

LOWERCASE

straight>straight
(udlijqhmna)R
L(ublijphmnr)

nonnnnnono
nonnnunono
nonnbnono
nonnninono
nonnnjnono
nonnpnono
nonuunono
nonubnono
nonuinono
nonujnono
nonupnono
nonunnnono
nonqunono
nonqbnono
nonqinono
nonqjnono
nonqpnono
nonqnnono
nonjunono
nonjbnono
nonjinono
nonjjnono
nonjpnono
nonjnnono
nonnunono
nonnbnono

nonninono
nonnjnono
nonnpnono
nonnnnnono
nonaunono
nonabnono
nonainono
nonajnono
nonapnono
nonannono
noniunono
nonibnono
noniinono
nonijnono
nonipnono
noninnono

straight>full round
(udlijqhmna)R L
(ceodqgđ)
nonuonono
nonugnono
nonuðnono
nonqonono
nonqgnono
nonqðnono
nonjonono
nonjgnono
nonjðnono
nonionono
nonignono

noniðnono
nonnonono
nonngnono
nonnðnono
nononono

(bpo)R L(ublijphmnr)
nonounono
nonobnono
nonojonon
nonoionon
nonononon

straight>small round
(udlijqhmna)R L(as)
nonuanono
nonusnono
nonqanono
nonqsnono
nonjanono
nonjsnono
nonaanono
nonasnono
nonianono
nonisnono
nonlanono
nonlsnono
nonnanono
nonnsnono

(s)R L(ublijphmnr)
nonsunono

nonsbnono
nonsnnonon
nonsjnnonon
nonslnnonon

straight>void
(udlijqhmna)R
L(vwyzx)

nonavnono
nonaynono
nonaznono
nonaxnono
nonuvnono
nonuynono
nonuznono
nonuxnono
nonqvnono
nonqwnono
nonqynono
nonqznono
nonqxnono
nonjvnono
nonjynono
nonjznono
nonjxnono
nonivnono
noniynono
noniznono
nonixnono
nonvnono

nonynono
nonznono
nonxnono

(kvwyzxr)R
L(ublijphmnr)
nonrunono
nonrlnono
nonrjnono
nonrpnono
nonrbnono

nonknono
nonklnono
nonkjonono
nonkpnono
nonkbnono

nonvunono
nonvlnono
nonvjnono
nonvpnono
nonvbnono

nonzunono
nonzlnono
nonzjnono
nonzpnono
nonzbnono

nonxunono
nonxlnono

nonxjnono
nonxpnono
nonxbnono

straight>open
(udlijgqhmna)R L(afts)
nonufnono
nonuanono
nonutnono
nonusnono
nonqfnono
nonqanono
nonqtnono
nonqsnono
nonjfnono
nonjanono
nonjtnono
nonjsnono
nonnfnon
nonnanon
nonntnon
nonnsnon

(ctfre) R L(ublijphmnr)

noncunono
noncbnono
noncnonon
noncjnonon
nonclonon
noncpnonon
nontunono

non**tb**nono
nontnnonon
nontjnonon
nont**l**onon
nontpnnonon
non**f**unono
nonfbnono
non**f**nnonon
nonfjnonon
non**f**lonon
nonfpnnonon
nonrunono
nonrbnono
nonrnonon
nonrjnonon
nonrlonon
nonrpnnonon
none**u**nono
none**b**nono
nonenonon
nonejnonon
nonelonon
nonepnnonon

full round >full round
(bpo)R L (ceodqgð)

nonocnono
nono**e**nono
nono**g**nnono
nonoðnono
non**p**donon

nonooonon

full > small
(bpo)R L(as)
nonoanono
nonpaonon
nonosnono
nonpsonon

(as) R L (ceodqgð)

nonaonono
nonaenono
nonagnono
nonadnono
nonaðnono
nonsonono
nonsenono
nonsgnono
nonsdnono
nonsðnono

full > void
(bpog)R L(vwyzx)
nonovnono
nonpvnnon
nonbvnnono
non**g**vnnono
nonownono
nonpwonon
nonbwnono
nongwnono

nonoynono
nonpyonon
nonbynono
nongynono
nonoznono
nonpzonon
nonbznono
nongznono
nonoxnono
nonpxonon
nonbxnono
nongxnono
nongxnono

