGHT ARROW
xlArr	027F8		/Longleftarrow A: long l dbl arrow LONG LEFTWARDS DOUBLE ARROW
xlarr	027F5		/longleftarrow A: long left arrow LONG LEFTWARDS ARROW
xmap	027FC		/longmapsto A: LONG RIGHTWARDS ARROW FROM BAR
xrArr	027F9		/Longrightarrow A: long rt dbl arr LONG RIGHTWARDS DOUBLE ARROW
xrarr	027F6		/longrightarrow A: long right arrow LONG RIGHTWARDS ARROW
zigrarr	021DD		right zig-zag arrow RIGHTWARDS SQUIGGLE ARROW

7.2 isoamsb




























isoamsb

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
ac	0223E	~	most positive INVERTED LAZY S
acE	0223E-00333	≈	most positive, two lines below INVERTED LAZY S with double underline
amalg	02A3F	⊍	/amalg B: amalgamation or coproduct AMALGAMATION OR COPRODUCT
barvee	022BD	∇	bar, vee NOR
Barwed	02306	⌘	/doublebarwedge B: log and, dbl bar above PERSPECTIVE
barwed	02305	⌘	/barwedge B: logical and, bar above PROJECTIVE
bsolb	029C5	⊘	reverse solidus in square SQUARED FALLING DIAGONAL SLASH
Cap	022D2	⊘	/Cap /doublecap B: dbl intersection DOUBLE INTERSECTION
capand	02A44	⊘	intersection, and INTERSECTION WITH LOGICAL AND
capbrcup	02A49	⊘	intersection, bar, union INTERSECTION ABOVE BAR ABOVE UNION
capcap	02A4B	⊘	intersection, intersection, joined INTERSECTION BESIDE AND JOINED WITH INTERSECTION
capcup	02A47	⊘	intersection above union INTERSECTION ABOVE UNION
capdot	02A40	⊘	intersection, with dot INTERSECTION WITH DOT
caps	02229-0FE00	⊘	intersection, serifs INTERSECTION with serifs
ccaps	02A4D	⊘	closed intersection, serifs CLOSED INTERSECTION WITH SERIFS
ccups	02A4C	⊘	closed union, serifs CLOSED UNION WITH SERIFS
ccupssm	02A50	⊘	closed union, serifs, smash product CLOSED UNION WITH SERIFS AND SMASH PRODUCT
coprod	02210	⊍	/coprod L: coproduct operator N-ARY COPRODUCT
Cup	022D3	⊍	/Cup /doublecup B: dbl union DOUBLE UNION
cupbrcap	02A48	⊍	union, bar, intersection UNION ABOVE BAR ABOVE INTERSECTION
cupcap	02A46	⊍	union above intersection UNION ABOVE INTERSECTION
cupcup	02A4A	⊍	union, union, joined UNION BESIDE AND JOINED WITH UNION
cupdot	0228D	⊍	union, with dot MULTISET MULTIPLICATION
cupor	02A45	⊍	union, or UNION WITH LOGICAL OR
cups	0222A-0FE00	⊍	union, serifs UNION with serifs
cuvee	022CE	∪	/curlyvee B: curly logical or CURLY LOGICAL OR





























isoamsb

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
cuwed	022CF	\curlywedge	/curlywedge B: curly logical and CURLY LOGICAL AND
Dagger	02021	\ddagger	/ddagger B: double dagger relation DOUBLE DAGGER
dagger	02020	\dagger	/dagger B: dagger relation DAGGER
diam	022C4	\diamond	/diamond B: open diamond DIAMOND OPERATOR
divonx	022C7	\div	/divideontimes B: division on times DIVISION TIMES
eplus	02A71	$\bar{+}$	equal, plus EQUALS SIGN ABOVE PLUS SIGN
hercon	022B9	\dagger	hermitian conjugate matrix HERMITIAN CONJUGATE MATRIX
intcal	022BA	\intercal	/intercal B: intercal INTERCALATE
iproduct	02A3C	\lrcorner	/intprod INTERIOR PRODUCT
loplus	02A2D	\oplus	plus sign in left half circle PLUS SIGN IN LEFT HALF CIRCLE
lotimes	02A34	\otimes	multiply sign in left half circle MULTIPLICATION SIGN IN LEFT HALF CIRCLE
lthree	022CB	\ltimes	/leftthreetimes B: LEFT SEMIDIRECT PRODUCT
ltimes	022C9	\ltimes	/ltimes B: times sign, left closed LEFT NORMAL FACTOR SEMIDIRECT PRODUCT
midast	0002A	$*$	/ast B: asterisk ASTERISK
minusb	0229F	\boxminus	/boxminus B: minus sign in box SQUARED MINUS
minusd	02238	$\dot{-}$	/dotminus B: minus sign, dot above DOT MINUS
minusdu	02A2A	$\dot{-}$	minus sign, dot below MINUS SIGN WITH DOT BELOW
ncap	02A43	$\bar{\cap}$	bar, intersection INTERSECTION WITH OVERBAR
ncup	02A42	$\bar{\cup}$	bar, union UNION WITH OVERBAR
oast	0229B	\circledast	/circledast B: asterisk in circle CIRCLED ASTERISK OPERATOR
ocirc	0229A	\circledcirc	/circledcirc B: small circle in circle CIRCLED RING OPERATOR
odash	0229D	\circledash	/circleddash B: hyphen in circle CIRCLED DASH
odiv	02A38	\circleddiv	divide in circle CIRCLED DIVISION SIGN
odot	02299	\circledcirc	/odot B: middle dot in circle CIRCLED DOT OPERATOR
odsold	029BC	\circledcirc	dot, solidus, dot in circle CIRCLED ANTICLOCKWISE-ROTATED DIVISION SIGN
ofcir	029BF	\bullet	filled circle in circle CIRCLED BULLET
ogt	029C1	\circledgt	greater-than in circle CIRCLED GREATER-THAN
ohbar	029B5	\ominus	circle with horizontal bar CIRCLE WITH HORIZONTAL BAR

isoamsb

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
olcir	029BE		large circle in circle CIRCLED WHITE BULLET
olt	029C0		less-than in circle CIRCLED LESS-THAN
omid	029B6		vertical bar in circle CIRCLED VERTICAL BAR
ominus	02296		/ominus B: minus sign in circle CIRCLED MINUS
opar	029B7		parallel in circle CIRCLED PARALLEL
operp	029B9		perpendicular in circle CIRCLED PERPENDICULAR
oplus	02295		/oplus B: plus sign in circle CIRCLED PLUS
osol	02298		/oslash B: solidus in circle CIRCLED DIVISION SLASH
Otimes	02A37		multiply sign in double circle MULTIPLICATION SIGN IN DOUBLE CIRCLE
otimes	02297		/otimes B: multiply sign in circle CIRCLED TIMES
otimesas	02A36		multiply sign in circle, circumflex accent CIRCLED MULTIPLICATION SIGN WITH CIRCUMFLEX ACCENT
ovbar	0233D		circle with vertical bar APL FUNCTIONAL SYMBOL CIRCLE STILE
plusacir	02A23		plus, circumflex accent above PLUS SIGN WITH CIRCUMFLEX ACCENT ABOVE
plusb	0229E		/boxplus B: plus sign in box SQUARED PLUS
pluscir	02A22		plus, small circle above PLUS SIGN WITH SMALL CIRCLE ABOVE
plusdo	02214		/dotplus B: plus sign, dot above DOT PLUS
plusdu	02A25		plus sign, dot below PLUS SIGN WITH DOT BELOW
pluse	02A72		plus, equals PLUS SIGN ABOVE EQUALS SIGN
plussim	02A26		plus, similar below PLUS SIGN WITH TILDE BELOW
plustwo	02A27		plus, two; Nim-addition PLUS SIGN WITH SUBSCRIPT TWO
prod	0220F		/prod L: product operator N-ARY PRODUCT
race	029DA		reverse most positive, line below LEFT DOUBLE WIGGLY FENCE
roplus	02A2E		plus sign in right half circle PLUS SIGN IN RIGHT HALF CIRCLE
rotimes	02A35		multiply sign in right half circle MULTIPLICATION SIGN IN RIGHT HALF CIRCLE
rthree	022CC		/righthreetimes B: RIGHT SEMIDIRECT PRODUCT
rtimes	022CA		/rtimes B: times sign, right closed RIGHT NORMAL FACTOR SEMIDIRECT PRODUCT
sdot	022C5		/cdot B: small middle dot DOT OPERATOR

isoamsb

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
sdotb	022A1		/dotsquare /boxdot B: small dot in box SQUARED DOT OPERATOR
setmn	02216		/setminus B: reverse solidus SET MINUS
simplus	02A24		plus, similar above PLUS SIGN WITH TILDE ABOVE
smashp	02A33		smash product SMASH PRODUCT
solb	029C4		solidus in square SQUARED RISING DIAGONAL SLASH
sqcap	02293		/sqcap B: square intersection SQUARE CAP
sqcaps	02293-0FE00		square intersection, serifs SQUARE CAP with serifs
sqcup	02294		/sqcup B: square union SQUARE CUP
sqcups	02294-0FE00		square union, serifs SQUARE CUP with serifs
ssetmn	02216		/smallsetminus B: sm reverse solidus SET MINUS
sstarf	022C6		/star B: small star, filled STAR OPERATOR
subdot	02ABD		subset, with dot SUBSET WITH DOT
sum	02211		/sum L: summation operator N-ARY SUMMATION
supdot	02ABE		superset, with dot SUPERSET WITH DOT
timesb	022A0		/boxtimes B: multiply sign in box SQUARED TIMES
timesbar	02A31		multiply sign, bar below MULTIPLICATION SIGN WITH UNDERBAR
timesd	02A30		times, dot MULTIPLICATION SIGN WITH DOT ABOVE
tridot	025EC		dot in triangle WHITE UP-POINTING TRIANGLE WITH DOT
triminus	02A3A		minus in triangle MINUS SIGN IN TRIANGLE
triplus	02A39		plus in triangle PLUS SIGN IN TRIANGLE
trisb	029CD		triangle, serifs at bottom TRIANGLE WITH SERIFS AT BOTTOM
tritime	02A3B		multiply in triangle MULTIPLICATION SIGN IN TRIANGLE
uplus	0228E		/uplus B: plus sign in union MULTISET UNION
veebar	022BB		/veebar B: logical or, bar below XOR
wedbar	02A5F		wedge, bar below LOGICAL AND WITH UNDERBAR
wreath	02240		/wr B: wreath product WREATH PRODUCT
xcap	022C2		/bigcap L: intersection operator N-ARY INTERSECTION
xcirc	025EF		/bigcirc B: large circle LARGE CIRCLE

isoamsb

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
xcup	022C3	⋃	/bigcup L: union operator N-ARY UNION
xdtri	025BD	▽	/bigtriangledown B: big dn tri, open WHITE DOWN-POINTING TRIANGLE
xodot	02A00	⊙	/bigodot L: circle dot operator N-ARY CIRCLED DOT OPERATOR
xoplus	02A01	⊕	/bigoplus L: circle plus operator N-ARY CIRCLED PLUS OPERATOR
xotime	02A02	⊗	/bigotimes L: circle times operator N-ARY CIRCLED TIMES OPERATOR
xsqcup	02A06	⊔	/bigsqcup L: square union operator N-ARY SQUARE UNION OPERATOR
xuplus	02A04	⊕	/biguplus L: N-ARY UNION OPERATOR WITH PLUS
xutri	025B3	△	/bigtriangleup B: big up tri, open WHITE UP-POINTING TRIANGLE
xvee	022C1	⋀	/bigvee L: logical and operator N-ARY LOGICAL OR
xwedge	022C0	⋀	/bigwedge L: logical or operator N-ARY LOGICAL AND




























7.3 isoamsc

isoamsc




























Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
dlcorn	0231E	└	/lcorner O: lower left corner BOTTOM LEFT CORNER
drcorn	0231F	┘	/rcorner C: lower right corner BOTTOM RIGHT CORNER
gtlPar	02995	⌞	dbl left parenthesis, greater DOUBLE LEFT ARC GREATER-THAN BRACKET
langd	02991	⦶	left angle, dot LEFT ANGLE BRACKET WITH DOT
lbrke	0298B	┌	left bracket, equal LEFT SQUARE BRACKET WITH UNDERBAR
lbrksld	0298F	└	left bracket, solidus bottom corner LEFT SQUARE BRACKET WITH TICK IN BOTTOM CORNER
lbrkslu	0298D	┌	left bracket, solidus top corner LEFT SQUARE BRACKET WITH TICK IN TOP CORNER
lceil	02308	┌	/lceil O: left ceiling LEFT CEILING
lfloor	0230A	└	/lfloor O: left floor LEFT FLOOR
lmoust	023B0	⌋	/lmoustache UPPER LEFT OR LOWER RIGHT CURLY BRACKET SECTION
lparlt	02993	⌞	O: left parenthesis, lt LEFT ARC LESS-THAN BRACKET
ltrPar	02996	⌟	dbl right parenthesis, less DOUBLE RIGHT ARC LESS-THAN BRACKET
rangd	02992	⦷	right angle, dot RIGHT ANGLE BRACKET WITH DOT
rbrke	0298C	┐	right bracket, equal RIGHT SQUARE BRACKET WITH UNDERBAR
rbrksld	0298E	┘	right bracket, solidus bottom corner RIGHT SQUARE BRACKET WITH TICK IN BOTTOM CORNER
rbrkslu	02990	┘	right bracket, solidus top corner RIGHT SQUARE BRACKET WITH TICK IN TOP CORNER
rceil	02309	┐	/rceil C: right ceiling RIGHT CEILING
rfloor	0230B	┘	/rfloor C: right floor RIGHT FLOOR
rmoust	023B1	⌋	/rmoustache UPPER RIGHT OR LOWER LEFT CURLY BRACKET SECTION
rpargt	02994	⌟	C: right paren, gt RIGHT ARC GREATER-THAN BRACKET
ulcorn	0231C	┐	/ulcorner O: upper left corner TOP LEFT CORNER
urcorn	0231D	┑	/urcorner C: upper right corner TOP RIGHT CORNER

7.4 isoamsn

isoamsn

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
gnap	02A8A		/gnapprox N: greater, not approximate GREATER-THAN AND NOT APPROXIMATE
gnE	02269		/gneq N: greater, not dbl equals GREATER-THAN BUT NOT EQUAL TO
gne	02A88		/gneq N: greater, not equals GREATER-THAN AND SINGLE-LINE NOT EQUAL TO
gnsim	022E7		/gnsim N: greater, not similar GREATER-THAN BUT NOT EQUIVALENT TO
gvnE	02269-0FE00		/gvrtneq N: gt, vert, not dbl eq GREATER-THAN BUT NOT EQUAL TO - with vertical stroke
lnap	02A89		/lnapprox N: less, not approximate LESS-THAN AND NOT APPROXIMATE
lnE	02268		/lneq N: less, not double equals LESS-THAN BUT NOT EQUAL TO
lne	02A87		/lneq N: less, not equals LESS-THAN AND SINGLE-LINE NOT EQUAL TO
lnsim	022E6		/lnsim N: less, not similar LESS-THAN BUT NOT EQUIVALENT TO
lvnE	02268-0FE00		/lvrtneq N: less, vert, not dbl eq LESS-THAN BUT NOT EQUAL TO - with vertical stroke
nap	02249		/napprox N: not approximate NOT ALMOST EQUAL TO
napE	02A70-00338		not approximately equal or equal to APPROXIMATELY EQUAL OR EQUAL TO with slash
napid	0224B-00338		not approximately identical to TRIPLE TILDE with slash
ncong	02247		/ncong N: not congruent with NEITHER APPROXIMATELY NOR ACTUALLY EQUAL TO
ncongdot	02A6D-00338		not congruent, dot CONGRUENT WITH DOT ABOVE with slash
nequiv	02262		/nequiv N: not identical with NOT IDENTICAL TO
ngE	02267-00338		/ngeq N: not greater, dbl equals GREATER-THAN OVER EQUAL TO with slash
nge	02271		/ngeq N: not greater-than-or-equal NEITHER GREATER-THAN NOR EQUAL TO
nges	02A7E-00338		/ngeqslant N: not gt-or-eq, slanted GREATER-THAN OR SLANTED EQUAL TO with slash
nGg	022D9-00338		not triple greater than VERY MUCH GREATER-THAN with slash
ngsim	02275		not greater, similar NEITHER GREATER-THAN NOR EQUIVALENT TO
nGt	0226B-020D2		not, vert, much greater than MUCH GREATER THAN with vertical line
ngt	0226F		/ngtr N: not greater-than NOT GREATER-THAN
nGtv	0226B-00338		not much greater than, variant MUCH GREATER THAN with slash
nIE	02266-00338		/nleq N: not less, dbl equals LESS-THAN OVER EQUAL TO with slash
nle	02270		/nleq N: not less-than-or-equal NEITHER LESS-THAN NOR EQUAL TO
nles	02A7D-00338		/nleqslant N: not less-or-eq, slant LESS-THAN OR SLANTED EQUAL TO with slash










