** The Extended Ideographic Description Language (IDLx) **

	Unicode Name	Α	Name	В	В	Examples
a-1	left to right		left-right	Ф	0	潰:◐氵貫
a-2	above to below		top-down	\ominus		稟:●亩木
a-3	surround from bottom left		L-shaped, left first	\mathbb{O}	•	毯:●毛炎
a-4			L-shaped, top first	Θ		廷:①壬廴
a-5	surround from upper left		Г-shaped	\bigcirc		慮:●虍思
a-6	surround from upper right		package	\bigcirc		截:●
a-7	/	/	surround from bottom right	\oplus		于一 ① :于
a-8	surround from below	Ш	plug	•		凶:●※□
a-9	surround from left		C-shaped		•	玉:●王、
a-10	surround from top		surround from top	0	•	閒:❶門月
a-11	/	/	reverse C-shaped	€	•	粤:●●号工工
a-12	full surround		surround	0	0	囪:О□ ※
a-13	overlaid		crossover	0	Ø	夫:@二人
a-14	/	/	no operator] :●
a-15	/	/	geta mark			亷:●严〓
a-16	/	/	rotate 180°		0	上:0子
a-17	/	/	horizontal flip		Θ	五:⊕正
a-18	/	/	similar		\otimes	龟:●从⊜电
a-19	/	/	parentheses; group		()	埊:(●山水土)

** System used in 《汉字信息字典》 **

《汉字信息字典》上海交通大学汉字编码组,上海汉语拼音文字研究组编著,樊静责任编辑;上海: 1988

本书使用的数字,符号一览表

字形结构

符号	表示内容	举例
/	表示上下组合关系	星:日/生
//	表示左右组合关系	把:扌//巴
>, <	表示包容或被包容关系	这:文<辶("辶"包容"文")
	表示嵌套关系	国:口玉
()	表示层次关系	疑:(匕/矢)//(マ/疋)

Notes:

- **a-1**, **a-2**: The left-right operator **(**) and the top-down operator **(**) are the most basic analytical operators of IDLx.
- **a-3**: The L-shape, ⊕, is the only binary relationship that occurs in both of its realizations, and ⊕; this case is well known to learners of Kanji, as there are many common glyphs with either type of operator.

The choice between lacktriangle and lacktriangle depends on the element that occupies the left and bottom of the character in question: only \lacktriangle and \lacktriangle $(\lacktriangle$, \lacktriangle are written *after* the top right and hence need \lacktriangle , as in \lacktriangle : \lacktriangle \lacktriangle \lacktriangle is a \lacktriangle : \lacktriangle \lacktriangle \lacktriangle \lacktriangle \lacktriangle \lacktriangle \lacktriangle are forced to write this as \lacktriangle : \lacktriangle \lacktriangle ; \lacktriangle \lacktriangle ; \lacktriangle \lacktriangle ; \lacktriangle \lacktriangle ; \l

All other elements (i.e. except for 廴 and 辶) that enclose another one from the left and from below in an L-shape take precedence; hence, in e.g. 赲, 走 comes first and 力 comes second, so its formula is 赲: ●走力.

- a-11: XXXXX XXXXX XXXXX XXXXX XXXXX the reversed C-shape: lowest frequency, missing from Unicode IDCs, erroneously replaced by in formula 邑:□□弓工工 for which we write 邑:○□弓工工.
- **a-15**: The symbol originated in Japanese manual typesetting. When a composer couldn't clearly read a character in the manuscript or was unable to find a certain kanji in the type cases, they'd instead pick any sort and put it wrong side first onto the composing stick. When galley proofs were printed, that upside-down sort would leave a mark similar to , making it visually clear that something was still missing. In the same way, we use to

stand in for an unresolved element in the formulas. For example, we know the upper left part of \mathbb{R} is \mathbb{R} , a fairly common element, but the lower right part is seemingly not encoded in Unicode, so we write out the formula \mathbb{R} : \mathbb{R} : this is a syntactically valid way of stating what we can and what we cannot say about that glyph. In other words, represents the unspecified element as much as an x in a mathematical formula represents the unknown quantity.

a-13: The crossover operator ② is to operators what the geta mark **■** is to elements; it represents an unspecified or underspecified operation. Most of the time, ③ really represents an element being overlaid onto another one, as in 夫:②二人, but more generally, it may be used in any

place where no other operator fits, as, for example, in

Notes

I) — see https://raw.githubusercontent.com/cjkvi/cjkvi-ids/master/ids.txt for actual examples

	Name	В	Examples	X
a-1	left-right	0	潰:◐氵貫	
a-2	top-down		稟:●亩木	
a-3	L-shaped, left first	•	毯:●毛炎	毯:(∪◐◒)毛炎
a-4	L-shaped, top first		廷:①壬廴	廷:(∩●①)壬廴
a-5	Г-shaped		慮:●虍思	慮:(∪●●)虍思
a-6	package		截:●	截:(∪●①)
a-7	surround from bottom right		ナーの: チ	ナー(●① ∩):チ
a-8	plug		凶:●※□	幽:(∩❶●①) ※凵
a-9	C-shaped		玉:●王丶	玉:(∪●●●)王丶
a-10	surround from top	•	閒:❶門月	閒:(∪◐◓◑)門月
a-11	reverse C-shaped		粤:●●弓工工	
a-12	surround	0	囪:О☆ ※	函:(∪①●①●))白 ※
a-13	crossover	0	夫:@二人	
a-14	no operator] :●	
a-15	geta mark		⊯:●严 〓	
a-16	rotate 180°	0	上:0子	
a-17	horizontal flip	Θ	五:⊖正	
a-18	similar	\otimes	龟:●从◎电	
a-19	parentheses; group	()	亴:(●一口一土九)	

