Miscellaneous Mathematical Symbols-A

Range: 27C0-27EF

The Unicode Standard, Version 3.2

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 3.2.*

Characters in this chart that are new for The Unicode Standard, Version 3.2 are shown in conjunction with any existing characters. For ease of reference, the new characters have been highlighted in the chart grid and in the names list.

This file will not be updated with errata, or when additional characters are assigned to the Unicode Standard. See http://www.unicode.org/charts for access to a complete list of the latest character charts.

Disclaimer

These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 3.2 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this excerpt file, please consult the appropriate sections of The Unicode Standard, Version 3.0 (ISBN 0-201-61633-5), as well as Unicode Standard Annexes #28 and #27, the other Unicode Technical Reports and the Unicode Character Database, which are available on-line.

See http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and http://www.unicode.org/unicode/reports

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

Fonts

The shapes of the reference glyphs used in these code charts are not prescriptive. Considerable variation is to be expected in actual fonts. The particular fonts used in these charts were provided to the Unicode Consortium by a number of different font designers, who own the rights to the fonts.

See http://www.unicode.org/unicode/uni2book/u2fonts.html for a list.

Terms of Use

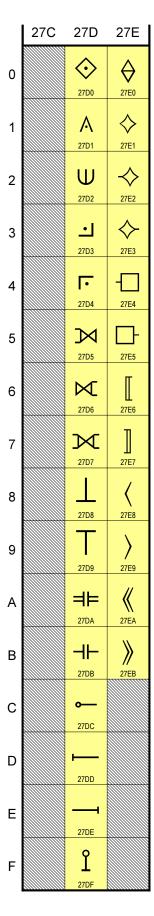
You may freely use these code charts for personal or internal business uses only. You may not incorporate them either wholly or in part into any product or publication, or otherwise distribute them without express written permission from the Unicode Consortium. However, you are welcome to provide links to these charts.

The fonts and font data used in production of these Code Charts may NOT be extracted or otherwise used in any commercial product without permission or license granted by the typeface owner(s).

The information in this file may be updated from time to time. The Unicode Consortium is not liable for errors or omissions in this excerpt file or the standard itself. Information on characters added to the Unicode Standard since the publication of Version 3.2 as well as on characters currently being considered for addition to the Unicode Standard can be found on the Unicode web site.

 $See \ http://www.unicode.org/pending/pending.html \ and \ http://www.unicode.org/unicode/alloc/Pipeline.html.$

Copyright © 1991-2002 Unicode, Inc. All rights reserved.



Miscellaneous symbol

Operators

- 27D1 A AND WITH DOT
 - \rightarrow 2227 \land logical and
 - \rightarrow 2A40 \cap intersection with dot
- - → 2AD9 ∩ element of opening downwards
- 27D3 LOWER RIGHT CORNER WITH DOT = pullback
 - → 230B J right floor
- 27D4 UPPER LEFT CORNER WITH DOT
 - = pushout
 - → 2308 [left ceiling

Database theory operators

- 27D5 ⋈ LEFT OUTER JOIN
- 27D6 ⋈ RIGHT OUTER JOIN
- 27D7 \bowtie FULL OUTER JOIN \rightarrow 2A1D \bowtie join

Tacks and turnstiles

- 27D8

 LARGE UP TACK
 - \rightarrow 22A5 \perp up tack
- - \rightarrow 22A4 \top down tack
- 27DA ♯ LEFT AND RIGHT DOUBLE
 - TURNSTILE
 - \rightarrow 22A8 \models true
 - → 2AE4 = vertical bar double left turnstile
- 27DB → LEFT AND RIGHT TACK
 - \rightarrow 22A2 \vdash right tack
- 27DC ← LEFT MULTIMAP
 - → 22B8 → multimap
- 27DD LONG RIGHT TACK
 - \rightarrow 22A2 \vdash right tack
- 27DE → LONG LEFT TACK
 - \rightarrow 22A3 \rightarrow left tack
- 27DF 1 UP TACK WITH CIRCLE ABOVE
 - = radial component
 - → 2AF1 I down tack with circle below

Modal logic operators

- 27E0 ♦ LOZENGE DIVIDED BY HORIZONTAL RULE
 - used as form of possibility in modal logic
 - → 25CA ♦ lozenge
- 27E1 ♦ WHITE CONCAVE-SIDED DIAMOND
 - = never (modal operator)
- 27E2 ♦ WHITE CONCAVE-SIDED DIAMOND WITH LEFTWARDS TICK
 - = was never (modal operator)
- - = will never be (modal operator)

- 27E4 WHITE SQUARE WITH LEFTWARDS TICK
 - = was always (modal operator)
 - \rightarrow 25A1 \square white square
- 27E5 WHITE SQUARE WITH RIGHTWARDS
 - = will always be (modal operator)

Mathematical brackets

- 27E6 MATHEMATICAL LEFT WHITE
 - SQUARE BRACKET
 - \rightarrow 301A \mathbb{I} left white square bracket
- 27E7 MATHEMATICAL RIGHT WHITE SQUARE BRACKET
 - → 301B] right white square bracket
- 27E8 \ MATHEMATICAL LEFT ANGLE BRACKET
 - = bra
 - = z notation left sequence bracket
 - → 2329 〈 left-pointing angle bracket
 - → 3008 〈 left angle bracket
- 27E9) MATHEMATICAL RIGHT ANGLE BRACKET
 - = ket
 - = z notation right sequence bracket
 - → 232A > right-pointing angle bracket
 - → 3009 \right angle bracket
- 27EA 《 MATHEMATICAL LEFT DOUBLE ANGLE BRACKET
 - = z notation left chevron bracket
 - → 300A 《 left double angle bracket
- 27EB » MATHEMATICAL RIGHT DOUBLE ANGLE BRACKET
 - = z notation right chevron bracket
 - \rightarrow 300B \rangle right double angle bracket