(kvwyx)R L (ceodqgđ)
nonknono
nonvonono
nonwoonon
nonyoonon
nonkđnono
nonvđnono
nonwđnonon
nonyđnonon
nonzđnonon
nonxđnonon
nonkdnono
nonvđnono
nonwdnonon
nonydonon
nonzđnonon
nonxdnonon

nonkgnono
nonvgnono
nonwgonon
nonygonon
nonzgnonon
nonxgnonon
nonkenono
nonvenono
nonweonon
nonyeonon
nonzenonon
nonxenonon

full>open
(bpo)R L(fts)

nonofnono
nonpfonon
nonbfnono
nonotnono
nonpptonon
nonbbtnono
nonosnono
nonppsonon
nonbsnono
nonoanonon
nonpaanonon
nonbanono

(ctfre) R L (ceodqgđ)
noncononon
noncdnonon

noncgnonon
noncđnonon
nontononon
nontdnonon
nontgnonon
nontđnonon
nonfononon
nonfdnonon
nonfgnonon
nonfđnonon
nonrononon
nonrđnonon
nonrgnonon
nonrđnonon
noneononon
nonednonon
nonegnonon
noneđnonon

small>small
(s)R L(as)
nonsanonon
nonssnonon

small>void
(s)R L(vwyx)
nonsvnonon
nonswnonon
nonsynonon
nonsznnonon
nonsxnnonon

(kvwyx)R L(as)
nonkanonon
nonksnonon
nonvanonon
nonvsnonon
nonwanonon
nonwsnonon
nonyanonon
nonsynonon
nonzanonon
nonzsnonon
nonxanonon
nonxsnonon

small>open
(s)R L(fts)
nonsfnonon
nonstnonon
nonssnonon

(ctfre) R L(as)
noncanonon
noncsnonon
nontanonon
nontsnonon
nonfanonon
nonfsnonon
nonranonon
nonrsnonon
noneanonon
nonesnonon

void>void
(kvwyzx)R L(vwyzx)
nonkvnnonon
nonkwnnonon
nonkynnonon
nonkznnonon
nonkxnnonon
nonvvnonon
nonvwnnonon
nonvynnonon
nonvznnonon
nonvxznnonon
nonwvnnonon
nonwwnnonon
nonwynnonon
nonwznnonon
nonwxznnonon
nonyvnnonon
nonywnnonon
nonyynnonon
nonyznnonon
nonyxnnonon
nonzvnnonon
nonzwnnonon
nonzynnonon
nonzznnonon
nonzxznnonon
nonxvnnonon
nonxwnnonon
nonxynnonon
nonxzznnonon
nonxxznnonon

void>open
(kvwyzx)R L(fts)
nonkfnnonon
nonktnnonon
nonksnnonon
nonvfnnonon
nonvttnnonon
nonvsnnonon
nonwfnnonon
nonwttnnonon
nonwsnnonon
nonyfnnonon
nonyttnnonon
nonysnnonon
nonzfnnonon
nonzttnnonon
nonzsnnonon
nonxfnnonon
nonxttnnonon
nonxsnnonon