isoamsn

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
nLl	022D8-00338		not triple less than VERY MUCH LESS-THAN with slash
nlsim	02274		not less, similar NEITHER LESS-THAN NOR EQUIVALENT TO
nLt	0226A-020D2		not, vert, much less than MUCH LESS THAN with vertical line
nlt	0226E		/nless N: not less-than NOT LESS-THAN
nltri	022EA		/ntriangleleft N: not left triangle NOT NORMAL SUBGROUP OF
nltrie	022EC		/ntrianglelefteq N: not l tri, eq NOT NORMAL SUBGROUP OF OR EQUAL TO
nLtv	0226A-00338		not much less than, variant MUCH LESS THAN with slash
nmid	02224		/nmid DOES NOT DIVIDE
npar	02226		/nparallel N: not parallel NOT PARALLEL TO
npr	02280		/nprec N: not precedes DOES NOT PRECEDE
nprcue	022E0		not curly precedes, eq DOES NOT PRECEDE OR EQUAL
npre	02AAF-00338		/npreceq N: not precedes, equals PRECEDES ABOVE SINGLE-LINE EQUALS SIGN with slash
nrtri	022EB		/ntriangleright N: not rt triangle DOES NOT CONTAIN AS NORMAL SUBGROUP
nrtrie	022ED		/ntrianglerighteq N: not r tri, eq DOES NOT CONTAIN AS NORMAL SUBGROUP OR EQUAL
nsc	02281		/nsucc N: not succeeds DOES NOT SUCCEED
nsccue	022E1		not succeeds, curly eq DOES NOT SUCCEED OR EQUAL
nsce	02AB0-00338		/nsuceq N: not succeeds, equals SUCCEEDS ABOVE SINGLE-LINE EQUALS SIGN with slash
nsim	02241		/nsim N: not similar NOT TILDE
nsime	02244		/nsimeq N: not similar, equals NOT ASYMPTOTICALLY EQUAL TO
nsmid	02224		/nshortmid DOES NOT DIVIDE
nspar	02226		/nshortparallel N: not short par NOT PARALLEL TO
nsqsube	022E2		not, square subset, equals NOT SQUARE IMAGE OF OR EQUAL TO
nsqsupe	022E3		not, square superset, equals NOT SQUARE ORIGINAL OF OR EQUAL TO
nsub	02284		not subset NOT A SUBSET OF
nsubE	02AC5-00338		/nsubseteqq N: not subset, dbl eq SUBSET OF ABOVE EQUALS SIGN with slash
nsube	02288		/nsubseteq N: not subset, equals NEITHER A SUBSET OF NOR EQUAL TO
nsup	02285		not superset NOT A SUPERSET OF

isoamsn























Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
nsupE	02AC6-00338		/nsupseteqq N: not superset, dbl eq SUPERSET OF ABOVE EQUALS SIGN with slash
nsupe	02289		/nsupseteq N: not superset, equals NEITHER A SUPERSET OF NOR EQUAL TO
ntgl	02279		not greater, less NEITHER GREATER-THAN NOR LESS-THAN
ntlq	02278		not less, greater NEITHER LESS-THAN NOR GREATER-THAN
nvap	0224D-020D2		not, vert, approximate EQUIVALENT TO with vertical line
nVDash	022AF		/nVDash N: not dbl vert, dbl dash NEGATED DOUBLE VERTICAL BAR DOUBLE RIGHT TURNSTILE
nVdash	022AE		/nVdash N: not dbl vertical, dash DOES NOT FORCE
nvDash	022AD		/nvDash N: not vertical, dbl dash NOT TRUE
nvdash	022AC		/nvdash N: not vertical, dash DOES NOT PROVE
nvge	02265-020D2		not, vert, greater-than-or-equal GREATER-THAN OR EQUAL TO with vertical line
nvgt	0003E-020D2		not, vert, greater-than GREATER-THAN SIGN with vertical line
nvle	02264-020D2		not, vert, less-than-or-equal LESS-THAN OR EQUAL TO with vertical line
nvlt	0003C-020D2		not, vert, less-than LESS-THAN SIGN with vertical line
nvltrie	022B4-020D2		not, vert, left triangle, equals NORMAL SUBGROUP OF OR EQUAL TO with vertical line
nvrtrie	022B5-020D2		not, vert, right triangle, equals CONTAINS AS NORMAL SUBGROUP OR EQUAL TO with vertical line
nvsim	0223C-020D2		not, vert, similar TILDE OPERATOR with vertical line
parsim	02AF3		parallel, similar PARALLEL WITH TILDE OPERATOR
prnap	02AB9		/precnapprox N: precedes, not approx PRECEDES ABOVE NOT ALMOST EQUAL TO
prnE	02AB5		/precneqq N: precedes, not dbl eq PRECEDES ABOVE NOT EQUAL TO
prnsim	022E8		/precnsim N: precedes, not similar PRECEDES BUT NOT EQUIVALENT TO
rnmid	02AEE		reverse /nmid DOES NOT DIVIDE WITH REVERSED NEGATION SLASH
scnap	02ABA		/succnapprox N: succeeds, not approx SUCCEEDS ABOVE NOT ALMOST EQUAL TO
scnE	02AB6		/succneqq N: succeeds, not dbl eq SUCCEEDS ABOVE NOT EQUAL TO
scnsim	022E9		/succnsim N: succeeds, not similar SUCCEEDS BUT NOT EQUIVALENT TO
simne	02246		similar, not equals APPROXIMATELY BUT NOT ACTUALLY EQUAL TO
solbar	0233F		solidus, bar through APL FUNCTIONAL SYMBOL SLASH BAR
subnE	02ACB		/subsetneqq N: subset, not dbl eq SUBSET OF ABOVE NOT EQUAL TO

isoamsn





























Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
subne	0228A		/subsetneq N: subset, not equals SUBSET OF WITH NOT EQUAL TO
supnE	02ACC		/supsetneqq N: superset, not dbl eq SUPERSET OF ABOVE NOT EQUAL TO
supne	0228B		/supsetneq N: superset, not equals SUPERSET OF WITH NOT EQUAL TO
vnsup	02282-020D2		/nsubset N: not subset, var SUBSET OF with vertical line
vnsup	02283-020D2		/nsupset N: not superset, var SUPERSET OF with vertical line
vsubnE	02ACB-0FE00		/varsubsetneqq N: subset not dbl eq, var SUBSET OF ABOVE NOT EQUAL TO - variant with stroke through bottom members
vsubne	0228A-0FE00		/varsubsetneq N: subset, not eq, var SUBSET OF WITH NOT EQUAL TO - variant with stroke through bottom members
vsupnE	02ACC-0FE00		/varsupsetneqq N: super not dbl eq, var SUPERSET OF ABOVE NOT EQUAL TO - variant with stroke through bottom members
vsupne	0228B-0FE00		/varsupsetneq N: superset, not eq, var SUPERSET OF WITH NOT EQUAL TO - variant with stroke through bottom members

7.5 isoamso

isoamso

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
ang	02220		/angle - angle ANGLE
ange	029A4		angle, equal ANGLE WITH UNDERBAR
angmsd	02221		/measuredangle - angle-measured MEASURED ANGLE
angmsdaa	029A8		angle-measured, arrow, up, right MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING UP AND RIGHT
angmsdab	029A9		angle-measured, arrow, up, left MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING UP AND LEFT
angmsdac	029AA		angle-measured, arrow, down, right MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING DOWN AND RIGHT
angmsdad	029AB		angle-measured, arrow, down, left MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING DOWN AND LEFT
angmsdae	029AC		angle-measured, arrow, right, up MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING RIGHT AND UP
angmsdaf	029AD		angle-measured, arrow, left, up MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING LEFT AND UP
angmsdag	029AE		angle-measured, arrow, right, down MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING RIGHT AND DOWN
angmsdah	029AF		angle-measured, arrow, left, down MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING LEFT AND DOWN
angrtvb	022BE		right angle-measured RIGHT ANGLE WITH ARC
angrtvbd	0299D		right angle-measured, dot MEASURED RIGHT ANGLE WITH DOT
bbrk	023B5		bottom square bracket BOTTOM SQUARE BRACKET
bbrktbrk	023B6		bottom above top square bracket BOTTOM SQUARE BRACKET OVER TOP SQUARE BRACKET
bemptyv	029B0		reversed circle, slash REVERSED EMPTY SET
beth	02136		/beth - beth, Hebrew BET SYMBOL
boxbox	029C9		two joined squares TWO JOINED SQUARES
bprime	02035		/backprime - reverse prime REVERSED PRIME
bsemi	0204F		reverse semi-colon REVERSED SEMICOLON
cemptyv	029B2		circle, slash, small circle above EMPTY SET WITH SMALL CIRCLE ABOVE
cirE	029C3		circle, two horizontal stroked to the right CIRCLE WITH TWO HORIZONTAL STROKES TO THE RIGHT

isoamso

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
cirscir	029C2		circle, small circle to the right CIRCLE WITH SMALL CIRCLE TO THE RIGHT
comp	02201		/complement - complement sign COMPLEMENT
daleth	02138		/daleth - daleth, Hebrew DALET SYMBOL
demptyv	029B1		circle, slash, bar above EMPTY SET WITH OVERBAR
ell	02113		/ell - cursive small l SCRIPT SMALL L
empty	02205		/emptyset - zero, slash EMPTY SET
emptyv	02205		/varnothing - circle, slash EMPTY SET
gimel	02137		/gimel - gimel, Hebrew GIMEL SYMBOL
iota	02129		inverted iota TURNED GREEK SMALL LETTER IOTA
image	02111		/Im - imaginary BLACK-LETTER CAPITAL I
imath	00131		/imath - small i, no dot LATIN SMALL LETTER DOTLESS I
jmath	0006A		/jmath - small j, no dot LATIN SMALL LETTER J
laemptyv	029B4		circle, slash, left arrow above EMPTY SET WITH LEFT ARROW ABOVE
lltri	025FA		lower left triangle LOWER LEFT TRIANGLE
lrtri	022BF		lower right triangle RIGHT TRIANGLE
mho	02127		/mho - conductance INVERTED OHM SIGN
nang	02220-020D2		not, vert, angle ANGLE with vertical line
nexist	02204		/nexists - negated exists THERE DOES NOT EXIST
oS	024C8		/circledS - capital S in circle CIRCLED LATIN CAPITAL LETTER S
planck	0210F		/hbar - Planck's over 2pi PLANCK CONSTANT OVER TWO PI
plankv	0210F		/hslash - variant Planck's over 2pi PLANCK CONSTANT OVER TWO PI
raemptyv	029B3		circle, slash, right arrow above EMPTY SET WITH RIGHT ARROW ABOVE
range	029A5		reverse angle, equal REVERSED ANGLE WITH UNDERBAR
real	0211C		/Re - real BLACK-LETTER CAPITAL R
tbrk	023B4		top square bracket TOP SQUARE BRACKET
trpezium	0FFFFD		trapezium REPLACEMENT CHARACTER
ultri	025F8		upper left triangle UPPER LEFT TRIANGLE
urtri	025F9		upper right triangle UPPER RIGHT TRIANGLE

isoamso



























Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
vzigzag	0299A	⋈	vertical zig-zag line VERTICAL ZIGZAG LINE
weierp	02118	℘	/wp - Weierstrass p SCRIPT CAPITAL P

7.6 isoamsr

isoamsr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
apE	02A70	≈	approximately equal or equal to APPROXIMATELY EQUAL OR EQUAL TO
ape	0224A	≈	/approx R: approximate, equals ALMOST EQUAL OR EQUAL TO
apid	0224B	≈	approximately identical to TRIPLE TILDE
asyp	02248	≈	/asyp R: asymptotically equal to ALMOST EQUAL TO
Barv	02AE7	⏊	vert, dbl bar (over) SHORT DOWN TACK WITH OVERBAR
bcong	0224C	≈	/backcong R: reverse congruent ALL EQUAL TO
bepsi	003F6	ϵ	/backepsilon R: such that GREEK REVERSED LUNATE EPSILON SYMBOL
bowtie	022C8	⋈	/bowtie R: BOWTIE
bsim	0223D	≈	/backsim R: reverse similar REVERSED TILDE
bsime	022CD	≈	/backsimeq R: reverse similar, eq REVERSED TILDE EQUALS
bsolhsub	0005C-02282	≈	reverse solidus, subset REVERSE SOLIDUS, SUBSET OF
bump	0224E	≈	/Bumpeq R: bumpy equals GEOMETRICALLY EQUIVALENT TO
bumpE	02AAE	≈	bump, equals EQUALS SIGN WITH BUMPY ABOVE
bumpe	0224F	≈	/bumpeq R: bumpy equals, equals DIFFERENCE BETWEEN
cire	02257	≈	/circeq R: circle, equals RING EQUAL TO
Colon	02237	::	/Colon, two colons PROPORTION
Colone	02A74	≈	double colon, equals DOUBLE COLON EQUAL
colone	02254	≈	/coloneq R: colon, equals COLON EQUALS
congdot	02A6D	≈	congruent, dot CONGRUENT WITH DOT ABOVE
csub	02ACF	⊂	subset, closed CLOSED SUBSET
csube	02AD1	⊂	subset, closed, equals CLOSED SUBSET OR EQUAL TO
csup	02AD0	⊃	superset, closed CLOSED SUPERSET
csupe	02AD2	⊃	superset, closed, equals CLOSED SUPERSET OR EQUAL TO
cuepr	022DE	≈	/curlyeqprec R: curly eq, precedes EQUAL TO OR PRECEDES
cuesc	022DF	≈	/curlyeqsucc R: curly eq, succeeds EQUAL TO OR SUCCEEDS
Dashv	02AE4	⏊	dbl dash, vertical VERTICAL BAR DOUBLE LEFT TURNSTILE
dashv	022A3	┌	/dashv R: dash, vertical LEFT TACK



























isoamsr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
easter	02A6E		equal, asterisk above EQUALS WITH ASTERISK
ecir	02256		/eqcirc R: circle on equals sign RING IN EQUAL TO
ecolon	02255		/eqcolon R: equals, colon EQUALS COLON
eDDot	02A77		/ddotseq R: equal with four dots EQUALS SIGN WITH TWO DOTS ABOVE AND TWO DOTS BELOW
eDot	02251		/doteqdot /Doteq R: eq, even dots GEOMETRICALLY EQUAL TO
efDot	02252		/fallingdotseq R: eq, falling dots APPROXIMATELY EQUAL TO OR THE IMAGE OF
eg	02A9A		equal-or-greater DOUBLE-LINE EQUAL TO OR GREATER-THAN
egs	02A96		/eqslantgtr R: equal-or-gtr, slanted SLANTED EQUAL TO OR GREATER-THAN
egsdot	02A98		equal-or-greater, slanted, dot inside SLANTED EQUAL TO OR GREATER-THAN WITH DOT INSIDE
el	02A99		equal-or-less DOUBLE-LINE EQUAL TO OR LESS-THAN
els	02A95		/eqslantless R: eq-or-less, slanted SLANTED EQUAL TO OR LESS-THAN
elsdot	02A97		equal-or-less, slanted, dot inside SLANTED EQUAL TO OR LESS-THAN WITH DOT INSIDE
equest	0225F		/questeq R: equal with questionmark QUESTIONED EQUAL TO
equivDD	02A78		equivalent, four dots above EQUIVALENT WITH FOUR DOTS ABOVE
erDot	02253		/risingdotseq R: eq, rising dots IMAGE OF OR APPROXIMATELY EQUAL TO
esdot	02250		/doteq R: equals, single dot above APPROACHES THE LIMIT
Esim	02A73		equal, similar EQUALS SIGN ABOVE TILDE OPERATOR
esim	02242		/esim R: equals, similar MINUS TILDE
fork	022D4		/pitchfork R: pitchfork PITCHFORK
forkv	02AD9		fork, variant ELEMENT OF OPENING DOWNWARDS
frown	02322		/frown R: down curve FROWN
gap	02A86		/gtrapprox R: greater, approximate GREATER-THAN OR APPROXIMATE
gE	02267		/geqq R: greater, double equals GREATER-THAN OVER EQUAL TO
gEl	02A8C		/gtreqqls R: gt, dbl equals, less GREATER-THAN ABOVE DOUBLE-LINE EQUAL ABOVE LESS-THAN
gel	022DB		/gtreqless R: greater, equals, less GREATER-THAN EQUAL TO OR LESS-THAN
ges	02A7E		/geqslant R: gt-or-equal, slanted GREATER-THAN OR SLANTED EQUAL TO





























