Miscellaneous Mathematical Symbols-B

Range: 2980–29FF

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ISO/IEC DIS 10646:2026(en) - 7th Edition Draft

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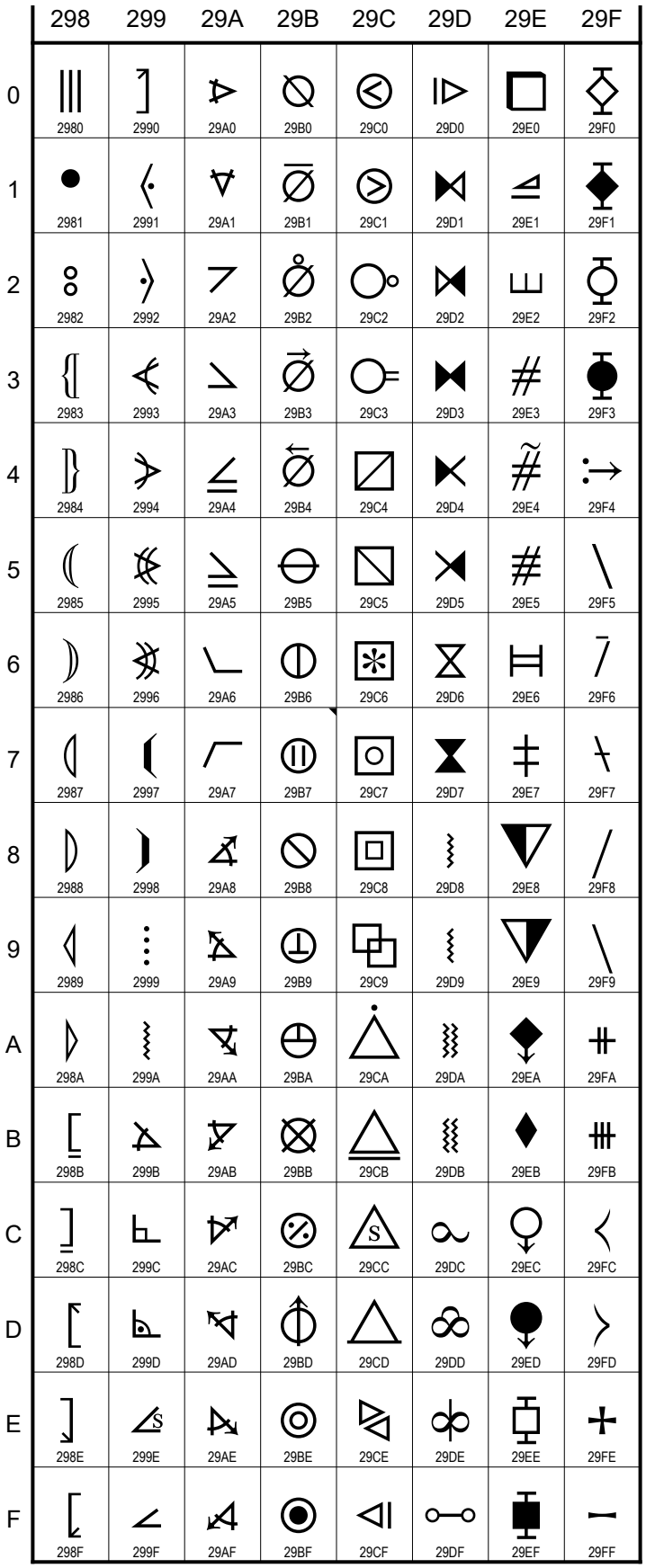
298 299 29A 29B 29C 29D 29E 29F
0 2980 2990 29A0 29B0 29C0 29D0 29E0 29F0
1 2981 2991 29A1 29B1 29C1 29D1 29E1 29F1
2 2982 2992 29A2 29B2 29C2 29D2 29E2 29F2
3 2983 2993 29A3 29B3 29C3 29D3 29E3 29F3
4 2984 2994 29A4 29B4 29C4 29D4 29E4 29F4
5 2985 2995 29A5 29B5 29C5 29D5 29E5 29F5
6 2986 2996 29A6 29B6 29C6 29D6 29E6 29F6
7 2987 2997 29A7 29B7 29C7 29D7 29E7 29F7
8 2988 2998 29A8 29B8 29C8 29D8 29E8 29F8
9 2989 2999 29A9 29B9 29C9 29D9 29E9 29F9
A 298A 299A 29AA 29BA 29CA 29DA 29EA 29FA
B 298B 299B 29AB 29BB 29CB 29DB 29EB 29FB
C 298C 299C 29AC 29BC 29CC 29DC 29EC 29FC
D 298D 299D 29AD 29BD 29CD 29DD 29ED 29FD
E 298E 299E 29AE 29BE 29CE 29DE 29EE 29FE
F 298F 299F 29AF 29BF 29CF 29DF 29EF 29FF