(ctfre) R L(vwyzx)
noncvnnonon
noncwnnonon
noncynnonon
noncznnonon
noncxznnonon
nontvnnonon
nontwnnonon

nontynnonon
nontznnonon
nontxnnonon
nonfvnnonon
nonfwnnonon
nonfynnonon
nonfznnonon
nonfxznnonon
nonrvnnonon
nonrwnnonon
nonrynnonon
nonrznnonon
nonrxznnonon
nonevnnonon
newnnonon
noneynnonon
noneznnonon
nonexznnonon

open>open
(ctfre) R L(fts)
noncfnnonon
nonctnnonon
noncsnnonon
nontfnnonon
nonttnnonon
nontsnnonon
nonffnnonon
nonftnnonon
nonfsnnonon
nonrfnnonon
nonrtnnonon

nonrsnnonon
nonefnnonon
nonetnnonon
nonesnnonon

UPPERCASE

straight>straight
(HMNUIJ)R
L(HMNUIKLPRBEFÐ)
HOHHHHOH
HOHHMHOH
HOHHNHOH
HOHHUHOH
HOHHIHOH
HOHHKHOH
HOHHLHOH
HOHHÐHOH

HOHMHHOH
HOHMMHOH
HOHMNHOH
HOHMUHOH
HOHMIHOH
HOHMKHOH
HOHMLHOH
HOHMÐHOH

HOHNHHOH
HOHNMHOH
HOHNNHOH

HOHN^UHOH
HOH^NIHOH
HOHNKHOH
HOHNLHOH
HOHN^ÐHOH

HOHUHHOH
HOHUMHOH
HOHUNHOH
HOH^UHOH
HOHUIHOH
HOHUKHOH
HOHULHOH
HOHU^ÐHOH

HOHIHHOH
HOHIMHOH
HOHINHOH
HOHIUHOH
HOHIIHOH
HOHIKHOH
HOHIL^{HOH}
HOHI^ÐHOH

HOHJHHOH
HOHJMH^{HOH}
HOHJNHOH
HOHJUHOH
HOHJIHOH
HOHJKHOH
HOHJLHOH
HOHJ^ÐHOH

straight>full round
(HMNUIJ)R L (CGOQ)
HOHHOHOH
HOHN^OHOH
HOHUOHOH
HOHHCHOH
HOHNCHOH
HOHUCHOH

(DOQ^Ð)R
L(HMNUIKLP^RBEF^Ð)
HOHO^UHOH
HOHQ^UHOH
HOHD^UHOH
HOH^ÞUHOH
HOHOHHOH
HOHQ^HHOH
HOHD^HHOH
HOH^ÞH^{HOH}
HOH^O^ÐHOH
HOHQ^ÐHOH
HOHD^ÐHOH
HOH^Þ^ÐHOH

straight>small round
(HMNUIJ)R L(S)
OHOHSHOH
OHONSHOH
OHOU^SHOH

(RBP)R

L(HMNUIKLP^RBEF^Ð)
HOHRHHOH
HOHRNHOH
HOHRUHOH
HOHR^ÐHOH
HOHBHHOH
HOHBNHOH
HOHBUHOH
HOHB^ÐHOH
HOHPHHOH
HOHPNHOH
HOHPUHOH
HOH^Þ^ÐHOH

straight>void
(HMNUIJ)R L(WVYZXA)
HOHHVHOH
HOHNVHOH
HOHUVHOH
HOHHW^{HOH}
HOHNW^{HOH}
HOHUW^{HOH}
HOHHYHOH
HOHNYHOH
HOHUYHOH
HOHHZHOH
HOHNZHOH
HOHUZHOH
HOHHXHOH
HOHNXHOH
HOHUXHOH

HOHHAHOH
HOHNAHOH
HOHUAHOH

(WVYZXAKR)R
L(HMNUIKLP^RBEF^Þ)
HOHWUHOH
HOHWHHOH
HOHVUHOH
HOHVHHOH
HOHYUHOH
HOHYHHOH
HOHZUHOH
HOHZHHOH
HOHXUHOH
HOHXHHOH
HOHAUHOH
HOHAHHOH
HOHKUHOH
HOHKHHOH
HOHRUHOH
HOHRHHOH