isoamsr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
gescc	02AA9		greater than, closed by curve, equal, slanted GREATER-THAN CLOSED BY CURVE ABOVE SLANTED EQUAL
gesdot	02A80		greater-than-or-equal, slanted, dot inside GREATER-THAN OR SLANTED EQUAL TO WITH DOT INSIDE
gesdoto	02A82		greater-than-or-equal, slanted, dot above GREATER-THAN OR SLANTED EQUAL TO WITH DOT ABOVE
gesdotol	02A84		greater-than-or-equal, slanted, dot above left GREATER-THAN OR SLANTED EQUAL TO WITH DOT ABOVE LEFT
gesl	022DB-0FE00		greater, equal, slanted, less GREATER-THAN slanted EQUAL TO OR LESS-THAN
gesles	02A94		greater, equal, slanted, less, equal, slanted GREATER-THAN ABOVE SLANTED EQUAL ABOVE LESS-THAN ABOVE SLANTED EQUAL
Gg	022D9		/ggg /Gg /gggtr R: triple gtr-than VERY MUCH GREATER-THAN
gl	02277		/gtless R: greater, less GREATER-THAN OR LESS-THAN
gla	02AA5		greater, less, apart GREATER-THAN BESIDE LESS-THAN
glE	02A92		greater, less, equal GREATER-THAN ABOVE LESS-THAN ABOVE DOUBLE-LINE EQUAL
glj	02AA4		greater, less, overlapping GREATER-THAN OVERLAPPING LESS-THAN
gsim	02273		/gtrsim R: greater, similar GREATER-THAN OR EQUIVALENT TO
gsime	02A8E		greater, similar, equal GREATER-THAN ABOVE SIMILAR OR EQUAL
gsiml	02A90		greater, similar, less GREATER-THAN ABOVE SIMILAR ABOVE LESS-THAN
Gt	0226B		/gg R: dbl greater-than sign MUCH GREATER-THAN
gtcc	02AA7		greater than, closed by curve GREATER-THAN CLOSED BY CURVE
gtcir	02A7A		greater than, circle inside GREATER-THAN WITH CIRCLE INSIDE
gtdot	022D7		/gtrdot R: greater than, with dot GREATER-THAN WITH DOT
gtquest	02A7C		greater than, questionmark above GREATER-THAN WITH QUESTION MARK ABOVE
gtrarr	02978		greater than, right arrow GREATER-THAN ABOVE RIGHTWARDS ARROW
homtht	0223B		homothetic HOMOTHETIC
lap	02A85		/lessapprox R: less, approximate LESS-THAN OR APPROXIMATE
lat	02AAB		larger than LARGER THAN
late	02AAD		larger than or equal LARGER THAN OR EQUAL TO
lates	02AAD-0FE00		larger than or equal, slanted LARGER THAN OR slanted EQUAL

isoamstr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
IE	02266		/leqq R: less, double equals LESS-THAN OVER EQUAL TO
IEg	02A8B		/lesseqgtr R: less, dbl eq, greater LESS-THAN ABOVE DOUBLE-LINE EQUAL ABOVE GREATER-THAN
leg	022DA		/lesseqgtr R: less, eq, greater LESS-THAN EQUAL TO OR GREATER-THAN
les	02A7D		/leqslant R: less-than-or-eq, slant LESS-THAN OR SLANTED EQUAL TO
lescc	02AA8		less than, closed by curve, equal, slanted LESS-THAN CLOSED BY CURVE ABOVE SLANTED EQUAL
lesdot	02A7F		less-than-or-equal, slanted, dot inside LESS-THAN OR SLANTED EQUAL TO WITH DOT INSIDE
lesdoto	02A81		less-than-or-equal, slanted, dot above LESS-THAN OR SLANTED EQUAL TO WITH DOT ABOVE
lesdotor	02A83		less-than-or-equal, slanted, dot above right LESS-THAN OR SLANTED EQUAL TO WITH DOT ABOVE RIGHT
lesg	022DA-0FE00		less, equal, slanted, greater LESS-THAN slanted EQUAL TO OR GREATER-THAN
lesges	02A93		less, equal, slanted, greater, equal, slanted LESS-THAN ABOVE SLANTED EQUAL ABOVE GREATER-THAN ABOVE SLANTED EQUAL
lg	02276		/lessgtr R: less, greater LESS-THAN OR GREATER-THAN
lgE	02A91		less, greater, equal LESS-THAN ABOVE GREATER-THAN ABOVE DOUBLE- LINE EQUAL
LI	022D8		/Ll /ll /lless R: triple less-than VERY MUCH LESS-THAN
lsim	02272		/lesssim R: less, similar LESS-THAN OR EQUIVALENT TO
lsime	02A8D		less, similar, equal LESS-THAN ABOVE SIMILAR OR EQUAL
lsimg	02A8F		less, similar, greater LESS-THAN ABOVE SIMILAR ABOVE GREATER-THAN
Lt	0226A		/ll R: double less-than sign MUCH LESS-THAN
ltcc	02AA6		less than, closed by curve LESS-THAN CLOSED BY CURVE
ltcir	02A79		less than, circle inside LESS-THAN WITH CIRCLE INSIDE
ltdot	022D6		/lessdot R: less than, with dot LESS-THAN WITH DOT
ltlarr	02976		less than, left arrow LESS-THAN ABOVE LEFTWARDS ARROW
ltquest	02A7B		less than, questionmark above LESS-THAN WITH QUESTION MARK ABOVE
ltrie	022B4		/trianglelefteq R: left triangle, eq NORMAL SUBGROUP OF OR EQUAL TO
mcomma	02A29		minus, comma above MINUS SIGN WITH COMMA ABOVE
mDDot	0223A		minus with four dots, geometric properties GEOMETRIC PROPORTION
mid	02223		/mid R: DIVIDES

isoamstr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
mlcp	02ADB		/mlcp TRANSVERSAL INTERSECTION
models	022A7		/models R: MODELS
mstpos	0223E		most positive INVERTED LAZY S
Pr	02ABB		dbl precedes DOUBLE PRECEDES
pr	0227A		/prec R: precedes PRECEDES
prap	02AB7		/precapprox R: precedes, approximate PRECEDES ABOVE ALMOST EQUAL TO
prcue	0227C		/precurlyeq R: precedes, curly eq PRECEDES OR EQUAL TO
prE	02AB3		precedes, dbl equals PRECEDES ABOVE EQUALS SIGN
pre	02AAF		/preceq R: precedes, equals PRECEDES ABOVE SINGLE-LINE EQUALS SIGN
prsim	0227E		/presim R: precedes, similar PRECEDES OR EQUIVALENT TO
prurel	022B0		element precedes under relation PRECEDES UNDER RELATION
ratio	02236		/ratio RATIO
rtrie	022B5		/trianglerighteq R: right tri, eq CONTAINS AS NORMAL SUBGROUP OR EQUAL TO
rtriltri	029CE		right triangle above left triangle RIGHT TRIANGLE ABOVE LEFT TRIANGLE
Sc	02ABC		dbl succeeds DOUBLE SUCCEEDS
sc	0227B		/succ R: succeeds SUCCEEDS
scap	02AB8		/succapprox R: succeeds, approximate SUCCEEDS ABOVE ALMOST EQUAL TO
sccue	0227D		/succurlyeq R: succeeds, curly eq SUCCEEDS OR EQUAL TO
scE	02AB4		succeeds, dbl equals SUCCEEDS ABOVE EQUALS SIGN
sce	02AB0		/succeq R: succeeds, equals SUCCEEDS ABOVE SINGLE-LINE EQUALS SIGN
scsim	0227F		/succsim R: succeeds, similar SUCCEEDS OR EQUIVALENT TO
sdote	02A66		equal, dot below EQUALS SIGN WITH DOT BELOW
sfrown	02322		/smallfrown R: small down curve FROWN
simg	02A9E		similar, greater SIMILAR OR GREATER-THAN
simgE	02AA0		similar, greater, equal SIMILAR ABOVE GREATER-THAN ABOVE EQUALS SIGN
siml	02A9D		similar, less SIMILAR OR LESS-THAN
simlE	02A9F		similar, less, equal SIMILAR ABOVE LESS-THAN ABOVE EQUALS SIGN
smid	02223		/shortmid R: DIVIDES

isoamsr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
smile	02323	⤿	/smile R: up curve SMILE
smt	02AAA	⋈	smaller than SMALLER THAN
smtē	02AAC	⋈̄	smaller than or equal SMALLER THAN OR EQUAL TO
smtēs	02AAC-0FE00	⋈̄̂	smaller than or equal, slanted SMALLER THAN OR slanted EQUAL
spar	02225	∥	/shortparallel R: short parallel PARALLEL TO
sqsub	0228F	◻	/sqsubset R: square subset SQUARE IMAGE OF
sqsube	02291	◻̄	/sqsubsetq R: square subset, equals SQUARE IMAGE OF OR EQUAL TO
sqsup	02290	◻̅	/sqsupset R: square superset SQUARE ORIGINAL OF
sqsupe	02292	◻̅̄	/sqsupsetq R: square superset, eq SQUARE ORIGINAL OF OR EQUAL TO
ssmile	02323	⤿	/smallsmile R: small up curve SMILE
Sub	022D0	⊆	/Subset R: double subset DOUBLE SUBSET
subE	02AC5	⊆̄	/subseteqq R: subset, dbl equals SUBSET OF ABOVE EQUALS SIGN
subedot	02AC3	⊆̄̂	subset, equals, dot SUBSET OF OR EQUAL TO WITH DOT ABOVE
submult	02AC1	⊆̄×	subset, multiply SUBSET WITH MULTIPLICATION SIGN BELOW
subplus	02ABF	⊆̄+	subset, plus SUBSET WITH PLUS SIGN BELOW
subrarr	02979	⊆̄→	subset, right arrow SUBSET ABOVE RIGHTWARDS ARROW
subsim	02AC7	⊆̄~	subset, similar SUBSET OF ABOVE TILDE OPERATOR
subsub	02AD5	⊆̄⊆	subset above subset SUBSET ABOVE SUBSET
subsup	02AD3	⊆̄⊇	subset above superset SUBSET ABOVE SUPERSET
Sup	022D1	⊇	/Supset R: dbl superset DOUBLE SUPERSET
supdsub	02AD8	⊇⊆̄	superset, subset, dash joining them SUPERSET BESIDE AND JOINED BY DASH WITH SUBSET
supE	02AC6	⊇̄	/supseteqq R: superset, dbl equals SUPERSET OF ABOVE EQUALS SIGN
supedot	02AC4	⊇̄̂	superset, equals, dot SUPERSET OF OR EQUAL TO WITH DOT ABOVE
suphsol	02283-0002F	⊇̄̂	superset, solidus SUPERSET OF, SOLIDUS
suphsub	02AD7	⊇̄⊆̄	superset, subset SUPERSET BESIDE SUBSET
suplarr	0297B	⊇̄←	superset, left arrow SUPERSET ABOVE LEFTWARDS ARROW
supmult	02AC2	⊇̄×	superset, multiply SUPERSET WITH MULTIPLICATION SIGN BELOW
supplus	02AC0	⊇̄+	superset, plus SUPERSET WITH PLUS SIGN BELOW

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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
supsim	02AC8	≈	superset, similar SUPERSET OF ABOVE TILDE OPERATOR
supsub	02AD4	⊃	superset above subset SUPERSET ABOVE SUBSET
supsup	02AD6	⊄	superset above superset SUPERSET ABOVE SUPERSET
thkap	02248	≈	/thickapprox R: thick approximate ALMOST EQUAL TO
thksim	0223C	≈	/thicksim R: thick similar TILDE OPERATOR
topfork	02ADA	⚑	fork with top PITCHFORK WITH TEE TOP
trie	0225C	△	/triangleq R: triangle, equals DELTA EQUAL TO
twixt	0226C	⊘	/between R: between BETWEEN
Vbar	02AEB	⊥	dbl vert, bar (under) DOUBLE UP TACK
vBar	02AE8	⊥	vert, dbl bar (under) SHORT UP TACK WITH UNDERBAR
vBarv	02AE9	⊥	dbl bar, vert over and under SHORT UP TACK ABOVE SHORT DOWN TACK
VDash	022AB	⦶	dbl vert, dbl dash DOUBLE VERTICAL BAR DOUBLE RIGHT TURNSTILE
Vdash	022A9	⦶	/Vdash R: dbl vertical, dash FORCES
vDash	022A8	⦶	/vDash R: vertical, dbl dash TRUE
vdash	022A2	⦶	/vdash R: vertical, dash RIGHT TACK
Vdashl	02AE6	⦶	vertical, dash (long) LONG DASH FROM LEFT MEMBER OF DOUBLE VERTICAL
vltri	022B2	△	/vartriangleleft R: l tri, open, var NORMAL SUBGROUP OF
vprop	0221D	∝	/varpropto R: proportional, variant PROPORTIONAL TO
vrtri	022B3	△	/vartriangleright R: r tri, open, var CONTAINS AS NORMAL SUBGROUP
Vvdash	022AA	⦶	/Vvdash R: triple vertical, dash TRIPLE VERTICAL BAR RIGHT TURNSTILE

7.7 isobox

isobox

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
boxDL	02557		lower left quadrant BOX DRAWINGS DOUBLE DOWN AND LEFT
boxDI	02556		lower left quadrant BOX DRAWINGS DOWN DOUBLE AND LEFT SINGLE
boxdL	02555		lower left quadrant BOX DRAWINGS DOWN SINGLE AND LEFT DOUBLE
boxdl	02510		lower left quadrant BOX DRAWINGS LIGHT DOWN AND LEFT
boxDR	02554		lower right quadrant BOX DRAWINGS DOUBLE DOWN AND RIGHT
boxDr	02553		lower right quadrant BOX DRAWINGS DOWN DOUBLE AND RIGHT SINGLE
boxdR	02552		lower right quadrant BOX DRAWINGS DOWN SINGLE AND RIGHT DOUBLE
boxdr	0250C		lower right quadrant BOX DRAWINGS LIGHT DOWN AND RIGHT
boxH	02550		horizontal line BOX DRAWINGS DOUBLE HORIZONTAL
boxh	02500		horizontal line BOX DRAWINGS LIGHT HORIZONTAL
boxHD	02566		lower left and right quadrants BOX DRAWINGS DOUBLE DOWN AND HORIZONTAL
boxHd	02564		lower left and right quadrants BOX DRAWINGS DOWN SINGLE AND HORIZONTAL DOUBLE
boxhD	02565		lower left and right quadrants BOX DRAWINGS DOWN DOUBLE AND HORIZONTAL SINGLE
boxhd	0252C		lower left and right quadrants BOX DRAWINGS LIGHT DOWN AND HORIZONTAL
boxHU	02569		upper left and right quadrants BOX DRAWINGS DOUBLE UP AND HORIZONTAL
boxHu	02567		upper left and right quadrants BOX DRAWINGS UP SINGLE AND HORIZONTAL DOUBLE
boxhU	02568		upper left and right quadrants BOX DRAWINGS UP DOUBLE AND HORIZONTAL SINGLE
boxhu	02534		upper left and right quadrants BOX DRAWINGS LIGHT UP AND HORIZONTAL
boxUL	0255D		upper left quadrant BOX DRAWINGS DOUBLE UP AND LEFT
boxUl	0255C		upper left quadrant BOX DRAWINGS UP DOUBLE AND LEFT SINGLE
boxuL	0255B		upper left quadrant BOX DRAWINGS UP SINGLE AND LEFT DOUBLE
boxul	02518		upper left quadrant BOX DRAWINGS LIGHT UP AND LEFT
boxUR	0255A		upper right quadrant BOX DRAWINGS DOUBLE UP AND RIGHT
boxUr	02559		upper right quadrant BOX DRAWINGS UP DOUBLE AND RIGHT SINGLE
boxuR	02558		upper right quadrant BOX DRAWINGS UP SINGLE AND RIGHT DOUBLE

isobox

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
boxur	02514		upper right quadrant BOX DRAWINGS LIGHT UP AND RIGHT
boxV	02551		vertical line BOX DRAWINGS DOUBLE VERTICAL
boxv	02502		vertical line BOX DRAWINGS LIGHT VERTICAL
boxVH	0256C		all four quadrants BOX DRAWINGS DOUBLE VERTICAL AND HORIZONTAL
boxVh	0256B		all four quadrants BOX DRAWINGS VERTICAL DOUBLE AND HORIZONTAL SINGLE
boxvH	0256A		all four quadrants BOX DRAWINGS VERTICAL SINGLE AND HORIZONTAL DOUBLE
boxvh	0253C		all four quadrants BOX DRAWINGS LIGHT VERTICAL AND HORIZONTAL
boxVL	02563		upper and lower left quadrants BOX DRAWINGS DOUBLE VERTICAL AND LEFT
boxVl	02562		upper and lower left quadrants BOX DRAWINGS VERTICAL DOUBLE AND LEFT SINGLE
boxvL	02561		upper and lower left quadrants BOX DRAWINGS VERTICAL SINGLE AND LEFT DOUBLE
boxvl	02524		upper and lower left quadrants BOX DRAWINGS LIGHT VERTICAL AND LEFT
boxVR	02560		upper and lower right quadrants BOX DRAWINGS DOUBLE VERTICAL AND RIGHT
boxVr	0255F		upper and lower right quadrants BOX DRAWINGS VERTICAL DOUBLE AND RIGHT SINGLE
boxvR	0255E		upper and lower right quadrants BOX DRAWINGS VERTICAL SINGLE AND RIGHT DOUBLE
boxvr	0251C		upper and lower right quadrants BOX DRAWINGS LIGHT VERTICAL AND RIGHT