Miscellaneous mathematical symbols

2980 ⦀ TRIPLE VERTICAL BAR DELIMITER
→ 2AF4 ⫼ triple vertical bar binary relation
→ 2AFC ⋿ large triple vertical bar operator

2981 • Z NOTATION SPOT
• medium-small-sized black circle
→ 2219 ∙ bullet operator
→ 25CF ● black circle

2982 ⸗ Z NOTATION TYPE COLON
→ 0F7F ཿ tibetan sign rnam bcad

Brackets

2983 ⦃ LEFT WHITE CURLY BRACKET

2984 ⦄ RIGHT WHITE CURLY BRACKET

2985 ⦅ LEFT WHITE PARENTHESIS
→ 2E28 ⸨ left double parenthesis
→ FF5F ｟ fullwidth left white parenthesis

2986 ⦆ RIGHT WHITE PARENTHESIS
• used for Bourbakist intervals
→ 2E29 ⸩ right double parenthesis
→ FF60 ｠ fullwidth right white parenthesis

2987 ⧼ Z NOTATION LEFT IMAGE BRACKET

2988 ⧽ Z NOTATION RIGHT IMAGE BRACKET

2989 ⧘ Z NOTATION LEFT BINDING BRACKET

298A ⧙ Z NOTATION RIGHT BINDING BRACKET

298B ⦋ LEFT SQUARE BRACKET WITH UNDERBAR

298C ⦌ RIGHT SQUARE BRACKET WITH UNDERBAR

Brackets with ticks

For bidirectional processing, the brackets with ticks are paired on the basis of their left/right symmetric glyphs, rather than on the basis of an open/close pairing inferred from code point order.

298D ⦍ LEFT SQUARE BRACKET WITH TICK IN TOP CORNER

298E ⦎ RIGHT SQUARE BRACKET WITH TICK IN BOTTOM CORNER

298F ⦏ LEFT SQUARE BRACKET WITH TICK IN BOTTOM CORNER

2990 ⦐ RIGHT SQUARE BRACKET WITH TICK IN TOP CORNER

Brackets

2991 ⦑ LEFT ANGLE BRACKET WITH DOT

2992 ⦒ RIGHT ANGLE BRACKET WITH DOT

2993 ⦓ LEFT ARC LESS-THAN BRACKET

2994 ⦔ RIGHT ARC GREATER-THAN BRACKET

2995 ⦕ DOUBLE LEFT ARC GREATER-THAN BRACKET

2996 ⦖ DOUBLE RIGHT ARC LESS-THAN BRACKET

2997 ⦗ LEFT BLACK TORTOISE SHELL BRACKET
→ 27EC ⟬ mathematical left white tortoise shell bracket
→ 3014 〔 left tortoise shell bracket
→ 3018 〖 left white tortoise shell bracket

2998 ⦘ RIGHT BLACK TORTOISE SHELL BRACKET

Fences

2999 ⦙ DOTTED FENCE
• four close dots vertical

299A ⦚ VERTICAL ZIGZAG LINE
→ 2307 ⌇ wavy line

Angles

299B ⦛ MEASURED ANGLE OPENING LEFT
→ 2221 ∡ measured angle

299C ⦜ RIGHT ANGLE VARIANT WITH SQUARE
→ 221F ∟ right angle

299D ⦝ MEASURED RIGHT ANGLE WITH DOT

299E ⦞ ANGLE WITH S INSIDE

299F ⦟ ACUTE ANGLE
→ 2220 ∠ angle

29A0 ⦠ SPHERICAL ANGLE OPENING LEFT
→ 2222 ∢ spherical angle

29A1 ⦡ SPHERICAL ANGLE OPENING UP

29A2 ⦢ TURNED ANGLE
→ 2220 ∠ angle

29A3 ⦣ REVERSED ANGLE

29A4 ⦤ ANGLE WITH UNDERBAR
→ 2264 ≤ less-than or equal to

29A5 ⦥ REVERSED ANGLE WITH UNDERBAR
→ 2265 ≥ greater-than or equal to

29A6 ⦦ OBLIQUE ANGLE OPENING UP

29A7 ⦧ OBLIQUE ANGLE OPENING DOWN

29A8 ⦨ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING UP AND RIGHT

29A9 ⦩ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING UP AND LEFT

29AA ⦪ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING DOWN AND RIGHT

29AB ⦫ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING DOWN AND LEFT

29AC ⦬ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING RIGHT AND UP

29AD ⦭ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING LEFT AND UP

29AE ⦮ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING RIGHT AND DOWN

29AF ⦯ MEASURED ANGLE WITH OPEN ARM ENDING IN ARROW POINTING LEFT AND DOWN

Empty sets

29B0 ⦰ REVERSED EMPTY SET
→ 2205 ∅ empty set
→ 2349 ⍉ apl functional symbol circle backslash