straight>open
(HMNUIJ)R L(TJS)
OHOHTHOH
OHONTHOH
OHOUTHOH
OHOHJHOH
OHON^JHOH
OHOU^JHOH

OHOHSHOH
OHONSHOH
OHOUSHOH

(CGSEFLTZ)R
L(HMNUIKLPRBEFÐ)
HOHC^UHOH
HOHCHHOH
HOHCÐHOH
HOHGUHOH
HOHGHHOH
HOHGÐHOH
HOHSUHOH
HOHSHHOH
HOHSÐHOH
HOHEUHOH
HOHEHHOH
HOHEÐHOH
HOHFUHOH
HOHFHHOH
HOHFÐHOH
HOHLUHOH
HOHLHHOH
HOHLÐHOH
HOHT^{TU}HOH
HOHTHHOH
HOHTÐHOH
HOHZUHOH
HOHZHHOH
HOHZÐHOH

full round >full round
(DOQ^P)R L(CGOQ)
HOH^POHOH
HOHD^OHOH
HOHDCHOH
HOHDQHOH
HOHQOHOH
HOHQCHOH
HOHQQHOH

full > small
(DOQ^P)R L(S)

HOH^PSHOH
HOHDSHOH
HOHOSHOH
HOHQSHOH

(RBP)R L(CGOQ)
HOH^ROHOH
HOH^BOHOH
HOHP^OHOH

full > void
(DOQ^P)R L(WVYZXA)

HOHD^{DW}HOH
HOH^PWHOH
HOHOWHOH
HOHQWHOH
HOH^PVHOH
HOHD^{DV}HOH

HOHOVHOH
HOHQVHOH
HOHDYHOH
HOH^PYHOH
HOHOYHOH
HOHQYHOH
HOH^PZHOH
HOHDZHOH
HOHOZHOH
HOHQZHOH
HOH^PXHOH
HOHDXHOH
HOHOXHOH
HOHQXHOH
HOH^PAHOH
HOHDAHOH
HOHOAHOH
HOHQ^AAHOH

(WVYZXAKR)R L(CGOQ)
HOHWOHOH
HOHVOHOH
HOHYOHOH
HOHZOHOH
HOH^XOHOH
HOHAOHOH
HOH^KOHOH
HOH^ROHOH

full>open
(DOQ)R L(TJSZ)

HOHDTHOH
HOH^PTHOH
HOHOTHOH
HOHQTHOH
HOHDTJOH
HOH^PJHOH
HOHOJHOH
HOHQJHOH
HOHDSHOH
HOH^PSHOH
HOHOSHOH
HOHQSHOH
HOH^{DZ}HOH
HOH^PZHOH
HOH^{OZ}HOH
HOHQZHOH

(CSEFLTZG)R L(CGOQ)
HOH^COHOH
HOH^SOHOH
HOHEOHOH
HOH^FOHOH
HOHLOHOH
HOHT^OHOH
HOHZOHOH
HOH^GOHOH

small>small
(RBP)R L(S)
HOH^RSHOH
HOHBSHOH

HOHPSHOH

small>void
(RBP)R L(WVYZXA)

HOHRW^{HOH}
HOHRV^{HOH}
HOHRY^{HOH}
HOHRZ^{HOH}
HOHRX^{HOH}
HOHRA^{HOH}
HOHRA^{HOH}

HOHBW^{HOH}
HOHBV^{HOH}
HOHBY^{HOH}
HOHBZ^{HOH}
HOHBX^{HOH}
HOHBA^{HOH}
HOHBA^{HOH}

HOHPW^{HOH}
HOHPV^{HOH}
HOHPY^{HOH}
HOHPZ^{HOH}
HOHPX^{HOH}
HOHPA^{HOH}
HOHPA^{HOH}

(WVYZXAKR)R L(S)

HOHWS^{HOH}
HOHVSHOH
HOHYSHOH
HOHZSHOH
HOHXSHOH
HOHASHOH
HOHKSHOH
HOHRS^{HOH}

small>open
(RBP)R L(TJSZ)