7.8 isocyr1

isocyr1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Acy	00410	А	=capital A, Cyrillic CYRILLIC CAPITAL LETTER A
acy	00430	а	=small a, Cyrillic CYRILLIC SMALL LETTER A
Bcy	00411	Б	=capital BE, Cyrillic CYRILLIC CAPITAL LETTER BE
bcy	00431	б	=small be, Cyrillic CYRILLIC SMALL LETTER BE
CHcy	00427	Ч	=capital CHE, Cyrillic CYRILLIC CAPITAL LETTER CHE
chcy	00447	ч	=small che, Cyrillic CYRILLIC SMALL LETTER CHE
Dcy	00414	Д	=capital DE, Cyrillic CYRILLIC CAPITAL LETTER DE
dcy	00434	д	=small de, Cyrillic CYRILLIC SMALL LETTER DE
Ecy	0042D	Э	=capital E, Cyrillic CYRILLIC CAPITAL LETTER E
ecy	0044D	э	=small e, Cyrillic CYRILLIC SMALL LETTER E
Fcy	00424	Ф	=capital EF, Cyrillic CYRILLIC CAPITAL LETTER EF
fcy	00444	ф	=small ef, Cyrillic CYRILLIC SMALL LETTER EF
Gcy	00413	Г	=capital GHE, Cyrillic CYRILLIC CAPITAL LETTER GHE
gcy	00433	г	=small ghe, Cyrillic CYRILLIC SMALL LETTER GHE
HARDcy	0042A	Ъ	=capital HARD sign, Cyrillic CYRILLIC CAPITAL LETTER HARD SIGN
hardcy	0044A	ь	=small hard sign, Cyrillic CYRILLIC SMALL LETTER HARD SIGN
Icy	00418	И	=capital I, Cyrillic CYRILLIC CAPITAL LETTER I
icy	00438	и	=small i, Cyrillic CYRILLIC SMALL LETTER I
IEcy	00415	Е	=capital IE, Cyrillic CYRILLIC CAPITAL LETTER IE
iecy	00435	е	=small ie, Cyrillic CYRILLIC SMALL LETTER IE
IOcy	00401	Ё	=capital IO, Russian CYRILLIC CAPITAL LETTER IO
ioey	00451	ё	=small io, Russian CYRILLIC SMALL LETTER IO
Jcy	00419	Й	=capital short I, Cyrillic CYRILLIC CAPITAL LETTER SHORT I
jcy	00439	й	=small short i, Cyrillic CYRILLIC SMALL LETTER SHORT I
Kcy	0041A	К	=capital KA, Cyrillic CYRILLIC CAPITAL LETTER KA
kcyc	0043A	к	=small ka, Cyrillic CYRILLIC SMALL LETTER KA

isocyr1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
KHcy	00425	Х	=capital HA, Cyrillic CYRILLIC CAPITAL LETTER HA
khcy	00445	х	=small ha, Cyrillic CYRILLIC SMALL LETTER HA
Lcy	0041B	Л	=capital EL, Cyrillic CYRILLIC CAPITAL LETTER EL
lcy	0043B	л	=small el, Cyrillic CYRILLIC SMALL LETTER EL
Mcy	0041C	М	=capital EM, Cyrillic CYRILLIC CAPITAL LETTER EM
mcy	0043C	м	=small em, Cyrillic CYRILLIC SMALL LETTER EM
Ncy	0041D	Н	=capital EN, Cyrillic CYRILLIC CAPITAL LETTER EN
ncy	0043D	н	=small en, Cyrillic CYRILLIC SMALL LETTER EN
numero	02116	№	=numero sign NUMERO SIGN
Ocy	0041E	О	=capital O, Cyrillic CYRILLIC CAPITAL LETTER O
ocy	0043E	о	=small o, Cyrillic CYRILLIC SMALL LETTER O
Pcy	0041F	П	=capital PE, Cyrillic CYRILLIC CAPITAL LETTER PE
pcy	0043F	п	=small pe, Cyrillic CYRILLIC SMALL LETTER PE
Rcy	00420	Р	=capital ER, Cyrillic CYRILLIC CAPITAL LETTER ER
rcy	00440	р	=small er, Cyrillic CYRILLIC SMALL LETTER ER
Scy	00421	С	=capital ES, Cyrillic CYRILLIC CAPITAL LETTER ES
scy	00441	с	=small es, Cyrillic CYRILLIC SMALL LETTER ES
SHCHcy	00429	Щ	=capital SHCHA, Cyrillic CYRILLIC CAPITAL LETTER SHCHA
shchcy	00449	щ	=small shcha, Cyrillic CYRILLIC SMALL LETTER SHCHA
SHcy	00428	Ш	=capital SHA, Cyrillic CYRILLIC CAPITAL LETTER SHA
shcy	00448	ш	=small sha, Cyrillic CYRILLIC SMALL LETTER SHA
SOFTcy	0042C	Ъ	=capital SOFT sign, Cyrillic CYRILLIC CAPITAL LETTER SOFT SIGN
softcy	0044C	ь	=small soft sign, Cyrillic CYRILLIC SMALL LETTER SOFT SIGN
Tcy	00422	Т	=capital TE, Cyrillic CYRILLIC CAPITAL LETTER TE
tcy	00442	т	=small te, Cyrillic CYRILLIC SMALL LETTER TE
TScy	00426	Ц	=capital TSE, Cyrillic CYRILLIC CAPITAL LETTER TSE
tscy	00446	ц	=small tse, Cyrillic CYRILLIC SMALL LETTER TSE
Ucy	00423	У	=capital U, Cyrillic CYRILLIC CAPITAL LETTER U

isocyr1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
ucy	00443	у	=small u, Cyrillic CYRILLIC SMALL LETTER U
Vcy	00412	В	=capital VE, Cyrillic CYRILLIC CAPITAL LETTER VE
vcy	00432	в	=small ve, Cyrillic CYRILLIC SMALL LETTER VE
YAcy	0042F	Я	=capital YA, Cyrillic CYRILLIC CAPITAL LETTER YA
yacy	0044F	я	=small ya, Cyrillic CYRILLIC SMALL LETTER YA
Ycy	0042B	Ы	=capital YERU, Cyrillic CYRILLIC CAPITAL LETTER YERU
ycy	0044B	ы	=small yeru, Cyrillic CYRILLIC SMALL LETTER YERU
YUcy	0042E	Ю	=capital YU, Cyrillic CYRILLIC CAPITAL LETTER YU
yucy	0044E	ю	=small yu, Cyrillic CYRILLIC SMALL LETTER YU
Zcy	00417	З	=capital ZE, Cyrillic CYRILLIC CAPITAL LETTER ZE
zcy	00437	з	=small ze, Cyrillic CYRILLIC SMALL LETTER ZE
ZHcy	00416	Ж	=capital ZHE, Cyrillic CYRILLIC CAPITAL LETTER ZHE
zhcy	00436	ж	=small zhe, Cyrillic CYRILLIC SMALL LETTER ZHE

7.9 isocyr2

isocyr2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
DJcy	00402	Ђ	=capital DJE, Serbian CYRILLIC CAPITAL LETTER DJE
djcy	00452	ђ	=small dje, Serbian CYRILLIC SMALL LETTER DJE
DScy	00405	Ѕ	=capital DSE, Macedonian CYRILLIC CAPITAL LETTER DZE
dscy	00455	ѕ	=small dse, Macedonian CYRILLIC SMALL LETTER DZE
DZcy	0040F	Д	=capital dze, Serbian CYRILLIC CAPITAL LETTER DZHE
dzcy	0045F	д	=small dze, Serbian CYRILLIC SMALL LETTER DZHE
GJcy	00403	Ѓ	=capital GJE, Macedonian CYRILLIC CAPITAL LETTER GJE
gjcy	00453	ѓ	=small gje, Macedonian CYRILLIC SMALL LETTER GJE
Iukcy	00406	І	=capital I, Ukrainian CYRILLIC CAPITAL LETTER BYELORUSSIAN-UKRAINIAN I
iukcy	00456	і	=small i, Ukrainian CYRILLIC SMALL LETTER BYELORUSSIAN-UKRAINIAN I
Jsercy	00408	Ј	=capital JE, Serbian CYRILLIC CAPITAL LETTER JE
jsercy	00458	ј	=small je, Serbian CYRILLIC SMALL LETTER JE
Jukcy	00404	Є	=capital JE, Ukrainian CYRILLIC CAPITAL LETTER UKRAINIAN IE
jukcy	00454	є	=small je, Ukrainian CYRILLIC SMALL LETTER UKRAINIAN IE
KJcy	0040C	Ќ	=capital KJE, Macedonian CYRILLIC CAPITAL LETTER KJE
kjcy	0045C	ќ	=small kje, Macedonian CYRILLIC SMALL LETTER KJE
LJcy	00409	Љ	=capital LJE, Serbian CYRILLIC CAPITAL LETTER LJE
ljcy	00459	љ	=small lje, Serbian CYRILLIC SMALL LETTER LJE
NJcy	0040A	Њ	=capital NJE, Serbian CYRILLIC CAPITAL LETTER NJE
njcy	0045A	њ	=small nje, Serbian CYRILLIC SMALL LETTER NJE
TSHcy	0040B	Ћ	=capital TSHE, Serbian CYRILLIC CAPITAL LETTER TSHE
tshcy	0045B	ћ	=small tshe, Serbian CYRILLIC SMALL LETTER TSHE
Ubrcy	0040E	Ў	=capital U, Byelorussian CYRILLIC CAPITAL LETTER SHORT U
ubrcy	0045E	ў	=small u, Byelorussian CYRILLIC SMALL LETTER SHORT U
YIcy	00407	І	=capital YI, Ukrainian CYRILLIC CAPITAL LETTER YI
yicy	00457	і	=small yi, Ukrainian CYRILLIC SMALL LETTER YI

7.10 isodia

isodia

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
acute	000B4	´	=acute accent ACUTE ACCENT
breve	002D8	˘	=breve BREVE
caron	002C7	ˇ	=caron CARON
cedil	000B8	¸	=cedilla CEDILLA
circ	002C6	ˆ	circumflex accent MODIFIER LETTER CIRCUMFLEX ACCENT
dblac	002DD	ˆˆ	=double acute accent DOUBLE ACUTE ACCENT
die	000A8	¨	=dieresis DIAERESIS
dot	002D9	·	=dot above DOT ABOVE
grave	00060	`	=grave accent GRAVE ACCENT
macr	000AF	¯	=macron MACRON
ogon	002DB	˙	=ogonek OGONEK
ring	002DA	◊	=ring RING ABOVE
tilde	002DC	˜	=tilde SMALL TILDE
uml	000A8	¨	=umlaut mark DIAERESIS

7.11 isogrkl

isogrkl

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Agr	00391	Α	=capital Alpha, Greek GREEK CAPITAL LETTER ALPHA
agr	003B1	α	=small alpha, Greek GREEK SMALL LETTER ALPHA
Bgr	00392	Β	=capital Beta, Greek GREEK CAPITAL LETTER BETA
bgr	003B2	β	=small beta, Greek GREEK SMALL LETTER BETA
Dgr	00394	Δ	=capital Delta, Greek GREEK CAPITAL LETTER DELTA
dgr	003B4	δ	=small delta, Greek GREEK SMALL LETTER DELTA
EEgr	00397	Η	=capital Eta, Greek GREEK CAPITAL LETTER ETA
eegr	003B7	η	=small eta, Greek GREEK SMALL LETTER ETA
Egr	00395	Ε	=capital Epsilon, Greek GREEK CAPITAL LETTER EPSILON
egr	003B5	ε	=small epsilon, Greek GREEK SMALL LETTER EPSILON
Ggr	00393	Γ	=capital Gamma, Greek GREEK CAPITAL LETTER GAMMA
ggr	003B3	γ	=small gamma, Greek GREEK SMALL LETTER GAMMA
Igr	00399	Ι	=capital Iota, Greek GREEK CAPITAL LETTER IOTA
igr	003B9	ι	=small iota, Greek GREEK SMALL LETTER IOTA
Kgr	0039A	Κ	=capital Kappa, Greek GREEK CAPITAL LETTER KAPPA
kgr	003BA	κ	=small kappa, Greek GREEK SMALL LETTER KAPPA
KHgr	003A7	Χ	=capital Chi, Greek GREEK CAPITAL LETTER CHI
khgr	003C7	χ	=small chi, Greek GREEK SMALL LETTER CHI
Lgr	0039B	Λ	=capital Lambda, Greek GREEK CAPITAL LETTER LAMDA
lgr	003BB	λ	=small lambda, Greek GREEK SMALL LETTER LAMDA
Mgr	0039C	Μ	=capital Mu, Greek GREEK CAPITAL LETTER MU
mgr	003BC	μ	=small mu, Greek GREEK SMALL LETTER MU
Ngr	0039D	Ν	=capital Nu, Greek GREEK CAPITAL LETTER NU
ngr	003BD	ν	=small nu, Greek GREEK SMALL LETTER NU
Ogr	0039F	Ο	=capital Omicron, Greek GREEK CAPITAL LETTER OMICRON
ogr	003BF	ο	=small omicron, Greek GREEK SMALL LETTER OMICRON

isogrkl

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
OHgr	003A9	Ω	=capital Omega, Greek GREEK CAPITAL LETTER OMEGA
ohgr	003C9	ω	=small omega, Greek GREEK SMALL LETTER OMEGA
Pgr	003A0	Π	=capital Pi, Greek GREEK CAPITAL LETTER PI
pgr	003C0	π	=small pi, Greek GREEK SMALL LETTER PI
PHgr	003A6	Φ	=capital Phi, Greek GREEK CAPITAL LETTER PHI
phgr	003C6	φ	=small phi, Greek GREEK SMALL LETTER PHI
PSgr	003A8	Ψ	=capital Psi, Greek GREEK CAPITAL LETTER PSI
psgr	003C8	ψ	=small psi, Greek GREEK SMALL LETTER PSI
Rgr	003A1	Ρ	=capital Rho, Greek GREEK CAPITAL LETTER RHO
rgr	003C1	ρ	=small rho, Greek GREEK SMALL LETTER RHO
sfgr	003C2	ς	=final small sigma, Greek GREEK SMALL LETTER FINAL SIGMA
Sgr	003A3	Σ	=capital Sigma, Greek GREEK CAPITAL LETTER SIGMA
sgr	003C3	σ	=small sigma, Greek GREEK SMALL LETTER SIGMA
Tgr	003A4	Τ	=capital Tau, Greek GREEK CAPITAL LETTER TAU
tgr	003C4	τ	=small tau, Greek GREEK SMALL LETTER TAU
THgr	00398	Θ	=capital Theta, Greek GREEK CAPITAL LETTER THETA
thgr	003B8	θ	=small theta, Greek GREEK SMALL LETTER THETA
Ugr	003A5	Υ	=capital Upsilon, Greek GREEK CAPITAL LETTER UPSILON
ugr	003C5	υ	=small upsilon, Greek GREEK SMALL LETTER UPSILON
Xgr	0039E	Ξ	=capital Xi, Greek GREEK CAPITAL LETTER XI
xgr	003BE	ξ	=small xi, Greek GREEK SMALL LETTER XI
Zgr	00396	Ζ	=capital Zeta, Greek GREEK CAPITAL LETTER ZETA
zgr	003B6	ζ	=small zeta, Greek GREEK SMALL LETTER ZETA

7.12 isogr_k2isogr_k2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Aacgr	00386	À	=capital Alpha, accent, Greek GREEK CAPITAL LETTER ALPHA WITH TONOS
aacgr	003AC	ά	=small alpha, accent, Greek GREEK SMALL LETTER ALPHA WITH TONOS
Eacgr	00388	Έ	=capital Epsilon, accent, Greek GREEK CAPITAL LETTER EPSILON WITH TONOS
eacgr	003AD	έ	=small epsilon, accent, Greek GREEK SMALL LETTER EPSILON WITH TONOS
EEacgr	00389	Ĥ	=capital Eta, accent, Greek GREEK CAPITAL LETTER ETA WITH TONOS
eeacgr	003AE	ή	=small eta, accent, Greek GREEK SMALL LETTER ETA WITH TONOS
Iacgr	0038A	Ί	=capital Iota, accent, Greek GREEK CAPITAL LETTER IOTA WITH TONOS
iacgr	003AF	ί	=small iota, accent, Greek GREEK SMALL LETTER IOTA WITH TONOS
idiagr	00390	ϊ	=small iota, dieresis, accent, Greek GREEK SMALL LETTER IOTA WITH DIALYTIKA AND TONOS
Idigr	003AA	Ï	=capital Iota, dieresis, Greek GREEK CAPITAL LETTER IOTA WITH DIALYTIKA
idigr	003CA	ï	=small iota, dieresis, Greek GREEK SMALL LETTER IOTA WITH DIALYTIKA
Oacgr	0038C	Ό	=capital Omicron, accent, Greek GREEK CAPITAL LETTER OMICRON WITH TONOS
oacgr	003CC	ό	=small omicron, accent, Greek GREEK SMALL LETTER OMICRON WITH TONOS
OHacgr	0038F	Ώ	=capital Omega, accent, Greek GREEK CAPITAL LETTER OMEGA WITH TONOS
ohacgr	003CE	ώ	=small omega, accent, Greek GREEK SMALL LETTER OMEGA WITH TONOS
Uacgr	0038E	Υ	=capital Upsilon, accent, Greek GREEK CAPITAL LETTER UPSILON WITH TONOS
uacgr	003CD	ύ	=small upsilon, accent, Greek GREEK SMALL LETTER UPSILON WITH TONOS
udiagr	003B0	Ϸ	=small upsilon, dieresis, accent, Greek GREEK SMALL LETTER UPSILON WITH DIALYTIKA AND TONOS
Udigr	003AB	ÿ	=capital Upsilon, dieresis, Greek GREEK CAPITAL LETTER UPSILON WITH DIALYTIKA
udigr	003CB	Ϸ	=small upsilon, dieresis, Greek GREEK SMALL LETTER UPSILON WITH DIALYTIKA