29B1 ⦱ EMPTY SET WITH OVERBAR

29B2 ⦲ EMPTY SET WITH SMALL CIRCLE ABOVE

29B3 ⦳ EMPTY SET WITH RIGHT ARROW ABOVE

29B4 ⦴ EMPTY SET WITH LEFT ARROW ABOVE

Circle symbols

29B5 ⦵ CIRCLE WITH HORIZONTAL BAR
→ 2296 ⊖ circled minus
→ 1CEF0 ᳰ medium small white circle with horizontal bar

29B6 ⦶ CIRCLED VERTICAL BAR
→ 1F715 🜕 alchemical symbol for nitre

29B7 ⦷ CIRCLED PARALLEL
~ 29B7 FE00 ⦷ with parallel lines touching the circle

29B8 ⦸ CIRCLED REVERSE SOLIDUS

29B9 ⦹ CIRCLED PERPENDICULAR

29BA ⦺ CIRCLE DIVIDED BY HORIZONTAL BAR AND TOP HALF DIVIDED BY VERTICAL BAR

29BB ⦻ CIRCLE WITH SUPERIMPOSED X
→ 2297 ⊗ circled times

29BC ⦼ CIRCLED ANTICLOCKWISE-ROTATED DIVISION SIGN

29BD ⦽ UP ARROW THROUGH CIRCLE

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29BE ◎ CIRCLED WHITE BULLET
→ 229A ⊛ circled ring operator
→ 233E ⌾ apl functional symbol circle jot
→ 25CE ◎ bullseye
29BF ◉ CIRCLED BULLET
• forms part of a graduated set of circles with enclosed black circle of different sizes
→ 2299 ⊙ circled dot operator
→ 25C9 ◉ fisheye
→ 2A00 ⨀ n-ary circled dot operator
29C0 ⧀ CIRCLED LESS-THAN
29C1 ⧁ CIRCLED GREATER-THAN
29C2 ⧂ CIRCLE WITH SMALL CIRCLE TO THE RIGHT
29C3 ⧃ CIRCLE WITH TWO HORIZONTAL STROKES TO THE RIGHT

Square symbols

29C4 ⧄ SQUARED RISING DIAGONAL SLASH
→ 2341 ⍁ apl functional symbol quad slash
→ 303C 〼 masu mark
29C5 ⧅ SQUARED FALLING DIAGONAL SLASH
→ 2342 ⍂ apl functional symbol quad backslash
29C6 ⧆ SQUARED ASTERISK
29C7 ⧇ SQUARED SMALL CIRCLE
→ 233B ⌻ apl functional symbol quad jot
29C8 ⧈ SQUARED SQUARE
29C9 ⧉ TWO JOINED SQUARES
→ 2BBA ⧉ overlapping white squares

Triangle symbols

29CA ⧊ TRIANGLE WITH DOT ABOVE
29CB ⧋ TRIANGLE WITH UNDERBAR
29CC ⧌ S IN TRIANGLE
29CD ⧍ TRIANGLE WITH SERIFS AT BOTTOM
→ 25B3 △ white up-pointing triangle
29CE ⧎ RIGHT TRIANGLE ABOVE LEFT TRIANGLE
29CF ⧏ LEFT TRIANGLE BESIDE VERTICAL BAR
29D0 ⧐ VERTICAL BAR BESIDE RIGHT TRIANGLE

Bowtie symbols

29D1 ⧑ BOWTIE WITH LEFT HALF BLACK
→ 22C8 ⋈ bowtie
29D2 ⧒ BOWTIE WITH RIGHT HALF BLACK
29D3 ⧓ BLACK BOWTIE
→ 1FB9B ▶◀ left and right triangular half block
29D4 ⧔ TIMES WITH LEFT HALF BLACK
→ 22C9 ⋉ left normal factor semidirect product
29D5 ⧕ TIMES WITH RIGHT HALF BLACK
→ 22CA ⋊ right normal factor semidirect product
29D6 ⧖ WHITE HOURGLASS
= vertical bowtie
= white framus
• simple form of the alchemical symbol for hour
→ 231B ⌛ hourglass
→ 1F76E 🝮 alchemical symbol for hour
29D7 ⧗ BLACK HOURGLASS
→ 1FB9A ▼▲ upper and lower triangular half block