HOHRT^{HOH}
HOHRT^{HOH}
HOHRT^{HOH}
HOHRJ^{HOH}
HOHRJ^{HOH}
HOHRJ^{HOH}
HOHRSHOH
HOHRSHOH
HOHRSHOH
HOHRZ^{HOH}
HOHRZ^{HOH}
HOHRZ^{HOH}

HOHBTHOH
HOHBTHOH
HOHBTHOH
HOHBJ^{HOH}

HOHBJ^{HOH}
HOHBJ^{HOH}
HOHBS^{HOH}
HOHBS^{HOH}
HOHBS^{HOH}
HOHBZ^{HOH}
HOHBZ^{HOH}
HOHBZ^{HOH}

HOHP^{THOH}
HOHP^{THOH}
HOHP^{THOH}
HOHPJ^{HOH}
HOHPJ^{HOH}
HOHPJ^{HOH}
HOHP^{SHOH}
HOHP^{SHOH}
HOHP^{SHOH}
HOHPZ^{HOH}
HOHPZ^{HOH}
HOHPZ^{HOH}

(CGSEFLTZ)R L(TJSZ)

HOHCS^{HOH}
HOHGSHOH
HOHSSHOH
HOHES^{HOH}
HOHFS^{HOH}
HOHLS^{HOH}
HOHTS^{HOH}
HOHZS^{HOH}

HOHCT^{HOH}
HOHGTHOH
HOHST^{HOH}
HOHETHOH
HOHFT^{HOH}
HOHLT^{HOH}
HOHTT^{HOH}
HOHZT^{HOH}

HOHCJ^{HOH}
HOHGJ^{HOH}
HOHSJ^{HOH}
HOHEJ^{HOH}
HOHFJ^{HOH}
HOHLJ^{HOH}
HOHTJ^{HOH}
HOHZJ^{HOH}

HOHCZ^{HOH}
HOHGZ^{HOH}
HOHSZ^{HOH}
HOHEZ^{HOH}
HOHFZ^{HOH}
HOHLZ^{HOH}
HOHTZ^{HOH}
HOHZZ^{HOH}

void>void
(WVYZXA KR)R
L(WVYZXA)

HOHWWHOH HWWWH
HOHWVHOH HWVWH
HOHWYHOH HWYWH
HOHWZHOH HWZWH
HOHWXHOH HWXWH
HOHWAHOH HWAWH
HOHWÆHOH HWÆWH

HOHVWHOH HVVWH
HOHVVHOH HVVVH
HOHVVHOH HVVWH
HOHVZHOH HVZVH
HOHVXHOH HVXVH
HOHVAHOH HVAVH

HOHYWHOH HYWYH
HOHYVHOH HYVYH
HOHYWHOH HYYYH
HOHYZHOH HYZYH
HOHYXHOH HYXYH
HOHYAHOH HYAYH

HOHZWHOH HZWZH
HOHZVHOH HZVZH
HOHZYHOH HZYZH
HOHZZHOH HZZZH

HOHZXHOH HZXZH
HOHZAHOH HZAZH

HOHXWHOH HXWXH
HOHXVHOH HXVXH
HOHXYHOH HXYXH
HOHXZHOH HXZXH
HOHXXHOH HXXXH
HOHXAHOH HXAXH

HOHAWHOH HAWAH
HOHAVHOH HAVAH
HOHAYHOH HAYAH
HOHAZHOH HAZAH
HOHAXHOH HAXAH
HOHAAHOH HAAAH

void>open
(WVYZXAKR)R L(TJS)

HOHWTHOH
HOHWJHOH
HOHWSHOH

HOHVTHOH
HOHVJHOH
HOHVSHOH

HOHYTHOH
HOHYJHOH
HOHYSHOH

HOHZTHOH
HOHZJHOH
HOHZSHOH

HOHXTHOH
HOHXJHOH
HOHXSHOH

HOHATHOH
HOHAJHOH
HOHASHOH

HOHKTHOH HKTXH
HOHKJHOH HKJXH
HOHKSHOH HKSXH

HOHRTHOH HRTXH
HOHRJHOH HRJXH
HOHRSHOH HRSXH

(CSEFLTZ)R
L(WVYZXA)