7.13 isogr3

isogr3

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
alpha	003B1	α	/alpha small alpha, Greek GREEK SMALL LETTER ALPHA
beta	003B2	β	/beta small beta, Greek GREEK SMALL LETTER BETA
chi	003C7	χ	/chi small chi, Greek GREEK SMALL LETTER CHI
Delta	00394	Δ	/Delta capital Delta, Greek GREEK CAPITAL LETTER DELTA
delta	003B4	δ	/delta small delta, Greek GREEK SMALL LETTER DELTA
epsi	003F5	ε	/straightepsilon, small epsilon, Greek GREEK LUNATE EPSILON SYMBOL
epsiv	003B5	ε	/varepsilon GREEK SMALL LETTER EPSILON
eta	003B7	η	/eta small eta, Greek GREEK SMALL LETTER ETA
Gamma	00393	Γ	/Gamma capital Gamma, Greek GREEK CAPITAL LETTER GAMMA
gamma	003B3	γ	/gamma small gamma, Greek GREEK SMALL LETTER GAMMA
Gammad	003DC	Ϝ	capital digamma GREEK LETTER DIGAMMA
gammad	003DD	ϝ	/digamma GREEK SMALL LETTER DIGAMMA
iota	003B9	ι	/iota small iota, Greek GREEK SMALL LETTER IOTA
kappa	003BA	κ	/kappa small kappa, Greek GREEK SMALL LETTER KAPPA
kappav	003F0	ϰ	/varkappa GREEK KAPPA SYMBOL
Lambda	0039B	Λ	/Lambda capital Lambda, Greek GREEK CAPITAL LETTER LAMDA
lambda	003BB	λ	/lambda small lambda, Greek GREEK SMALL LETTER LAMDA
mu	003BC	μ	/mu small mu, Greek GREEK SMALL LETTER MU
nu	003BD	ν	/nu small nu, Greek GREEK SMALL LETTER NU
Omega	003A9	Ω	/Omega capital Omega, Greek GREEK CAPITAL LETTER OMEGA
omega	003C9	ω	/omega small omega, Greek GREEK SMALL LETTER OMEGA
Phi	003A6	Φ	/Phi capital Phi, Greek GREEK CAPITAL LETTER PHI
phi	003D5	φ	/straightphi - small phi, Greek GREEK PHI SYMBOL
phiv	003C6	ϕ	/varphi - curly or open phi GREEK SMALL LETTER PHI
Pi	003A0	Π	/Pi capital Pi, Greek GREEK CAPITAL LETTER PI
pi	003C0	π	/pi small pi, Greek GREEK SMALL LETTER PI

isogr3


















Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
piv	003D6	Ω	/varpi GREEK PI SYMBOL
Psi	003A8	Ψ	/Psi capital Psi, Greek GREEK CAPITAL LETTER PSI
psi	003C8	ψ	/psi small psi, Greek GREEK SMALL LETTER PSI
rho	003C1	ρ	/rho small rho, Greek GREEK SMALL LETTER RHO
rhov	003F1	ϱ	/varrho GREEK RHO SYMBOL
Sigma	003A3	Σ	/Sigma capital Sigma, Greek GREEK CAPITAL LETTER SIGMA
sigma	003C3	σ	/sigma small sigma, Greek GREEK SMALL LETTER SIGMA
sigmav	003C2	ς	/varsigma GREEK SMALL LETTER FINAL SIGMA
tau	003C4	τ	/tau small tau, Greek GREEK SMALL LETTER TAU
Theta	00398	Θ	/Theta capital Theta, Greek GREEK CAPITAL LETTER THETA
theta	003B8	θ	/theta straight theta, small theta, Greek GREEK SMALL LETTER THETA
thetav	003D1	ϴ	/vartheta - curly or open theta GREEK THETA SYMBOL
Upsi	003D2	Ϝ	/Upsilon capital Upsilon, Greek GREEK UPSILON WITH HOOK SYMBOL
upsi	003C5	υ	/upsilon small upsilon, Greek GREEK SMALL LETTER UPSILON
Xi	0039E	Ξ	/Xi capital Xi, Greek GREEK CAPITAL LETTER XI
xi	003BE	ξ	/xi small xi, Greek GREEK SMALL LETTER XI
zeta	003B6	ζ	/zeta small zeta, Greek GREEK SMALL LETTER ZETA

7.14 isogr4

isogr4

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
b.alpha	1D6C2	α	small alpha, Greek MATHEMATICAL BOLD SMALL ALPHA
b.beta	1D6C3	β	small beta, Greek MATHEMATICAL BOLD SMALL BETA
b.chi	1D6D8	χ	small chi, Greek MATHEMATICAL BOLD SMALL CHI
b.Delta	1D6AB	Δ	capital delta, Greek MATHEMATICAL BOLD CAPITAL DELTA
b.delta	1D6C5	δ	small delta, Greek MATHEMATICAL BOLD SMALL DELTA
b.epsi	1D6C6	ε	small epsilon, Greek MATHEMATICAL BOLD SMALL EPSILON
b.epsiv	1D6DC	ϵ	variant epsilon MATHEMATICAL BOLD EPSILON SYMBOL
b.eta	1D6C8	η	small eta, Greek MATHEMATICAL BOLD SMALL ETA
b.Gamma	1D6AA	Γ	capital gamma, Greek MATHEMATICAL BOLD CAPITAL GAMMA
b.gamma	1D6C4	γ	small gamma, Greek MATHEMATICAL BOLD SMALL GAMMA
b.Gammad	003DC	Ɔ	capital Digamma GREEK LETTER DIGAMMA
b.gammad	003DD	Ɔ	digamma GREEK SMALL LETTER DIGAMMA
b.iota	1D6CA	ι	small iota, Greek MATHEMATICAL BOLD SMALL IOTA
b.kappa	1D6CB	κ	small kappa, Greek MATHEMATICAL BOLD SMALL KAPPA
b.kappav	1D6DE	κ	variant kappa MATHEMATICAL BOLD KAPPA SYMBOL
b.Lambda	1D6B2	Λ	capital Lambda, Greek MATHEMATICAL BOLD CAPITAL LAMDA
b.lambda	1D6CC	λ	small lambda, Greek MATHEMATICAL BOLD SMALL LAMDA
b.mu	1D6CD	μ	small mu, Greek MATHEMATICAL BOLD SMALL MU
b.nu	1D6CE	ν	small nu, Greek MATHEMATICAL BOLD SMALL NU
b.Omega	1D6C0	Ω	capital Omega, Greek MATHEMATICAL BOLD CAPITAL OMEGA
b.omega	1D6DA	ω	small omega, Greek MATHEMATICAL BOLD SMALL OMEGA
b.Phi	1D6BD	Φ	capital Phi, Greek MATHEMATICAL BOLD CAPITAL PHI
b.phi	1D6D7	φ	small phi, Greek MATHEMATICAL BOLD SMALL PHI
b.phiv	1D6DF	ϕ	variant phi MATHEMATICAL BOLD PHI SYMBOL
b.Pi	1D6B7	Π	capital Pi, Greek MATHEMATICAL BOLD CAPITAL PI
b.pi	1D6D1	π	small pi, Greek MATHEMATICAL BOLD SMALL PI

isogr4

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
b.piv	1D6E1		variant pi MATHEMATICAL BOLD PI SYMBOL
b.Psi	1D6BF		capital Psi, Greek MATHEMATICAL BOLD CAPITAL PSI
b.psi	1D6D9		small psi, Greek MATHEMATICAL BOLD SMALL PSI
b.rho	1D6D2		small rho, Greek MATHEMATICAL BOLD SMALL RHO
b.rhov	1D6E0		variant rho MATHEMATICAL BOLD RHO SYMBOL
b.Sigma	1D6BA		capital Sigma, Greek MATHEMATICAL BOLD CAPITAL SIGMA
b.sigma	1D6D4		small sigma, Greek MATHEMATICAL BOLD SMALL SIGMA
b.sigmay	1D6D3		variant sigma MATHEMATICAL BOLD SMALL FINAL SIGMA
b.tau	1D6D5		small tau, Greek MATHEMATICAL BOLD SMALL TAU
b.Theta	1D6AF		capital Theta, Greek MATHEMATICAL BOLD CAPITAL THETA
b.thetas	1D6C9		straight theta, Greek MATHEMATICAL BOLD SMALL THETA
b.thetav	1D6DD		variant theta MATHEMATICAL BOLD THETA SYMBOL
b.Upsi	1D6BC		capital Upsilon, Greek MATHEMATICAL BOLD CAPITAL UPSILON
b.upsilon	1D6D6		small upsilon, Greek MATHEMATICAL BOLD SMALL UPSILON
b.Xi	1D6B5		capital Xi, Greek MATHEMATICAL BOLD CAPITAL XI
b.xi	1D6CF		small xi, Greek MATHEMATICAL BOLD SMALL XI
b.zeta	1D6C7		small zeta, Greek MATHEMATICAL BOLD SMALL ZETA

7.15 isolat1

isolat1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Aacute	000C1	Á	=capital A, acute accent LATIN CAPITAL LETTER A WITH ACUTE
aacute	000E1	á	=small a, acute accent LATIN SMALL LETTER A WITH ACUTE
Acirc	000C2	Â	=capital A, circumflex accent LATIN CAPITAL LETTER A WITH CIRCUMFLEX
acirc	000E2	â	=small a, circumflex accent LATIN SMALL LETTER A WITH CIRCUMFLEX
AElig	000C6	Æ	=capital AE diphthong (ligature) LATIN CAPITAL LETTER AE
aelig	000E6	æ	=small ae diphthong (ligature) LATIN SMALL LETTER AE
Agrave	000C0	À	=capital A, grave accent LATIN CAPITAL LETTER A WITH GRAVE
agrave	000E0	à	=small a, grave accent LATIN SMALL LETTER A WITH GRAVE
Aring	000C5	Å	=capital A, ring LATIN CAPITAL LETTER A WITH RING ABOVE
aring	000E5	å	=small a, ring LATIN SMALL LETTER A WITH RING ABOVE
Atilde	000C3	Ã	=capital A, tilde LATIN CAPITAL LETTER A WITH TILDE
atilde	000E3	ã	=small a, tilde LATIN SMALL LETTER A WITH TILDE
Auml	000C4	Ä	=capital A, dieresis or umlaut mark LATIN CAPITAL LETTER A WITH DIAERESIS
auml	000E4	ä	=small a, dieresis or umlaut mark LATIN SMALL LETTER A WITH DIAERESIS
Ccedil	000C7	Ç	=capital C, cedilla LATIN CAPITAL LETTER C WITH CEDILLA
ccedil	000E7	ç	=small c, cedilla LATIN SMALL LETTER C WITH CEDILLA
Eacute	000C9	É	=capital E, acute accent LATIN CAPITAL LETTER E WITH ACUTE
eacute	000E9	é	=small e, acute accent LATIN SMALL LETTER E WITH ACUTE
Ecirc	000CA	Ê	=capital E, circumflex accent LATIN CAPITAL LETTER E WITH CIRCUMFLEX
ecirc	000EA	ê	=small e, circumflex accent LATIN SMALL LETTER E WITH CIRCUMFLEX
Egrave	000C8	È	=capital E, grave accent LATIN CAPITAL LETTER E WITH GRAVE
egrave	000E8	è	=small e, grave accent LATIN SMALL LETTER E WITH GRAVE
ETH	000D0	Ð	=capital Eth, Icelandic LATIN CAPITAL LETTER ETH
eth	000F0	ð	=small eth, Icelandic LATIN SMALL LETTER ETH
Euml	000CB	Ë	=capital E, dieresis or umlaut mark LATIN CAPITAL LETTER E WITH DIAERESIS
euml	000EB	ë	=small e, dieresis or umlaut mark LATIN SMALL LETTER E WITH DIAERESIS
Iacute	000CD	Í	=capital I, acute accent LATIN CAPITAL LETTER I WITH ACUTE

isolat1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
iacute	000ED	í	=small i, acute accent LATIN SMALL LETTER I WITH ACUTE
Icirc	000CE	Î	=capital I, circumflex accent LATIN CAPITAL LETTER I WITH CIRCUMFLEX
icirc	000EE	î	=small i, circumflex accent LATIN SMALL LETTER I WITH CIRCUMFLEX
Igrave	000CC	Ì	=capital I, grave accent LATIN CAPITAL LETTER I WITH GRAVE
igrave	000EC	ì	=small i, grave accent LATIN SMALL LETTER I WITH GRAVE
Iuml	000CF	Ï	=capital I, dieresis or umlaut mark LATIN CAPITAL LETTER I WITH DIAERESIS
iuml	000EF	ï	=small i, dieresis or umlaut mark LATIN SMALL LETTER I WITH DIAERESIS
Ntilde	000D1	Ñ	=capital N, tilde LATIN CAPITAL LETTER N WITH TILDE
ntilde	000F1	ñ	=small n, tilde LATIN SMALL LETTER N WITH TILDE
Oacute	000D3	Ó	=capital O, acute accent LATIN CAPITAL LETTER O WITH ACUTE
oacute	000F3	ó	=small o, acute accent LATIN SMALL LETTER O WITH ACUTE
Ocirc	000D4	Ô	=capital O, circumflex accent LATIN CAPITAL LETTER O WITH CIRCUMFLEX
ocirc	000F4	ô	=small o, circumflex accent LATIN SMALL LETTER O WITH CIRCUMFLEX
Ograve	000D2	Ò	=capital O, grave accent LATIN CAPITAL LETTER O WITH GRAVE
ograve	000F2	ò	=small o, grave accent LATIN SMALL LETTER O WITH GRAVE
Oslash	000D8	Ø	=capital O, slash LATIN CAPITAL LETTER O WITH STROKE
oslash	000F8	ø	latin small letter o with stroke LATIN SMALL LETTER O WITH STROKE
Otilde	000D5	Õ	=capital O, tilde LATIN CAPITAL LETTER O WITH TILDE
otilde	000F5	õ	=small o, tilde LATIN SMALL LETTER O WITH TILDE
Ouml	000D6	Ö	=capital O, dieresis or umlaut mark LATIN CAPITAL LETTER O WITH DIAERESIS
ouml	000F6	ö	=small o, dieresis or umlaut mark LATIN SMALL LETTER O WITH DIAERESIS
szlig	000DF	ß	=small sharp s, German (sz ligature) LATIN SMALL LETTER SHARP S
THORN	000DE	Þ	=capital THORN, Icelandic LATIN CAPITAL LETTER THORN
thorn	000FE	þ	=small thorn, Icelandic LATIN SMALL LETTER THORN
Uacute	000DA	Ú	=capital U, acute accent LATIN CAPITAL LETTER U WITH ACUTE
uacute	000FA	ú	=small u, acute accent LATIN SMALL LETTER U WITH ACUTE
Ucirc	000DB	Û	=capital U, circumflex accent LATIN CAPITAL LETTER U WITH CIRCUMFLEX
ucirc	000FB	û	=small u, circumflex accent LATIN SMALL LETTER U WITH CIRCUMFLEX

isolat1

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Ugrave	000D9	Û	=capital U, grave accent LATIN CAPITAL LETTER U WITH GRAVE
ugrave	000F9	ù	=small u, grave accent LATIN SMALL LETTER U WITH GRAVE
Uuml	000DC	Û	=capital U, dieresis or umlaut mark LATIN CAPITAL LETTER U WITH DIAERESIS
uuml	000FC	ü	=small u, dieresis or umlaut mark LATIN SMALL LETTER U WITH DIAERESIS
Yacute	000DD	Ý	=capital Y, acute accent LATIN CAPITAL LETTER Y WITH ACUTE
yacute	000FD	ý	=small y, acute accent LATIN SMALL LETTER Y WITH ACUTE
yuml	000FF	ÿ	=small y, dieresis or umlaut mark LATIN SMALL LETTER Y WITH DIAERESIS

