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

	Unicode Name	A	Name	B	B	Examples
a-1	left to right	⿰	left-right	◑	◖	潰:◖氵貫
a-2	above to below	⿱	top-down	⊖	⬤	槀:⬤靣木
a-3	surround from bottom left	⿺	L-shaped, bottom first	◴	◣	毯:◣毛炎
a-4			L-shaped, top first	◵	◤	廷:◤壬廴
a-5	surround from upper left	⿸	Γ-shaped	◷	◐	慮:◐虍思
a-6	surround from upper right	⿹	package	◶	◗	截:◗𢦏隹
a-7	/	/	surround from bottom right	◷	◞	弋:◞一弋
a-8	surround from below	⿶	plug	⬒	◓	凶:◓㐅凵
a-9	surround from left	⿷	C-shaped	◖	◖	玉:◖王丶
a-10	surround from top	⿵	surround from top	⿵	◓	閗:◓門月
a-11	/	/	reverse C-shaped	⊖	◗	弜:◖◗弓工工
a-12	full surround	⿴	surround	◎	⬤	囚:⬤囗夊
a-13	overlaid	⊚	crossover	⊘	⊘	夫:⊘二人
a-14	/	/	no operator		⬤	亅:⬤
a-15	/	/	geta mark		＝	厤:◐厂严＝
a-16	/	/	rotate 180°		↻	𠫓:↻予
a-17	/	/	horizontal flip		⊖	玉:⊖正
a-18	/	/	similar		≈	黿:⬤从≈电
a-19	/	/	parentheses; group		( )	褭:(⬤亠口冖土九)

Remarks:

a-1, **a-2**: The left-right operator ◑ and the top-down operator ⊖ are the most basic analytical operators of IDLx.

徵:(◑彳(⬤山一壬)攵)
毯:◣毛炎 as 毯:(∪◑⊖)毛炎
廷:◤壬廴 as 廷:(∩⬤◑)壬廴
玉:◖王丶 as 玉:(∪⬤◑⬤)王丶
國:⬤𥁕或 as 國:(∪◑⬤◑⬤)𥁕或

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 夊 and 辶 (辶, 廴) are written *after* the top right and hence need ◤, as in 這:◤言辶 (observe that using standard Unicode IDL, we are forced to write this as 這:⿺辶言, which, crucially, does not preserve the order in which the factors are normally written).[1] All other elements (i.e. except for 夊 and 辶) that enclose another one from the left and from below in an L-shape take precedence; hence, in e.g. 趙, 走 comes first and 力 comes second, so its formula is 趙:◣走力.

a-11: XXXXX XXXXX XXXXX XXXXX XXXXX the reversed C-shape: lowest frequency, missing from Unicode IDCs, erroneously replaced by ⬤ in formula 弜:⿷⿴弓工工 for which we write 弜:◖◗弓工工.

a-15: The symbol ＝ originated in Japanese manual type-setting. 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 厤 is 严, a fairly common element, but the lower right part is seemingly not encoded in Unicode, so we write out the formula 厤:◐严＝; 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 ⊘ is to operators what the geta mark ＝ is to elements; it represents an unspecified or underspecified operation. Most of the time, ⊘ really represents an element being overlaid onto another one, as in 夫:⊘二人, but more generally, it may be used in any place where no other operator fits, as, for example, in ＝ ＝＝＝＝＝.

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[1] see `https://raw.githubusercontent.com/cjkvi/cjkvi-ids/master/ids.txt` for actual examples

	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	C	E	Examples
I	left to right	⿰	left/right	◑	◑	潰:◑氵貫
2	above to below	⿱	top/down	◓	⊖	槑:●冚木
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:◑戈隹
7	/	/	surround from bottom right	◔	◕	弍:◔一弋
8	surround from below	⿶	surround from below	◓	●	凶:◓㐅凵
9	surround from left	⿷	surround from left	●	◖	玉:●王、
10	surround from top	⿵	surround from top	◗	◖	閒:◗門月
II	/	/	surround from right	●◖		
12	full surround	⿴	surround	○	●	囡:○囗夊
13	overlaid	⿻	crossover	⊘		夫:⊘二人
14	/	/	any operator	○		
15	/	/	no operator	●		亅:●
16	/	/	unspecified element	▬		廉:●严▬
17	/	/	rotate 180°	↻		𡈼:↻予
18	/	/	horizontal flip	↔		玊:↔正
19	/	/	vertical flip		↕	
20	/	/	similar	≈		黽:⊖从≈电
21	/	/	parentheses; group			亮:(●亠口冖士几)
22	left to middle and right	⿲	/			衍:(◑彳氵亍)
23	above to middle and below	⿳	/			衰:(●亠日衣)

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	Unicode Name	A	Name	B	C	E	Examples
1	left to right	⿰	left/right	◑	◐	◑	潰:◐氵貫
2	above to below	⿱	top/down	⊖	⊜	⊜	稟:⊜靣木
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:◗戋隹
6	/	/	surround from bottom right	◔	◔	◔	弋:◑一弋
7	surround from below	⿶	surround from below	◍	◑	◑	凶:◑㐫凵
8	surround from left	⿷	surround from left	◶	◖	◖	玉:◖王丶
9	surround from top	⿵	surround from top	◠	◓	◓	閒:◑門月
10	/	/	surround from right	◷		◐◑	
11	full surround	⿴	surround	◎	⬤	◉	囟:⬤囟乂
12	overlaid	⿻	crossover	⊘	⊘		夫:⊘二人
15	/	/	any operator	◯			
16	/	/	no operator	⬤			亅:⬤
15	/	/	unspecified element	▬			廉:◕严▬
17	/	/	rotate 180°	↻			厶:◎予
18	/	/	horizontal flip	↔			玊:⊖正
19	/	/	vertical flip		↕		
20	/	/	similar	≋			龟:⊜从≋电
13	/	/	parentheses; group	( )			羹:(⊜宀口冖土九)
13	left to middle and right	⿲	/	/			衍:(◐彳氵亍)
14	above to middle and below	⿳	/	/			袞:(⊜亠日伙)