HOHCWHOH
HOHCYHOH
HOHCVHOH
HOHCZHOH
HOHCXHOH
HOHCAHOH

HOHSWHOH HSWSH
HOHSYHOH HSYSH

HOHSVHOH HSVSH
HOHSZHOH HSZSH
HOHSXHOH HSXSH
HOHSAHOH HSASH

HOHEWHOH
HOHEYHOH
HOHEVHOH
HOHEZHOH
HOHEXHOH
HOHEAHOH

HOHFWHOH
HOHFWHOH
HOHFVHOH
HOHFFHOH
HOHFXHOH
HOHFAHOH

HOHLWHOH
HOHLYHOH
HOHLVHOH
HOHLZHOH
HOHLXHOH
HOHLAHOH

HOHTWHOH HTWTH
HOHTYHOH HTYTH
HOHTVHOH HTVTH
HOHTZHOH HTZTH
HOHTXHOH HTXTH
HOHTAHOH HTATH

HOHZWHOH HZWZH
HOHZYHOH HZYZH
HOHZVHOH HZVZH
HOHZZHOH HZZZH
HOHZXHOH HZXZH
HOHZAHOH HZAZH

open>open
(CSEFLTZ)R L(TJZ)

HOHCTHOH
HOHCJHOH
HOHCSHOH
HOHCZHOH
HOHSTHOH
HOHSJHOH
HOHSSHOTH
HOHSZHOH
HOHETHOH
HOHEJHOH
HOHESHOTH
HOHEZHOH
HOHFTHOH
HOHFJHOH
HOHFSHOH
HOHFZHOH
HOHLTHOH
HOHLJHOH
HOHLSHOH
HOHLZHOH

HOHTTHOH
HOHTJHOH
HOHTSHOH
HOHTZHOH
HOHZTHOH
HOHZJHOH
HOHZSHOH
HOHZZHOH

UPPERCASE >
Lowercase

straight>straight

(HMINUJ)R
L(ublijphmnr)

nonHnnono
nonNnnono
nonUnnnono
nonHunono
nonNunono
nonUunono
nonHbnnono
nonNbnnono
nonUbnono
nonHjnnono
nonNjnnono
nonUjnnono
nonHinono
nonNinono
nonUinono

nonHjnnono
nonNjnnono
nonUjnnono
nonHpnnono
nonNpnnono
nonUpnnono
nonHhnnono
nonNhnnono
nonUhnnono

straight>full round
(HMINUJ)R L (ceodqgđ)

nonHonono
nonNonono
nonUonono
nonHdnono
nonNdnono
nonUdnono
nonHgnono
nonNgnono
nonUgnono
nonHđnnono
nonNđnnono
nonUđnnono

(DOQ)R L(ublijphmnr)

nonFunono
nonFbnnono
nonFjnnono
nonFnnono

nonFpnnono
nonDunono
nonDbnnono
nonDjnnono
nonDnnono
nonDpnnono
nonOunono
nonObnnono
nonOjnnono
nonOnnnono
nonOpnnono
nonQunono
nonQbnnono
nonQjnnono
nonQnnono
nonQpnnono

straight>small round
(HMNUIJ)R L(as)

nonHanono
nonNanono
nonUanono
nonHsnnono
nonNsnnono
nonUsnnono

(RBPG)R
L(ublijphmnr)

nonRunono
nonRbnnono

nonRjnono
nonRnnono
nonRpnono

nonBunono
nonBbnono
nonBjnono
nonBnnono
nonBpnono

nonPunono
nonPbnono
nonPjnono
nonPnnono
nonPpnono

nonGunono
nonGbnono
nonGjnono
nonGnnono
nonGpnono

straight>void
(HMNUIJ)R L(vwyzx)

nonHvnono
nonNvnono
nonUvnono
nonHwnono
nonNwnono
nonUwnono

nonHynono
nonNynono
nonUynono
nonHznono
nonNznono
nonUznono
nonHxnono
nonNxnono
nonUxnono