7.16 isolat2

isolat2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Abreve	00102	Ă	=capital A, breve LATIN CAPITAL LETTER A WITH BREVE
abreve	00103	ă	=small a, breve LATIN SMALL LETTER A WITH BREVE
Amacr	00100	Ā	=capital A, macron LATIN CAPITAL LETTER A WITH MACRON
amacr	00101	ā	=small a, macron LATIN SMALL LETTER A WITH MACRON
Aogon	00104	Ą	=capital A, ogonek LATIN CAPITAL LETTER A WITH OGONEK
aogon	00105	ą	=small a, ogonek LATIN SMALL LETTER A WITH OGONEK
Cacute	00106	Ć	=capital C, acute accent LATIN CAPITAL LETTER C WITH ACUTE
cacute	00107	ć	=small c, acute accent LATIN SMALL LETTER C WITH ACUTE
Ccaron	0010C	Č	=capital C, caron LATIN CAPITAL LETTER C WITH CARON
ccaron	0010D	č	=small c, caron LATIN SMALL LETTER C WITH CARON
Ccirc	00108	Ĉ	=capital C, circumflex accent LATIN CAPITAL LETTER C WITH CIRCUMFLEX
ccirc	00109	ĉ	=small c, circumflex accent LATIN SMALL LETTER C WITH CIRCUMFLEX
Cdot	0010A	Ċ	=capital C, dot above LATIN CAPITAL LETTER C WITH DOT ABOVE
cdot	0010B	ċ	=small c, dot above LATIN SMALL LETTER C WITH DOT ABOVE
Dcaron	0010E	Ď	=capital D, caron LATIN CAPITAL LETTER D WITH CARON
dcaron	0010F	ď	=small d, caron LATIN SMALL LETTER D WITH CARON
Dstrok	00110	Đ	=capital D, stroke LATIN CAPITAL LETTER D WITH STROKE
dstrok	00111	đ	=small d, stroke LATIN SMALL LETTER D WITH STROKE
Ecaron	0011A	Ě	=capital E, caron LATIN CAPITAL LETTER E WITH CARON
ecaron	0011B	ě	=small e, caron LATIN SMALL LETTER E WITH CARON
Edot	00116	Ě	=capital E, dot above LATIN CAPITAL LETTER E WITH DOT ABOVE
edot	00117	ě	=small e, dot above LATIN SMALL LETTER E WITH DOT ABOVE
Emacr	00112	Ē	=capital E, macron LATIN CAPITAL LETTER E WITH MACRON
emacr	00113	ē	=small e, macron LATIN SMALL LETTER E WITH MACRON
ENG	0014A	Ŋ	=capital ENG, Lapp LATIN CAPITAL LETTER ENG
eng	0014B	ŋ	=small eng, Lapp LATIN SMALL LETTER ENG
Eogon	00118	Ę	=capital E, ogonek LATIN CAPITAL LETTER E WITH OGONEK

isolat2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
eogon	00119	ę	=small e, ogonek LATIN SMALL LETTER E WITH OGONEK
gacute	001F5	ǵ	=small g, acute accent LATIN SMALL LETTER G WITH ACUTE
Gbreve	0011E	Ĝ	=capital G, breve LATIN CAPITAL LETTER G WITH BREVE
gbreve	0011F	ĝ	=small g, breve LATIN SMALL LETTER G WITH BREVE
Gcedil	00122	Ģ	=capital G, cedilla LATIN CAPITAL LETTER G WITH CEDILLA
Gcirc	0011C	Ĝ	=capital G, circumflex accent LATIN CAPITAL LETTER G WITH CIRCUMFLEX
gcirc	0011D	ĝ	=small g, circumflex accent LATIN SMALL LETTER G WITH CIRCUMFLEX
Gdot	00120	Ġ	=capital G, dot above LATIN CAPITAL LETTER G WITH DOT ABOVE
gdot	00121	ġ	=small g, dot above LATIN SMALL LETTER G WITH DOT ABOVE
Hcirc	00124	Ĥ	=capital H, circumflex accent LATIN CAPITAL LETTER H WITH CIRCUMFLEX
hcirc	00125	ĥ	=small h, circumflex accent LATIN SMALL LETTER H WITH CIRCUMFLEX
Hstrok	00126	Ħ	=capital H, stroke LATIN CAPITAL LETTER H WITH STROKE
hstrok	00127	ħ	=small h, stroke LATIN SMALL LETTER H WITH STROKE
Idot	00130	İ	=capital I, dot above LATIN CAPITAL LETTER I WITH DOT ABOVE
IJlig	00132	IJ	=capital IJ ligature LATIN CAPITAL LIGATURE IJ
ijlig	00133	ij	=small ij ligature LATIN SMALL LIGATURE IJ
Imacr	0012A	Ī	=capital I, macron LATIN CAPITAL LETTER I WITH MACRON
imacr	0012B	ī	=small i, macron LATIN SMALL LETTER I WITH MACRON
inodot	00131	ı	=small i without dot LATIN SMALL LETTER DOTLESS I
Iogon	0012E	Į	=capital I, ogonek LATIN CAPITAL LETTER I WITH OGONEK
iogon	0012F	į	=small i, ogonek LATIN SMALL LETTER I WITH OGONEK
Itilde	00128	Ĭ	=capital I, tilde LATIN CAPITAL LETTER I WITH TILDE
itilde	00129	ĩ	=small i, tilde LATIN SMALL LETTER I WITH TILDE
Jcirc	00134	Ĵ	=capital J, circumflex accent LATIN CAPITAL LETTER J WITH CIRCUMFLEX
jcirc	00135	ĵ	=small j, circumflex accent LATIN SMALL LETTER J WITH CIRCUMFLEX
Kcedil	00136	Ķ	=capital K, cedilla LATIN CAPITAL LETTER K WITH CEDILLA
kcedil	00137	ķ	=small k, cedilla LATIN SMALL LETTER K WITH CEDILLA
kgreen	00138	ƙ	=small k, Greenlandic LATIN SMALL LETTER KRA

isolat2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Lacute	00139	Ꞥ	=capital L, acute accent LATIN CAPITAL LETTER L WITH ACUTE
lacute	0013A	ꞥ	=small l, acute accent LATIN SMALL LETTER L WITH ACUTE
Lcaron	0013D	Ꞩ	=capital L, caron LATIN CAPITAL LETTER L WITH CARON
lcaron	0013E	ꞩ	=small l, caron LATIN SMALL LETTER L WITH CARON
Lcedil	0013B	Ɦ	=capital L, cedilla LATIN CAPITAL LETTER L WITH CEDILLA
lcedil	0013C	Ɜ	=small l, cedilla LATIN SMALL LETTER L WITH CEDILLA
Lmidot	0013F	Ɡ	=capital L, middle dot LATIN CAPITAL LETTER L WITH MIDDLE DOT
lmidot	00140	Ɬ	=small l, middle dot LATIN SMALL LETTER L WITH MIDDLE DOT
Lstrok	00141	Ɪ	=capital L, stroke LATIN CAPITAL LETTER L WITH STROKE
lstrok	00142	ꞯ	=small l, stroke LATIN SMALL LETTER L WITH STROKE
Nacute	00143	Ʞ	=capital N, acute accent LATIN CAPITAL LETTER N WITH ACUTE
nacute	00144	Ʇ	=small n, acute accent LATIN SMALL LETTER N WITH ACUTE
napos	00149	Ʝ	=small n, apostrophe LATIN SMALL LETTER N PRECEDED BY APOSTROPHE
Ncaron	00147	Ꞵ	=capital N, caron LATIN CAPITAL LETTER N WITH CARON
ncaron	00148	ꞵ	=small n, caron LATIN SMALL LETTER N WITH CARON
Ncedil	00145	Ꞷ	=capital N, cedilla LATIN CAPITAL LETTER N WITH CEDILLA
ncedil	00146	ꞷ	=small n, cedilla LATIN SMALL LETTER N WITH CEDILLA
Odblac	00150	Ŏ	=capital O, double acute accent LATIN CAPITAL LETTER O WITH DOUBLE ACUTE
odblac	00151	ŏ	=small o, double acute accent LATIN SMALL LETTER O WITH DOUBLE ACUTE
OElig	00152	Œ	=capital OE ligature LATIN CAPITAL LIGATURE OE
oelig	00153	œ	=small oe ligature LATIN SMALL LIGATURE OE
Omacr	0014C	Ō	=capital O, macron LATIN CAPITAL LETTER O WITH MACRON
omacr	0014D	ō	=small o, macron LATIN SMALL LETTER O WITH MACRON
Racute	00154	Ꝥ	=capital R, acute accent LATIN CAPITAL LETTER R WITH ACUTE
racute	00155	ꝥ	=small r, acute accent LATIN SMALL LETTER R WITH ACUTE
Rcaron	00158	Ꝩ	=capital R, caron LATIN CAPITAL LETTER R WITH CARON
rcaron	00159	ꝩ	=small r, caron LATIN SMALL LETTER R WITH CARON
Rcedil	00156	Ꝭ	=capital R, cedilla LATIN CAPITAL LETTER R WITH CEDILLA

isolat2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
rcedil	00157	ŕ	=small r, cedilla LATIN SMALL LETTER R WITH CEDILLA
Sacute	0015A	Ś	=capital S, acute accent LATIN CAPITAL LETTER S WITH ACUTE
sacute	0015B	ś	=small s, acute accent LATIN SMALL LETTER S WITH ACUTE
Scaron	00160	Š	=capital S, caron LATIN CAPITAL LETTER S WITH CARON
scaron	00161	š	=small s, caron LATIN SMALL LETTER S WITH CARON
Scedil	0015E	Ș	=capital S, cedilla LATIN CAPITAL LETTER S WITH CEDILLA
scedil	0015F	ș	=small s, cedilla LATIN SMALL LETTER S WITH CEDILLA
Scirc	0015C	Ŝ	=capital S, circumflex accent LATIN CAPITAL LETTER S WITH CIRCUMFLEX
scirc	0015D	ŝ	=small s, circumflex accent LATIN SMALL LETTER S WITH CIRCUMFLEX
Tcaron	00164	Ț	=capital T, caron LATIN CAPITAL LETTER T WITH CARON
tcaron	00165	ț	=small t, caron LATIN SMALL LETTER T WITH CARON
Tcedil	00162	Ț	=capital T, cedilla LATIN CAPITAL LETTER T WITH CEDILLA
tcedil	00163	ț	=small t, cedilla LATIN SMALL LETTER T WITH CEDILLA
Tstrok	00166	Ț	=capital T, stroke LATIN CAPITAL LETTER T WITH STROKE
tstrok	00167	ț	=small t, stroke LATIN SMALL LETTER T WITH STROKE
Ubreve	0016C	Ū	=capital U, breve LATIN CAPITAL LETTER U WITH BREVE
ubreve	0016D	ū	=small u, breve LATIN SMALL LETTER U WITH BREVE
Udblac	00170	Ů	=capital U, double acute accent LATIN CAPITAL LETTER U WITH DOUBLE ACUTE
udblac	00171	ů	=small u, double acute accent LATIN SMALL LETTER U WITH DOUBLE ACUTE
Umacr	0016A	Ū	=capital U, macron LATIN CAPITAL LETTER U WITH MACRON
umacr	0016B	ū	=small u, macron LATIN SMALL LETTER U WITH MACRON
Uogon	00172	Ů	=capital U, ogonek LATIN CAPITAL LETTER U WITH OGONEK
uogon	00173	ů	=small u, ogonek LATIN SMALL LETTER U WITH OGONEK
Uring	0016E	Ů	=capital U, ring LATIN CAPITAL LETTER U WITH RING ABOVE
uring	0016F	ů	=small u, ring LATIN SMALL LETTER U WITH RING ABOVE
Utilde	00168	Ů	=capital U, tilde LATIN CAPITAL LETTER U WITH TILDE
utilde	00169	ů	=small u, tilde LATIN SMALL LETTER U WITH TILDE
Wcirc	00174	Ŵ	=capital W, circumflex accent LATIN CAPITAL LETTER W WITH CIRCUMFLEX

isolat2

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
wcirc	00175	ŵ	=small w, circumflex accent LATIN SMALL LETTER W WITH CIRCUMFLEX
Ycirc	00176	ÿ	=capital Y, circumflex accent LATIN CAPITAL LETTER Y WITH CIRCUMFLEX
ycirc	00177	ÿ	=small y, circumflex accent LATIN SMALL LETTER Y WITH CIRCUMFLEX
Yuml	00178	ÿ	=capital Y, dieresis or umlaut mark LATIN CAPITAL LETTER Y WITH DIAERESIS
Zacute	00179	Ź	=capital Z, acute accent LATIN CAPITAL LETTER Z WITH ACUTE
zacute	0017A	ź	=small z, acute accent LATIN SMALL LETTER Z WITH ACUTE
Zcaron	0017D	Ž	=capital Z, caron LATIN CAPITAL LETTER Z WITH CARON
zcaron	0017E	ž	=small z, caron LATIN SMALL LETTER Z WITH CARON
Zdot	0017B	Ẑ	=capital Z, dot above LATIN CAPITAL LETTER Z WITH DOT ABOVE
zdot	0017C	ẑ	=small z, dot above LATIN SMALL LETTER Z WITH DOT ABOVE

7.17 isomfrk

isomfrk

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Afr	1D504	Ⓐ	/frak A, upper case a MATHEMATICAL FRAKTUR CAPITAL A
afr	1D51E	ⓐ	/frak a, lower case a MATHEMATICAL FRAKTUR SMALL A
Bfr	1D505	Ⓑ	/frak B, upper case b MATHEMATICAL FRAKTUR CAPITAL B
bfr	1D51F	ⓑ	/frak b, lower case b MATHEMATICAL FRAKTUR SMALL B
Cfr	0212D	Ⓒ	/frak C, upper case c BLACK-LETTER CAPITAL C
cfr	1D520	Ⓒ	/frak c, lower case c MATHEMATICAL FRAKTUR SMALL C
Dfr	1D507	Ⓓ	/frak D, upper case d MATHEMATICAL FRAKTUR CAPITAL D
dfr	1D521	ⓓ	/frak d, lower case d MATHEMATICAL FRAKTUR SMALL D
Efr	1D508	Ⓔ	/frak E, upper case e MATHEMATICAL FRAKTUR CAPITAL E
efr	1D522	ⓔ	/frak e, lower case e MATHEMATICAL FRAKTUR SMALL E
Ffr	1D509	Ⓕ	/frak F, upper case f MATHEMATICAL FRAKTUR CAPITAL F
ffr	1D523	ⓕ	/frak f, lower case f MATHEMATICAL FRAKTUR SMALL F
Gfr	1D50A	Ⓖ	/frak G, upper case g MATHEMATICAL FRAKTUR CAPITAL G
gfr	1D524	ⓖ	/frak g, lower case g MATHEMATICAL FRAKTUR SMALL G
Hfr	0210C	Ⓖ	/frak H, upper case h BLACK-LETTER CAPITAL H
hfr	1D525	ⓗ	/frak h, lower case h MATHEMATICAL FRAKTUR SMALL H
Ifr	02111	Ⓗ	/frak I, upper case i BLACK-LETTER CAPITAL I
ifr	1D526	ⓙ	/frak i, lower case i MATHEMATICAL FRAKTUR SMALL I
Jfr	1D50D	Ⓖ	/frak J, upper case j MATHEMATICAL FRAKTUR CAPITAL J
jfr	1D527	ⓚ	/frak j, lower case j MATHEMATICAL FRAKTUR SMALL J
Kfr	1D50E	Ⓗ	/frak K, upper case k MATHEMATICAL FRAKTUR CAPITAL K
kfr	1D528	ⓛ	/frak k, lower case k MATHEMATICAL FRAKTUR SMALL K
Lfr	1D50F	Ⓖ	/frak L, upper case l MATHEMATICAL FRAKTUR CAPITAL L
lfr	1D529	ⓜ	/frak l, lower case l MATHEMATICAL FRAKTUR SMALL L
Mfr	1D510	Ⓜ	/frak M, upper case m MATHEMATICAL FRAKTUR CAPITAL M
mfr	1D52A	ⓜ	/frak m, lower case m MATHEMATICAL FRAKTUR SMALL M
Nfr	1D511	Ⓝ	/frak N, upper case n MATHEMATICAL FRAKTUR CAPITAL N

isomfrk

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
nfr	1D52B		/frak n, lower case n MATHEMATICAL FRAKTUR SMALL N
Ofr	1D512		/frak O, upper case o MATHEMATICAL FRAKTUR CAPITAL O
ofr	1D52C		/frak o, lower case o MATHEMATICAL FRAKTUR SMALL O
Pfr	1D513		/frak P, upper case p MATHEMATICAL FRAKTUR CAPITAL P
pfr	1D52D		/frak p, lower case p MATHEMATICAL FRAKTUR SMALL P
Qfr	1D514		/frak Q, upper case q MATHEMATICAL FRAKTUR CAPITAL Q
qfr	1D52E		/frak q, lower case q MATHEMATICAL FRAKTUR SMALL Q
Rfr	0211C		/frak R, upper case r BLACK-LETTER CAPITAL R
rfr	1D52F		/frak r, lower case r MATHEMATICAL FRAKTUR SMALL R
Sfr	1D516		/frak S, upper case s MATHEMATICAL FRAKTUR CAPITAL S
sfr	1D530		/frak s, lower case s MATHEMATICAL FRAKTUR SMALL S
Tfr	1D517		/frak T, upper case t MATHEMATICAL FRAKTUR CAPITAL T
tfr	1D531		/frak t, lower case t MATHEMATICAL FRAKTUR SMALL T
Ufr	1D518		/frak U, upper case u MATHEMATICAL FRAKTUR CAPITAL U
ufr	1D532		/frak u, lower case u MATHEMATICAL FRAKTUR SMALL U
Vfr	1D519		/frak V, upper case v MATHEMATICAL FRAKTUR CAPITAL V
vfr	1D533		/frak v, lower case v MATHEMATICAL FRAKTUR SMALL V
Wfr	1D51A		/frak W, upper case w MATHEMATICAL FRAKTUR CAPITAL W
wfr	1D534		/frak w, lower case w MATHEMATICAL FRAKTUR SMALL W
Xfr	1D51B		/frak X, upper case x MATHEMATICAL FRAKTUR CAPITAL X
xfr	1D535		/frak x, lower case x MATHEMATICAL FRAKTUR SMALL X
Yfr	1D51C		/frak Y, upper case y MATHEMATICAL FRAKTUR CAPITAL Y
yfr	1D536		/frak y, lower case y MATHEMATICAL FRAKTUR SMALL Y
Zfr	02128		/frak Z, upper case z BLACK-LETTER CAPITAL Z
zfr	1D537		/frak z, lower case z MATHEMATICAL FRAKTUR SMALL Z

