

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

	Unicode Name	A	Name	B	B	Examples
a-1	left to right	☐	left-right	⊕	⊕	潰:⊕彳貫
a-2	above to below	☐	top-down	⊖	⊖	桌:⊖𠂇木
a-3	surround from bottom left	☐	L-shaped, left first	⊕⊖	⊖⊕	毯:⊖毛炎
a-4	L-shaped, top first	⊖⊕	⊕⊖	廷:⊖壬乚
a-5	surround from upper left	☐	Γ-shaped	⊖⊖	⊖⊖	慮:⊖虎思
a-6	surround from upper right	☐	package	⊖⊖	⊖⊖	截:⊖戔隹
a-7	/	/	surround from bottom right	⊖⊖	⊖⊖	弋:⊖一弋
a-8	surround from below	☐	plug	⊖⊖	⊖⊖	函:⊖𠂇口
a-9	surround from left	☐	C-shaped	⊖⊖	⊖⊖	玉:⊖王、
a-10	surround from top	☐	surround from top	⊖⊖	⊖⊖	閒:⊖門月
a-11	/	/	reverse C-shaped	⊖⊖	⊖⊖	𠂇:⊖弓工工
a-12	full surround	☐	surround	⊖⊖	⊖⊖	函:⊖白々
a-13	overlaid	☐	crossover	⊖⊖	⊖⊖	夫:⊖二人
a-14	/	/	no operator		●	丿:●
a-15	/	/	geta mark		≡	𠂇:●严≡
a-16	/	/	rotate 180°	⊖	⊖	去:⊖予
a-17	/	/	horizontal flip	⊖	⊖	五:⊖正
a-18	/	/	similar	⊖	⊖	𠂇:●从⊖电
a-19	/	/	parentheses; group	()	()	峯:(●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<讠 (“讠” 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 ⊖ and ⊕ depends on the element that occupies the left and bottom of the character in question: only 𠂇 and 讠 (讠, 𠂇) are written *after* the top right and hence need ⊖, as in 這:⊖言讠 (observe that using standard Unicode IDL, we are forced to write this as 這:☐讠言, which, crucially, does not preserve the order in which the factors are normally written).¹

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

a-11: XXXXX XXXXX XXXXX XXXXX XXXXX the reversed C-shape: lowest frequency, missing from Unicode IDCs, erroneously replaced by ⊖ in formula 𠂇:☐☐弓工工 for which we write 𠂇:⊖⊖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 𡗗 is 𡗗, a fairly common element, but the lower right part is seemingly not encoded in Unicode, so we write out the formula 𡗗: (●)𡗗 𡗗; this is a syntactically valid way of stating what we can and what we cannot say about that glyph. In other words, 𡗗 represents the unspecified element as much as an x in a mathematical formula represents the unknown quantity.

a-13: The crossover operator ④ is to operators what the geta mark 𡗗 is to elements; it represents an unspecified or underspecified operation. Most of the time, ④ really represents an element being overlaid onto another one, as in 夫: ④二人, but more generally, it may be used in any

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

Notes

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

徵: (●)彳 (●)山一王(文)

毯: (●)毛炎 as 毯: (U ● ●)毛炎

廷: (●)壬乚 as 廷: (∩ ● ●)壬乚

玉: (●)王、 as 玉: (U ● ● ●)王、

函: (●)𠂇𠂇 as 函: (∩ ● ● ●)𠂇𠂇

國: (●)囙或 as 國: (U ● ● ● ●)囙或

	Name	B	Examples	X
a-1	left-right	●	潰: (●)彳 貫	
a-2	top-down	●	稟: (●)畎木	
a-3	L-shaped, left first	●	毯: (●)毛炎	毯: (U ● ●)毛炎
a-4	L-shaped, top first	●	廷: (●)壬乚	廷: (∩ ● ●)壬乚
a-5	Γ-shaped	●	慮: (●)虍思	慮: (U ● ●)虍思
a-6	package	●	截: (●)戔隹	截: (U ● ●)戔隹
a-7	surround from bottom right	●	弋: (●)一弋	弋: (∩ ● ●)一弋
a-8	plug	●	函: (●)𠂇𠂇	函: (∩ ● ● ●)𠂇𠂇
a-9	C-shaped	●	玉: (●)王、	玉: (U ● ● ●)王、
a-10	surround from top	●	閒: (●)門月	閒: (U ● ● ●)門月
a-11	reverse C-shaped	●	𠂇: (●)弓工工	𠂇: (U ● ● ●)弓工工
a-12	surround	●	函: (●)𠂇𠂇	函: (U ● ● ● ●)𠂇𠂇
a-13	crossover	④	夫: ④二人	
a-14	no operator	●	丿: ●	
a-15	geta mark	𡗗	𡗗: (●)𡗗 𡗗	
a-16	rotate 180°	⊙	𡗗: ⊙予	
a-17	horizontal flip	↔	王: ↔正	
a-18	similar	≈	𠂇: (●)从 ≈ 电	
a-19	parentheses; group	()	𡗗: (●)一 口 一 土 九	

	Used	G	B	Op	L	T	R	B	l	t	r	b
c-1	Yes	⊙	●									
c-2	Yes	⊖	●									
c-15	No	⊙	●	↗	●							
c-16	No	⊖	●	↗		●						

	Used	G		B	Op	L	T	R	B	l	t	r	b
c-7	Yes									+	+		
c-4	Yes									-	+	+	
c-3	Yes									+	-	+	+
c-5	Yes									+	+		+
c-6	Yes									+	+	+	
c-19	No									-	-	+	+
c-17	No									-	-	+	+
c-18	No									+	-		+

	Used	G	B	Op	L	T	R	B	l	t	r	b
c-12	Yes								-	+	+	+
c-8	Yes								+	+	+	
c-9	Yes								+	+		+
c-10	Yes								+	+	+	
c-25	No								+	+		+
c-20	No											
c-22	No											
c-24	No											

	Used	G	B	Op	L	T	R	B	l	t	r	b
c-14	Yes											
c-26	No											

	Name	B	E
b-1	left/right		
b-2	top/down		
b-3	surround from bottom left		/
b-4	surround from upper left		
b-5	surround from upper right		
b-6	surround from bottom right		
b-7	surround from below		
b-8	surround from left		
b-9	surround from top		
b-10	surround		
b-11	any operator		
b-12	vertical flip		

	Unicode Name	A	Name	B	C	E	Examples
1	left to right		left/right				潰:彳貫
2	above to below		top/down				稟:畝木
3	surround from bottom left		surround from bottom left				毯:毛炎 廷:壬廴
4	surround from upper left		surround from upper left				慮:虍思
5	surround from upper right		surround from upper right				截:戔隹
6	/	/	surround from bottom right				弋:一弋
7	surround from below		surround from below				凶:兂凵
8	surround from left		surround from left				玉:王、
9	surround from top		surround from top				閒:門月
10	/	/	surround from right				
11	full surround		surround				囟:白々
12	overlaid		crossover				夫:二人
13	/	/	any operator				
14	/	/	no operator				丿:
15	/	/	unspecified element				𠄎:严
16	/	/	rotate 180°				𠄎:予
17	/	/	horizontal flip				王:正
18	/	/	vertical flip				
19	/	/	similar				𠄎:从电
20	/	/	parentheses; group	()			亮:(𠄎口𠄎土九)
21	left to middle and right		/	/			衍:(彳彳子)
22	above to middle and below		/	/			衰:(𠄎母衣)