(WVYZXAKR)R
L(ublijphmnr)

nonWunono
nonWbnono
nonWjnono
nonWnnono
nonWpnono

nonVunono
nonVbnono
nonVjnono
nonVnnono
nonVpnono

nonYunono
nonYbnono
nonYjnono
nonYnnono
nonYpnono

nonZunono

nonZbnono
nonZjnono
nonZnnono
nonZpnono

nonXunono
nonXbnono
nonXjnono
nonXnnono
nonXpnono

nonAunono
nonAbnono
nonAjnono
nonAnnono
nonApnono

nonKunono
nonKbnono
nonKjnono
nonKnnono
nonKpnono

nonRunono
nonRbnono
nonRjnono
nonRnnono
nonRpnono

straight>open
(HMNUIJ)R L(fts)

nonHfnono
nonNfnono
nonUfnono

nonHtnono
nonNtnono
nonUtnono

nonHsnono
nonNsnono
nonUsnono

(CSEFLTZ)R
L(ublijphmnr)

nonCunono
nonCbnono
nonCjnono
nonCnnono
nonCpnono

nonSunono
nonSbnono
nonSjnono
nonSnnono
nonSpnono

nonEunono
nonEbnono
nonEjnono
nonEnnono
nonEpnono

	(DOQ)R L (ceodqgđ)		
nonFunono	nonDonono	nonRonono	nonOwnono
nonFbnono	nonDdnono	nonRdnono	nonOynono
nonFjnono	nonDgnono	nonRgnono	nonOznono
nonFnnono	nonDđnono	nonRđnono	nonOxnono
nonFpnono	nonFonono		
	nonFdnono	nonBonono	nonQvnono
nonLunono	nonFgnono	nonBdnono	nonQwnono
nonLbnono	nonFđnono	nonBgnono	nonQynono
nonLjnono	nonOnono	nonBđnono	nonQznono
nonLnnono	nonOdnono		nonQxnono
nonLpnono	nonOgnono	nonPonono	(WVYZXAKR)R L
	nonOđnono	nonPdnono	(ceodqgđ)
nonTunono	nonQonono	nonPgnono	
nonTbnono	nonQdnono	nonPđnono	nonWonono
nonTjnono	nonQgnono		nonWdnono
nonTnnono	nonQđnono	full > void	nonWgnono
nonTpnono		(DOQ)R L(vwyzx)	nonWđnono
nonZunono	full > small	nonDvnono	nonVonono
nonZbnono	(DOQ)R L(as)	nonDwnono	nonVdnono
nonZjnono		nonDynono	nonVgnono
nonZnnono	nonDanono	nonDznono	nonVđnono
nonZpnono	nonDsnono	nonDxnono	
	nonFanono		nonYonono
nonZhnono	nonFsnono	nonFvnono	nonYdnono
nonZhnono	nonOanono	nonFwnono	nonYgnono
nonZhnono	nonOsnono	nonFynono	nonYđnono
nonZhnono	nonQanono	nonFznono	
nonZhnono	nonQsnono	nonFxnono	nonZonono
			nonZdnono
full round >full round	(RBP)R L (ceodqg)	nonOvnono	nonZgnono