7.18 isomopf

isomopf


























Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Aopf	1D538	À	/Bbb A, open face A MATHEMATICAL DOUBLE-STRUCK CAPITAL A
Bopf	1D539	Ā	/Bbb B, open face B MATHEMATICAL DOUBLE-STRUCK CAPITAL B
Copf	02102	Ĉ	/Bbb C, open face C DOUBLE-STRUCK CAPITAL C
Dopf	1D53B	Ď	/Bbb D, open face D MATHEMATICAL DOUBLE-STRUCK CAPITAL D
Eopf	1D53C	Ě	/Bbb E, open face E MATHEMATICAL DOUBLE-STRUCK CAPITAL E
Fopf	1D53D	ƒ	/Bbb F, open face F MATHEMATICAL DOUBLE-STRUCK CAPITAL F
Gopf	1D53E	Ĝ	/Bbb G, open face G MATHEMATICAL DOUBLE-STRUCK CAPITAL G
Hopf	0210D	Ĥ	/Bbb H, open face H DOUBLE-STRUCK CAPITAL H
Iopf	1D540	İ	/Bbb I, open face I MATHEMATICAL DOUBLE-STRUCK CAPITAL I
Jopf	1D541	Ĵ	/Bbb J, open face J MATHEMATICAL DOUBLE-STRUCK CAPITAL J
Kopf	1D542	Ķ	/Bbb K, open face K MATHEMATICAL DOUBLE-STRUCK CAPITAL K
Lopf	1D543	Ļ	/Bbb L, open face L MATHEMATICAL DOUBLE-STRUCK CAPITAL L
Mopf	1D544	Ļ	/Bbb M, open face M MATHEMATICAL DOUBLE-STRUCK CAPITAL M
Nopf	02115	Ñ	/Bbb N, open face N DOUBLE-STRUCK CAPITAL N
Oopf	1D546	Ō	/Bbb O, open face O MATHEMATICAL DOUBLE-STRUCK CAPITAL O
Popf	02119	Ɔ	/Bbb P, open face P DOUBLE-STRUCK CAPITAL P
Qopf	0211A	Œ	/Bbb Q, open face Q DOUBLE-STRUCK CAPITAL Q
Ropf	0211D	Ŕ	/Bbb R, open face R DOUBLE-STRUCK CAPITAL R
Sopf	1D54A	Š	/Bbb S, open face S MATHEMATICAL DOUBLE-STRUCK CAPITAL S
Topf	1D54B	Ť	/Bbb T, open face T MATHEMATICAL DOUBLE-STRUCK CAPITAL T
Uopf	1D54C	Ũ	/Bbb U, open face U MATHEMATICAL DOUBLE-STRUCK CAPITAL U
Vopf	1D54D	Ū	/Bbb V, open face V MATHEMATICAL DOUBLE-STRUCK CAPITAL V
Wopf	1D54E	Ŵ	/Bbb W, open face W MATHEMATICAL DOUBLE-STRUCK CAPITAL W
Xopf	1D54F	Ẁ	/Bbb X, open face X MATHEMATICAL DOUBLE-STRUCK CAPITAL X
Yopf	1D550	Ỳ	/Bbb Y, open face Y MATHEMATICAL DOUBLE-STRUCK CAPITAL Y
Zopf	02124	Ẓ	/Bbb Z, open face Z DOUBLE-STRUCK CAPITAL Z

7.19 isomscr

isomscr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Ascr	1D49C	<i>A</i>	/scr A, script letter A MATHEMATICAL SCRIPT CAPITAL A
ascr	1D4B6	<i>a</i>	/scr a, script letter a MATHEMATICAL SCRIPT SMALL A
Bscr	0212C	<i>B</i>	/scr B, script letter B SCRIPT CAPITAL B
bscr	1D4B7	<i>b</i>	/scr b, script letter b MATHEMATICAL SCRIPT SMALL B
Cscr	1D49E	<i>C</i>	/scr C, script letter C MATHEMATICAL SCRIPT CAPITAL C
cscr	1D4B8	<i>c</i>	/scr c, script letter c MATHEMATICAL SCRIPT SMALL C
Dscr	1D49F	<i>D</i>	/scr D, script letter D MATHEMATICAL SCRIPT CAPITAL D
dscr	1D4B9	<i>d</i>	/scr d, script letter d MATHEMATICAL SCRIPT SMALL D
Escr	02130	<i>E</i>	/scr E, script letter E SCRIPT CAPITAL E
escr	0212F	<i>e</i>	/scr e, script letter e SCRIPT SMALL E
Fscr	02131	<i>F</i>	/scr F, script letter F SCRIPT CAPITAL F
fscr	1D4BB	<i>f</i>	/scr f, script letter f MATHEMATICAL SCRIPT SMALL F
Gscr	1D4A2	<i>G</i>	/scr G, script letter G MATHEMATICAL SCRIPT CAPITAL G
gscr	0210A	<i>g</i>	/scr g, script letter g SCRIPT SMALL G
Hscr	0210B	<i>H</i>	/scr H, script letter H SCRIPT CAPITAL H
hscr	1D4BD	<i>h</i>	/scr h, script letter h MATHEMATICAL SCRIPT SMALL H
Iscr	02110	<i>I</i>	/scr I, script letter I SCRIPT CAPITAL I
iscr	1D4BE	<i>i</i>	/scr i, script letter i MATHEMATICAL SCRIPT SMALL I
Jscr	1D4A5	<i>J</i>	/scr J, script letter J MATHEMATICAL SCRIPT CAPITAL J
jscr	1D4BF	<i>j</i>	/scr j, script letter j MATHEMATICAL SCRIPT SMALL J
Kscr	1D4A6	<i>K</i>	/scr K, script letter K MATHEMATICAL SCRIPT CAPITAL K
kscr	1D4C0	<i>k</i>	/scr k, script letter k MATHEMATICAL SCRIPT SMALL K
Lscr	02112	<i>L</i>	/scr L, script letter L SCRIPT CAPITAL L
lscr	1D4C1	<i>l</i>	/scr l, script letter l MATHEMATICAL SCRIPT SMALL L
Mscr	02133	<i>M</i>	/scr M, script letter M SCRIPT CAPITAL M
mscr	1D4C2	<i>m</i>	/scr m, script letter m MATHEMATICAL SCRIPT SMALL M
Nscr	1D4A9	<i>N</i>	/scr N, script letter N MATHEMATICAL SCRIPT CAPITAL N

isomscr

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
nscr	1D4C3		/scr n, script letter n MATHEMATICAL SCRIPT SMALL N
Oscr	1D4AA		/scr O, script letter O MATHEMATICAL SCRIPT CAPITAL O
oscr	02134		/scr o, script letter o SCRIPT SMALL O
Pscr	1D4AB		/scr P, script letter P MATHEMATICAL SCRIPT CAPITAL P
pscr	1D4C5		/scr p, script letter p MATHEMATICAL SCRIPT SMALL P
Qscr	1D4AC		/scr Q, script letter Q MATHEMATICAL SCRIPT CAPITAL Q
qscr	1D4C6		/scr q, script letter q MATHEMATICAL SCRIPT SMALL Q
Rscr	0211B		/scr R, script letter R SCRIPT CAPITAL R
rscr	1D4C7		/scr r, script letter r MATHEMATICAL SCRIPT SMALL R
Sscr	1D4AE		/scr S, script letter S MATHEMATICAL SCRIPT CAPITAL S
sscr	1D4C8		/scr s, script letter s MATHEMATICAL SCRIPT SMALL S
Tscr	1D4AF		/scr T, script letter T MATHEMATICAL SCRIPT CAPITAL T
tscr	1D4C9		/scr t, script letter t MATHEMATICAL SCRIPT SMALL T
Uscr	1D4B0		/scr U, script letter U MATHEMATICAL SCRIPT CAPITAL U
uscr	1D4CA		/scr u, script letter u MATHEMATICAL SCRIPT SMALL U
Vscr	1D4B1		/scr V, script letter V MATHEMATICAL SCRIPT CAPITAL V
vscr	1D4CB		/scr v, script letter v MATHEMATICAL SCRIPT SMALL V
Wscr	1D4B2		/scr W, script letter W MATHEMATICAL SCRIPT CAPITAL W
wscr	1D4CC		/scr w, script letter w MATHEMATICAL SCRIPT SMALL W
Xscr	1D4B3		/scr X, script letter X MATHEMATICAL SCRIPT CAPITAL X
xscr	1D4CD		/scr x, script letter x MATHEMATICAL SCRIPT SMALL X
Yscr	1D4B4		/scr Y, script letter Y MATHEMATICAL SCRIPT CAPITAL Y
yscr	1D4CE		/scr y, script letter y MATHEMATICAL SCRIPT SMALL Y
Zscr	1D4B5		/scr Z, script letter Z MATHEMATICAL SCRIPT CAPITAL Z
zscr	1D4CF		/scr z, script letter z MATHEMATICAL SCRIPT SMALL Z

7.20 isonum

isonum

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
amp	00026	&	=ampersand AMPERSAND
apos	00027	'	=apostrophe APOSTROPHE
ast	0002A	*	/ast B: =asterisk ASTERISK
brvbar	000A6		=broken (vertical) bar BROKEN BAR
bsol	0005C	\	/backslash =reverse solidus REVERSE SOLIDUS
cent	000A2	¢	=cent sign CENT SIGN
colon	0003A	:	/colon P: COLON
comma	0002C	,	P: =comma COMMA
commat	00040	@	=commercial at COMMERCIAL AT
copy	000A9	©	=copyright sign COPYRIGHT SIGN
curren	000A4	₹	=general currency sign CURRENCY SIGN
darr	02193	↓	/downarrow A: =downward arrow DOWNWARDS ARROW
deg	000B0	°	=degree sign DEGREE SIGN
divide	000F7	÷	/div B: =divide sign DIVISION SIGN
dollar	00024	\$	=dollar sign DOLLAR SIGN
equals	0003D	=	=equals sign R: EQUALS SIGN
excl	00021	!	=exclamation mark EXCLAMATION MARK
frac12	000BD	½	=fraction one-half VULGAR FRACTION ONE HALF
frac14	000BC	¼	=fraction one-quarter VULGAR FRACTION ONE QUARTER
frac18	0215B	⅛	=fraction one-eighth VULGAR FRACTION ONE EIGHTH
frac34	000BE	¾	=fraction three-quarters VULGAR FRACTION THREE QUARTERS
frac38	0215C	⅜	=fraction three-eighths VULGAR FRACTION THREE EIGHTHS
frac58	0215D	⅝	=fraction five-eighths VULGAR FRACTION FIVE EIGHTHS
frac78	0215E	⅞	=fraction seven-eighths VULGAR FRACTION SEVEN EIGHTHS
gt	0003E	>	=greater-than sign R: GREATER-THAN SIGN
half	000BD	½	=fraction one-half VULGAR FRACTION ONE HALF
horbar	02015	-	=horizontal bar HORIZONTAL BAR

isonum

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
hyphen	02010	-	=hyphen HYPHEN
iexcl	000A1	¡	=inverted exclamation mark INVERTED EXCLAMATION MARK
iquest	000BF	¿	=inverted question mark INVERTED QUESTION MARK
laquo	000AB	«	=angle quotation mark, left LEFT-POINTING DOUBLE ANGLE QUOTATION MARK
larr	02190	←	/leftarrow /gets A: =leftward arrow LEFTWARDS ARROW
lcub	0007B	{	/lbrace O: =left curly bracket LEFT CURLY BRACKET
ldquo	0201C	“	=double quotation mark, left LEFT DOUBLE QUOTATION MARK
lowbar	0005F	—	=low line LOW LINE
lpar	00028	(O: =left parenthesis LEFT PARENTHESIS
lsqb	0005B	[/lbrack O: =left square bracket LEFT SQUARE BRACKET
lsquo	02018	‘	=single quotation mark, left LEFT SINGLE QUOTATION MARK
lt	0003C	<	=less-than sign R: LESS-THAN SIGN
micro	000B5	μ	=micro sign MICRO SIGN
middot	000B7	·	/centerdot B: =middle dot MIDDLE DOT
nbsp	000A0	␣	=no break (required) space NO-BREAK SPACE
not	000AC	¬	/neg /lnot =not sign NOT SIGN
num	00023	#	=number sign NUMBER SIGN
ohm	02126	Ω	=ohm sign OHM SIGN
ordf	000AA	ª	=ordinal indicator, feminine FEMININE ORDINAL INDICATOR
ordm	000BA	º	=ordinal indicator, masculine MASCULINE ORDINAL INDICATOR
para	000B6	¶	=pilcrow (paragraph sign) PILCROW SIGN
percnt	00025	%	=percent sign PERCENT SIGN
period	0002E	.	=full stop, period FULL STOP
plus	0002B	+	=plus sign B: PLUS SIGN
plusmn	000B1	±	/pm B: =plus-or-minus sign PLUS-MINUS SIGN
pound	000A3	£	=pound sign POUND SIGN
quest	0003F	?	=question mark QUESTION MARK
quot	00022	"	=quotation mark QUOTATION MARK

isonum


Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
raquo	000BB	»	=angle quotation mark, right RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK
rarr	02192	→	/rightarrow /to A: =rightward arrow RIGHTWARDS ARROW
rcub	0007D	}	/rbrace C: =right curly bracket RIGHT CURLY BRACKET
rdquo	0201D	”	=double quotation mark, right RIGHT DOUBLE QUOTATION MARK
reg	000AE	®	/circledR =registered sign REGISTERED SIGN
rpar	00029)	C: =right parenthesis RIGHT PARENTHESIS
rsqb	0005D]	/rbrack C: =right square bracket RIGHT SQUARE BRACKET
rsquo	02019	'	=single quotation mark, right RIGHT SINGLE QUOTATION MARK
sect	000A7	§	=section sign SECTION SIGN
semi	0003B	;	=semicolon P: SEMICOLON
shy	000AD	-	=soft hyphen SOFT HYPHEN
sol	0002F	/	=solidus SOLIDUS
sung	0266A	♪	=music note (sung text sign) EIGHTH NOTE
sup1	000B9	¹	=superscript one SUPERSCRRIPT ONE
sup2	000B2	²	=superscript two SUPERSCRRIPT TWO
sup3	000B3	³	=superscript three SUPERSCRRIPT THREE
times	000D7	×	/times B: =multiply sign MULTIPLICATION SIGN
trade	02122	™	=trade mark sign TRADE MARK SIGN
uarr	02191	↑	/uparrow A: =upward arrow UPWARDS ARROW
verbar	0007C		/vert =vertical bar VERTICAL LINE
yen	000A5	¥	/yen =yen sign YEN SIGN

7.21 isopub

isopub

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
blank	02423	☐	=significant blank symbol OPEN BOX
blk12	02592	■	=50% shaded block MEDIUM SHADE
blk14	02591	░	=25% shaded block LIGHT SHADE
blk34	02593	▣	=75% shaded block DARK SHADE
block	02588	■	=full block FULL BLOCK
bull	02022	•	/bullet B: =round bullet, filled BULLET
caret	02041	⋈	=caret (insertion mark) CARET INSERTION POINT
check	02713	✓	/checkmark =tick, check mark CHECK MARK
cir	025CB	○	/circ B: =circle, open WHITE CIRCLE
clubs	02663	♣	/clubsuit =club suit symbol BLACK CLUB SUIT
copysr	02117	Ⓜ	=sound recording copyright sign SOUND RECORDING COPYRIGHT
cross	02717	✕	=ballot cross BALLOT X
Dagger	02021	‡	/ddagger B: =double dagger DOUBLE DAGGER
dagger	02020	†	/dagger B: =dagger DAGGER
dash	02010	-	=hyphen (true graphic) HYPHEN
diams	02666	♠	/diamondsuit =diamond suit symbol BLACK DIAMOND SUIT
dlcrop	0230D	⌞	downward left crop mark BOTTOM LEFT CROP
drcrop	0230C	⌟	downward right crop mark BOTTOM RIGHT CROP
dtri	025BF	▾	/triangledown =down triangle, open WHITE DOWN-POINTING SMALL TRIANGLE
dtrif	025BE	▼	/blacktriangledown =dn tri, filled BLACK DOWN-POINTING SMALL TRIANGLE
emsp	02003	␣	=em space EM SPACE
emsp13	02004	␣	=1/3-em space THREE-PER-EM SPACE
emsp14	02005	␣	=1/4-em space FOUR-PER-EM SPACE
ensp	02002	␣	=en space (1/2-em) EN SPACE
female	02640	♀	=female symbol FEMALE SIGN
fflig	0FB03	ffi	small ffi ligature LATIN SMALL LIGATURE FFI

isopub

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
fflig	0FB00	ff	small ff ligature LATIN SMALL LIGATURE FF
fflig	0FB04	ffl	small ffl ligature LATIN SMALL LIGATURE FFL
filig	0FB01	fi	small fi ligature LATIN SMALL LIGATURE FI
flat	0266D	b	/flat =musical flat MUSIC FLAT SIGN
flig	0FB02	fl	small fl ligature LATIN SMALL LIGATURE FL
frac13	02153	$\frac{1}{3}$	=fraction one-third VULGAR FRACTION ONE THIRD
frac15	02155	$\frac{1}{5}$	=fraction one-fifth VULGAR FRACTION ONE FIFTH
frac16	02159	$\frac{1}{6}$	=fraction one-sixth VULGAR FRACTION ONE SIXTH
frac23	02154	$\frac{2}{3}$	=fraction two-thirds VULGAR FRACTION TWO THIRDS
frac25	02156	$\frac{2}{5}$	=fraction two-fifths VULGAR FRACTION TWO FIFTHS
frac35	02157	$\frac{3}{5}$	=fraction three-fifths VULGAR FRACTION THREE FIFTHS
frac45	02158	$\frac{4}{5}$	=fraction four-fifths VULGAR FRACTION FOUR FIFTHS
frac56	0215A	$\frac{5}{6}$	=fraction five-sixths VULGAR FRACTION FIVE SIXTHS
hairsp	0200A		=hair space HAIR SPACE
hearts	02665	♥	/heartsuit =heart suit symbol BLACK HEART SUIT
hellip	02026	...	=ellipsis (horizontal) HORIZONTAL ELLIPSIS
hybull	02043	-	rectangle, filled (hyphen bullet) HYPHEN BULLET
incare	02105	‰	=in-care-of symbol CARE OF
ldquor	0201E	”	=rising dbl quote, left (low) DOUBLE LOW-9 QUOTATION MARK
lhblk	02584	■	=lower half block LOWER HALF BLOCK
loz	025CA	◇	/lozenge - lozenge or total mark LOZENGE
lozf	029EB	◆	/blacklozenge - lozenge, filled BLACK LOZENGE
lsquor	0201A	‘	=rising single quote, left (low) SINGLE LOW-9 QUOTATION MARK
ltri	025C3	◀	/triangleleft B: 1 triangle, open WHITE LEFT-POINTING SMALL TRIANGLE
ltrif	025C2	◄	/blacktriangleleft R: =1 tri, filled BLACK LEFT-POINTING SMALL TRIANGLE
male	02642	♂	=male symbol MALE SIGN
malt	02720	⚡	/maltese =maltese cross MALTESE CROSS
marker	025AE	■	=histogram marker BLACK VERTICAL RECTANGLE