Fences

29D8 ⧘ LEFT WIGGLY FENCE
→ FE34 ﴾ presentation form for vertical wavy low line
29D9 ⧙ RIGHT WIGGLY FENCE
29DA ⧚ LEFT DOUBLE WIGGLY FENCE
29DB ⧛ RIGHT DOUBLE WIGGLY FENCE

Miscellaneous mathematical symbols

29DC ⧜ INCOMPLETE INFINITY
= ISOtech entity ⧜
→ 221E ∞ infinity
29DD ⧝ TIE OVER INFINITY
29DE ⧞ INFINITY NEGATED WITH VERTICAL BAR
29DF ⧟ DOUBLE-ENDED MULTIMAP
→ 22B8 ⊸ multimap
→ 1F73A ⚮ alchemical symbol for arsenic
29E0 ⧠ SQUARE WITH CONTOURED OUTLINE
= D'Alembertian
→ 274F ❏ lower right drop-shadowed white square
29E1 ⧡ INCREASES AS
→ 22B4 ⊴ normal subgroup of or equal to
29E2 ⧢ SHUFFLE PRODUCT
→ 22FF ⋿ z notation bag membership

Relations

29E3 ⧣ EQUALS SIGN AND SLANTED PARALLEL
→ 0023 # number sign
→ 22D5 ⋕ equal and parallel to
29E4 ⧤ EQUALS SIGN AND SLANTED PARALLEL WITH TILDE ABOVE
29E5 ⧥ IDENTICAL TO AND SLANTED PARALLEL
→ 2A68 ⩨ triple horizontal bar with double vertical stroke
29E6 ⧦ GLEICH STARK
= tautological equivalent

Miscellaneous mathematical symbols

29E7 ⧧ THERMODYNAMIC
= record mark
• vertical bar crossed by two horizontals
→ 2260 ≠ not equal to
→ 2BD2 ⫲ group mark
29E8 ⧨ DOWN-POINTING TRIANGLE WITH LEFT HALF BLACK
→ 25ED ◭ up-pointing triangle with left half black
29E9 ⧩ DOWN-POINTING TRIANGLE WITH RIGHT HALF BLACK
→ 25EE ◮ up-pointing triangle with right half black
29EA ⧪ BLACK DIAMOND WITH DOWN ARROW
29EB ⧫ BLACK LOZENGE
→ 25CA ◊ lozenge
29EC ⧬ WHITE CIRCLE WITH DOWN ARROW
29ED ⧭ BLACK CIRCLE WITH DOWN ARROW

Error bar symbols

29EE ⧮ ERROR-BARRED WHITE SQUARE
29EF ⧯ ERROR-BARRED BLACK SQUARE
29F0 ⧰ ERROR-BARRED WHITE DIAMOND
29F1 ⧱ ERROR-BARRED BLACK DIAMOND
29F2 ⧲ ERROR-BARRED WHITE CIRCLE
29F3 ⧳ ERROR-BARRED BLACK CIRCLE

Miscellaneous mathematical symbols

29F4 ⧴ RULE-DELAYED
= colon right arrow

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29F5 ⧵ REVERSE SOLIDUS OPERATOR
→ 005C \ reverse solidus
→ 2216 ∖ set minus
→ 27CD ⟍ mathematical falling diagonal
29F6 ⧶ SOLIDUS WITH OVERBAR
29F7 ⧷ REVERSE SOLIDUS WITH HORIZONTAL STROKE
→ 2340 ⍀ apl functional symbol backslash bar

Large operators

29F8 ⧸ BIG SOLIDUS
→ 2215 ∕ division slash
29F9 ⧹ BIG REVERSE SOLIDUS
= z notation schema hiding
→ 2216 ∖ set minus

Specialized plus sign operators

29FA ⧺ DOUBLE PLUS
29FB ⧻ TRIPLE PLUS

Brackets

29FC ⧼ LEFT-POINTING CURVED ANGLE BRACKET
→ 227A ≺ precedes
→ 2329 〈 left-pointing angle bracket
29FD ⧽ RIGHT-POINTING CURVED ANGLE BRACKET
→ 227B ≻ succeeds
→ 232A 〉 right-pointing angle bracket

Symbols used in game theory

TINY and MINY are symbols that yield infinitesimal values when applied to numbers in combinatorial game theory.

29FE ⧾ TINY
→ 002B + plus sign
29FF ⧿ MINY
→ 2212 − minus sign

Standardized Variation Sequences

29B7  CIRCLED PARALLEL

29B7

 with parallel lines touching the circle

29B7 FE00