			_	0-			_	_			_	L
	Used	G	В	Ор	L	ı	R	В	ι	C	Г	D
c-1	Yes	\bigcirc										
c-2	Yes	Θ										
c-15	No	\bigcirc	1	_	•							
c-16	No	\cap		_								

	Used	G		В	Ор	L	Т	R	В	ι	t	٢	Ь
c-7	Yes	0			\cap	0	\bigcirc			+	+		
c-4	Yes	0	Θ		\cap					_	+	+	
c-3	Yes	0	\mathbb{O}		U					+	_	+	+
c-5	Yes	\bigcirc			U					+	+		+
c-6	Yes	\bigcirc			U					+	+	+	
c-19	No	\oplus			U				\bigcirc	_	_	+	+
c-17	No	\bigcirc			\cap					_	_	+	+
c-18	No	0		\bigcirc	\cap				\bigcirc	+	_		+

	Used	G	В	Ор	L	Т	R	В	l	t	Г	b
c-12	Yes			U					_	+	+	+
c-8	Yes			\cap	lacksquare				+	+	+	
c-9	Yes			U	lacksquare			\bigcirc	+	+		+
c-10	Yes		0	U	lacksquare				+	+	+	
c-25	No	0	lacksquare	\cap	lacksquare			\bigcirc	+	+		+
c-20	No	(0	U	lacksquare			\bigcirc				
c-22	No			\cap				\bigcirc				
c-24	No	0		\cap	•			\bigcirc				

	Used	G	В	Ор	L	Т	R	В	ι	t	٢	Ь
c-14	Yes	0	0	U								
c-26	No	0	•	\cap	•	lacksquare	•	\bigcirc				

	Name	В	E
b-1	left/right	Ф	1
b-2	top/down	$\overline{\bigcirc}$	
b-3	surround from bottom left	(/
b-4	surround from upper left	\bigcirc	
b-5	surround from upper right	0	
b-6	surround from bottom right	0	•
b-7	surround from below	(0
b-8	surround from left		
b-9	surround from top	0	
b-10	surround	0	•
b-11	any operator		
b-12	vertical flip		1

萬字一覽置換索引

	Unicode Name	Α	Name	С	E	Examples
I	left to right		left/right	•	•	潰:◐氵貫
2	above to below		top/down		\bigcirc	稟:●亩木
3	surround from bottom left		surround from bottom left			毯:●毛炎
4						廷:●壬廴
5	surround from upper left		surround from upper left			慮:●虍思
6	surround from upper right		surround from upper right	•		截:●
7	/	/	surround from bottom right		•	ナーの:チー
8	surround from below		surround from below		•	凶:◐※凵
9	surround from left		surround from left	•		玉:●王 \
IO	surround from top		surround from top	0		閒:●門月
II	/	/	surround from right		●	
12	full surround		surround	0	•	函:0白※
13	overlaid		crossover	0		夫:◎二人
14	/	/	any operator			
15	/	/	no operator] : ●
16	/	/	unspecified element			亷:•●严〓
17	/	/	rotate 180°	0		上:0予
18	/	/	horizontal flip	Θ		五:⊕正
19	/	/	vertical flip		1	
20	/	/	similar	$ \otimes $		铯:●从◎电
2.1	/	/	parentheses; group			亴:(●一口一土九)
22	left to middle and right		/			衍:(◐彳氵亍)
23	above to middle and below		/			衰:(●∸母化)

	Unicode Name	Α	Name	В	С	E	Examples
I	left to right		left/right	Ф	•	•	潰:◐氵貫
2	above to below		top/down	Θ		\bigcirc	稟:●亩木
3	surround from bottom left		surround from bottom left	0			毯:●毛炎
							廷:①壬廴
4	surround from upper left		surround from upper left	\bigcirc			慮:●虍思
5	surround from upper right		surround from upper right	\bigcirc		lacksquare	截:●
6	/	/	surround from bottom right	\oplus			ナー の : チ
7	surround from below	Ш	surround from below	(•	•	幽:●※□
8	surround from left		surround from left			•	玉:●王丶
9	surround from top		surround from top	0	•		閒:❶門月
IO	/	/	surround from right	Đ		●	
II	full surround		surround	0	0	•	図:○□ ※
12	overlaid		crossover		Ø		夫:@二人
15	/	/	any operator		○■■		
16	/	/	no operator] : ●
15	/	/	unspecified element				亷:●严 〓
17	/	/	rotate 180°		$\bigcirc\!$		上:0子
18	/	/	horizontal flip		Θ		五:⊖正
19	/	/	vertical flip		_	1	
20	/	/	similar		\otimes		龟:●从 ◎电
13	/	/	parentheses; group	()			亴:(●一口一土九)
13	left to middle and right		/	/			衍:(◐彳氵亍)
14	above to middle and below		/	/			衰:(●∸母化)