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











Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
mdash	02014	—	=em dash EM DASH
mldr	02026	…	em leader HORIZONTAL ELLIPSIS
natur	0266E	♩	/natural - music natural MUSIC NATURAL SIGN
ndash	02013	–	=en dash EN DASH
nldr	02025	..	=double baseline dot (en leader) TWO DOT LEADER
numsp	02007		=digit space (width of a number) FIGURE SPACE
phone	0260E	☎	=telephone symbol BLACK TELEPHONE
puncsp	02008		=punctuation space (width of comma) PUNCTUATION SPACE
rdquor	0201D	”	rising dbl quote, right (high) RIGHT DOUBLE QUOTATION MARK
rect	025AD	◻	=rectangle, open WHITE RECTANGLE
rsquor	02019	’	rising single quote, right (high) RIGHT SINGLE QUOTATION MARK
rtri	025B9	▸	/triangleright B: r triangle, open WHITE RIGHT-POINTING SMALL TRIANGLE
rtrif	025B8	▶	/blacktriangleright R: =r tri, filled BLACK RIGHT-POINTING SMALL TRIANGLE
rx	0211E	℞	pharmaceutical prescription (Rx) PRESCRIPTION TAKE
sext	02736	✳	sextile (6-pointed star) SIX POINTED BLACK STAR
sharp	0266F	♯	/sharp =musical sharp MUSIC SHARP SIGN
spades	02660	♠	/spadesuit =spades suit symbol BLACK SPADE SUIT
squ	025A1	□	=square, open WHITE SQUARE
squf	025AA	▪	/blacksquare =sq bullet, filled BLACK SMALL SQUARE
star	02606	☆	=star, open WHITE STAR
starf	02605	★	/bigstar - star, filled BLACK STAR
target	02316	‡	register mark or target POSITION INDICATOR
telrec	02315	☎	=telephone recorder symbol TELEPHONE RECORDER
thinsp	02009		=thin space (1/6-em) THIN SPACE
uhblk	02580	■	=upper half block UPPER HALF BLOCK
ulcrop	0230F	⌞	upward left crop mark TOP LEFT CROP
urcrop	0230E	⌟	upward right crop mark TOP RIGHT CROP
utri	025B5	▲	/triangle =up triangle, open WHITE UP-POINTING SMALL TRIANGLE

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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
utrif	025B4	▲	/blacktriangle =up tri, filled BLACK UP-POINTING SMALL TRIANGLE
vellip	022EE	⋮	vertical ellipsis VERTICAL ELLIPSIS

7.22 isotech

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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
acd	0223F		ac current SINE WAVE
aleph	02135		/aleph aleph, Hebrew ALEF SYMBOL
And	02A53		dbl logical and DOUBLE LOGICAL AND
and	02227		/wedge /and B: logical and LOGICAL AND
andand	02A55		two logical and TWO INTERSECTING LOGICAL AND
andd	02A5C		and, horizontal dash LOGICAL AND WITH HORIZONTAL DASH
andslope	02A58		sloping large and SLOPING LARGE AND
andv	02A5A		and with middle stem LOGICAL AND WITH MIDDLE STEM
angrt	0221F		right (90 degree) angle RIGHT ANGLE
angsph	02222		/sphericalangle angle-spherical SPHERICAL ANGLE
angst	0212B		Angstrom capital A, ring ANGSTROM SIGN
ap	02248		/approx R: approximate ALMOST EQUAL TO
apacir	02A6F		approximate, circumflex accent ALMOST EQUAL TO WITH CIRCUMFLEX ACCENT
awconint	02233		contour integral, anti-clockwise ANTICLOCKWISE CONTOUR INTEGRAL
awint	02A11		anti clock-wise integration ANTICLOCKWISE INTEGRATION
becaus	02235		/because R: because BECAUSE
bernou	0212C		Bernoulli function (script capital B) SCRIPT CAPITAL B
bne	0003D-020E5		reverse not equal EQUALS SIGN with reverse slash
bnequiv	02261-020E5		reverse not equivalent IDENTICAL TO with reverse slash
bNot	02AED		reverse not with two horizontal strokes REVERSED DOUBLE STROKE NOT SIGN
bnot	02310		reverse not REVERSED NOT SIGN
bottom	022A5		/bot bottom UP TACK
cap	02229		/cap B: intersection INTERSECTION
Cconint	02230		triple contour integral operator VOLUME INTEGRAL
cirfnint	02A10		circulation function CIRCULATION FUNCTION
compfn	02218		/circ B: composite function (small circle) RING OPERATOR
cong	02245		/cong R: congruent with APPROXIMATELY EQUAL TO


























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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
Conint	0222F		double contour integral operator SURFACE INTEGRAL
conint	0222E		/oint L: contour integral operator CONTOUR INTEGRAL
ctdot	022EF		/cdots, three dots, centered MIDLINE HORIZONTAL ELLIPSIS
cup	0222A		/cup B: union or logical sum UNION
cwconint	02232		contour integral, clockwise CLOCKWISE CONTOUR INTEGRAL
cwint	02231		clockwise integral CLOCKWISE INTEGRAL
cylcty	0232D		cylindricity CYLINDRICITY
disin	022F2		set membership, long horizontal stroke ELEMENT OF WITH LONG HORIZONTAL STROKE
Dot	000A8		dieresis or umlaut mark DIAERESIS
DotDot	020DC		four dots above COMBINING FOUR DOTS ABOVE
dsol	029F6		solidus, bar above SOLIDUS WITH OVERBAR
dtidot	022F1		/ddots, three dots, descending DOWN RIGHT DIAGONAL ELLIPSIS
dwangle	029A6		large downward pointing angle OBLIQUE ANGLE OPENING UP
elinters	0FFFFD		electrical intersection REPLACEMENT CHARACTER
epar	022D5		parallel, equal; equal or parallel EQUAL AND PARALLEL TO
eparsl	029E3		parallel, slanted, equal; homothetically congruent to EQUALS SIGN AND SLANTED PARALLEL
equiv	02261		/equiv R: identical with IDENTICAL TO
eqvparsl	029E5		equivalent, equal; congruent and parallel IDENTICAL TO AND SLANTED PARALLEL
exist	02203		/exists at least one exists THERE EXISTS
ftns	025B1		flatness WHITE PARALLELOGRAM
fnof	00192		function of (italic small f) LATIN SMALL LETTER F WITH HOOK
forall	02200		/forall for all FOR ALL
fpartint	02A0D		finite part integral FINITE PART INTEGRAL
ge	02265		/geq /ge R: greater-than-or-equal GREATER-THAN OR EQUAL TO
hamilt	0210B		Hamiltonian (script capital H) SCRIPT CAPITAL H
iff	021D4		/iff if and only if LEFT RIGHT DOUBLE ARROW
iinfin	029DC		infinity sign, incomplete INCOMPLETE INFINITY
imped	001B5		impedance LATIN CAPITAL LETTER Z WITH STROKE

isotech

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
infin	0221E	∞	/infty infinity INFINITY
infintie	029DD	∞	tie, infinity TIE OVER INFINITY
Int	0222C	\iint	double integral operator DOUBLE INTEGRAL
int	0222B	\int	/int L: integral operator INTEGRAL
intlarhk	02A17	\int	integral, left arrow with hook INTEGRAL WITH LEFTWARDS ARROW WITH HOOK
isin	02208	\in	/in R: set membership ELEMENT OF
isindot	022F5	\in	set membership, dot above ELEMENT OF WITH DOT ABOVE
isinE	022F9	\in	set membership, two horizontal strokes ELEMENT OF WITH TWO HORIZONTAL STROKES
isins	022F4	\in	set membership, vertical bar on horizontal stroke SMALL ELEMENT OF WITH VERTICAL BAR AT END OF HORIZONTAL STROKE
isinsv	022F3	\in	large set membership, vertical bar on horizontal stroke ELEMENT OF WITH VERTICAL BAR AT END OF HORIZONTAL STROKE
isinv	02208	\in	set membership, variant ELEMENT OF
lagran	02112	\mathcal{L}	Lagrangian (script capital L) SCRIPT CAPITAL L
Lang	0300A	$\langle\langle$	left angle bracket, double LEFT DOUBLE ANGLE BRACKET
lang	02329	\langle	/angle O: left angle bracket LEFT-POINTING ANGLE BRACKET
lArr	021D0	\Leftarrow	/Leftarrow A: is implied by LEFTWARDS DOUBLE ARROW
lbbrk	03014	\lrcorner	left broken bracket LEFT TORTOISE SHELL BRACKET
le	02264	\leq	/leq /le R: less-than-or-equal LESS-THAN OR EQUAL TO
loang	03018	\lgroup	left open angular bracket LEFT WHITE TORTOISE SHELL BRACKET
lobrk	0301A	\llbracket	left open bracket LEFT WHITE SQUARE BRACKET
lopar	02985	\lpar	left open parenthesis LEFT WHITE PARENTHESIS
lowast	02217	$*$	low asterisk ASTERISK OPERATOR
minus	02212	$-$	B: minus sign MINUS SIGN
mnplus	02213	\mp	/mp B: minus-or-plus sign MINUS-OR-PLUS SIGN
nabla	02207	∇	/nabla del, Hamilton operator NABLA
ne	02260	\neq	/ne /neq R: not equal NOT EQUAL TO
nedot	02250-00338	\neq	not equal, dot APPROACHES THE LIMIT with slash
nhpar	02AF2	$\#$	not, horizontal, parallel PARALLEL WITH HORIZONTAL STROKE

isotech

Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
ni	0220B		/ni /owns R: contains CONTAINS AS MEMBER
nis	022FC		contains, vertical bar on horizontal stroke SMALL CONTAINS WITH VERTICAL BAR AT END OF HORIZONTAL STROKE
nisd	022FA		contains, long horizontal stroke CONTAINS WITH LONG HORIZONTAL STROKE
niv	0220B		contains, variant CONTAINS AS MEMBER
Not	02AEC		not with two horizontal strokes DOUBLE STROKE NOT SIGN
notin	02209		/notin N: negated set membership NOT AN ELEMENT OF
notindot	022F5-00338		negated set membership, dot above ELEMENT OF WITH DOT ABOVE with slash
notinE	022F9-00338		negated set membership, two horizontal strokes ELEMENT OF WITH TWO HORIZONTAL STROKES with slash
notinva	02209		negated set membership, variant NOT AN ELEMENT OF
notinvb	022F7		negated set membership, variant SMALL ELEMENT OF WITH OVERBAR
notinvc	022F6		negated set membership, variant ELEMENT OF WITH OVERBAR
notni	0220C		negated contains DOES NOT CONTAIN AS MEMBER
notniva	0220C		negated contains, variant DOES NOT CONTAIN AS MEMBER
notnivb	022FE		contains, variant SMALL CONTAINS WITH OVERBAR
notnivc	022FD		contains, variant CONTAINS WITH OVERBAR
nparsl	02AFD-020E5		not parallel, slanted DOUBLE SOLIDUS OPERATOR with reverse slash
npart	02202-00338		not partial differential PARTIAL DIFFERENTIAL with slash
npolint	02A14		line integration, not including the pole LINE INTEGRATION NOT INCLUDING THE POLE
nvfinf	029DE		not, vert, infinity INFINITY NEGATED WITH VERTICAL BAR
olcross	029BB		circle, cross CIRCLE WITH SUPERIMPOSED X
Or	02A54		dbl logical or DOUBLE LOGICAL OR
or	02228		/vee /lor B: logical or LOGICAL OR
ord	02A5D		or, horizontal dash LOGICAL OR WITH HORIZONTAL DASH
order	02134		order of (script small o) SCRIPT SMALL O
oror	02A56		two logical or TWO INTERSECTING LOGICAL OR
orslope	02A57		sloping large or SLOPING LARGE OR
orv	02A5B		or with middle stem LOGICAL OR WITH MIDDLE STEM

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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
par	02225	\parallel	/parallel R: parallel PARALLEL TO
parsl	02AFD	\parallel	parallel, slanted DOUBLE SOLIDUS OPERATOR
part	02202	∂	/partial partial differential PARTIAL DIFFERENTIAL
permil	02030	‰	per thousand PER MILLE SIGN
perp	022A5	\perp	/perp R: perpendicular UP TACK
pertenk	02031	‰‰	per 10 thousand PER TEN THOUSAND SIGN
phmmat	02133	\mathcal{M}	physics M-matrix (script capital M) SCRIPT CAPITAL M
pointint	02A15	\oint	integral around a point operator INTEGRAL AROUND A POINT OPERATOR
Prime	02033	$''$	double prime or second DOUBLE PRIME
prime	02032	$'$	/prime prime or minute PRIME
profalar	0232E	⌚	all-around profile ALL AROUND-PROFILE
proflin	02312	\frown	profile of a line ARC
profsurf	02313	\cap	profile of a surface SEGMENT
prop	0221D	\propto	/propto R: is proportional to PROPORTIONAL TO
qint	02A0C	\iiint	/iiiiint quadruple integral operator QUADRUPLE INTEGRAL OPERATOR
qprime	02057	$''''$	quadruple prime QUADRUPLE PRIME
quatint	02A16	\oint	quaternion integral operator QUATERNION INTEGRAL OPERATOR
radic	0221A	$\sqrt{\quad}$	/surd radical SQUARE ROOT
Rang	0300B	$\rangle\rangle$	right angle bracket, double RIGHT DOUBLE ANGLE BRACKET
rang	0232A	\rangle	/rangle C: right angle bracket RIGHT-POINTING ANGLE BRACKET
rArr	021D2	\Rightarrow	/Rightarrow A: implies RIGHTWARDS DOUBLE ARROW
rbbrk	03015	$\})$	right broken bracket RIGHT TORTOISE SHELL BRACKET
roang	03019	$\})$	right open angular bracket RIGHT WHITE TORTOISE SHELL BRACKET
robrk	0301B	$\})$	right open bracket RIGHT WHITE SQUARE BRACKET
ropar	02986	$\})$	right open parenthesis RIGHT WHITE PARENTHESIS
rppolint	02A12	\oint	line integration, rectangular path around pole LINE INTEGRATION WITH RECTANGULAR PATH AROUND POLE
scpolint	02A13	\oint	line integration, semi-circular path around pole LINE INTEGRATION WITH SEMICIRCULAR PATH AROUND POLE

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Entity Name	Unicode/10646	Glyph image	Character Description ISO Unicode/10646 Name
sim	0223C	~	/sim R: similar TILDE OPERATOR
simdot	02A6A	˜	similar, dot TILDE OPERATOR WITH DOT ABOVE
sime	02243	≈	/simeq R: similar, equals ASYMPTOTICALLY EQUAL TO
smeparsl	029E4	≍	similar, parallel, slanted, equal EQUALS SIGN AND SLANTED PARALLEL WITH TILDE ABOVE
square	025A1	□	/square, square WHITE SQUARE
squarf	025AA	■	/blacksquare, square, filled BLACK SMALL SQUARE
strns	000AF	-	straightness MACRON
sub	02282	⊂	/subset R: subset or is implied by SUBSET OF
sube	02286	⊆	/subseteq R: subset, equals SUBSET OF OR EQUAL TO
sup	02283	⊃	/supset R: superset or implies SUPERSET OF
supe	02287	⊇	/supseteq R: superset, equals SUPERSET OF OR EQUAL TO
tdot	020DB	⋮	three dots above COMBINING THREE DOTS ABOVE
there4	02234	∴	/therefore R: therefore THEREFORE
tint	0222D	∫∫∫	/iiint triple integral operator TRIPLE INTEGRAL
top	022A4	⌞	/top top DOWN TACK
topbot	02336	⌚	top and bottom APL FUNCTIONAL SYMBOL I-BEAM
topcir	02AF1	⌞	top, circle below DOWN TACK WITH CIRCLE BELOW
tprime	02034	≡	triple prime TRIPLE PRIME
utdot	022F0	⋱	three dots, ascending UP RIGHT DIAGONAL ELLIPSIS
uwangle	029A7	∕	large upward pointing angle OBLIQUE ANGLE OPENING DOWN
vangrt	0299C	⊥	right angle, variant RIGHT ANGLE VARIANT WITH SQUARE
veeeq	0225A	≍	logical or, equals EQUIANGULAR TO
Verbar	02016	∥	/Vert dbl vertical bar DOUBLE VERTICAL LINE
wedgeq	02259	≅	/wedgeq R: corresponds to (wedge, equals) ESTIMATES
xnis	022FB	⊃	large contains, vertical bar on horizontal stroke CONTAINS WITH VERTICAL BAR AT END OF HORIZONTAL STROKE