nonZǎnono	nonDsnono		nonRvnono	nonYsnono	L(as)
		nonLnono	nonRwnono	nonZanono	
nonZonono	nonOfnono	nonLdnono	nonRynono	nonZsnono	nonCsnono
nonZdnono	nonOtnono	nonLgnono	nonRznono	nonXanono	nonCanono
nonZgnono	nonOsnono	nonLǎnono	nonRxnono	nonXsnono	nonSsnono
nonZǎnono				nonAanono	nonSanono
	nonQfnono	nonTnono	nonBvnono	nonAsnono	nonEsnono
nonXonono	nonQtnono	nonTdnono	nonBwnono	nonKanonono	nonEanono
nonXdnono	nonQsnono	nonTgnono	nonBynono	nonKsnono	nonFsnono
nonXgnono		nonTǎnono	nonBznono	nonRanono	nonFanono
nonXǎnono	(CSEFLTZ)R L (ceodqgǎ)		nonBxnono	nonRsnono	nonLsnono
		nonZonono			nonLanono
nonAonono		nonZdnono	nonPvnono	small>open	nonTsnono
nonAdnono	nonConono	nonZgnono	nonPwnono	(RBPG)R L(fts)	nonTanono
nonAgnono	nonCdnono	nonZǎnono	nonPynono		nonZsnono
nonAǎnono	nonCgnono		nonPznono	nonRfnono	nonZanono
	nonCǎnono	small>small (RBPG)R L(as)	nonPxnono	nonRtnono	
nonKnono				nonRsnono	void>void (WVYZXAKR)R L(vwyzx)
nonKdnono	nonSonono	nonRanono	nonGvnono		
nonKgnono	nonSdnono	nonRsnono	nonGwnono	nonBfnono	
nonKǎnono	nonSgnono	nonBanono	nonGynono	nonBtnono	
	nonSǎnono	nonBsnono	nonGznono	nonBsnono	nonWvnono
nonRnono		nonPanono	nonGxnono		nonWwnono
nonRdnono	nonEonono	nonPsnono		nonPfnono	nonWynono
nonRgnono	nonEdnono	nonGanono	(WVYZXAKR)R L(as)	nonPtnono	nonWznono
nonRǎnono	nonEgnono	nonGsnono		nonPsnono	nonWxnono
	nonEǎnono				
full>open (DOQ)R L(fts)			nonWanono	nonGfnono	nonVvnono
	nonFonono		nonWsnono	nonGtnono	nonVwnono
nonDfnono	nonFdnono	small>void (RBPG)R L(vwyzx)	nonVanono	nonGsnono	nonVynono
nonDtnono	nonFgnono		nonVsnono		nonVznono
	nonFǎnono		nonYanono	(CSEFLTZ)R	nonVxnono

nonYvnono	nonRwnono		
nonYwnono	nonRynono	(CSEFLTZ)R L(vwyzx)	nonTvnono
nonYynono	nonRznono		nonTwnono
nonYznono	nonRxnono	nonCvnono	nonTynono
nonYxnono		nonCwnono	nonTznono
	void>open	nonCynono	nonTxnono
	(WVYZXAKR)R L(fts)	nonCznono	
		nonCxnono	nonZvnono
nonZvnono	nonWfnono		nonZwnono
nonZwnono	nonWtnono	nonSvnono	nonZynono
nonZynono	nonWsnono	nonSwnono	nonZznono
nonZznono	nonVfnono	nonSynono	nonZxnono
nonZxnono	nonVtnono	nonSznono	
	nonVsnono	nonSxnono	open>open
nonXvnono	nonYfnono		(CSEFLTZ)R L(fts)
nonXwnono	nonYtnono	nonEvnono	
nonXynono	nonYsnono	nonEwnono	nonCfnono
nonXznono	nonZfnono	nonEynono	nonCtnono
nonXxnono	nonZtnono	nonEznono	nonCsnono
	nonZsnono	nonExnono	nonSfnono
nonAvnono	nonXfnono		nonStnono
nonAwnono	nonXtnono	nonFvnono	nonSsnono
nonAynono	nonXsnono	nonFwnono	nonEfnono
nonAznono	nonAfnono	nonFynono	nonEtnono
nonAxnono	nonAtnono	nonFznono	nonEsnono
	nonAsnono	nonFxnono	nonFfnono
nonKvnono	nonKfnono		nonFtnono
nonKwnono	nonKtnono	nonLvnono	nonFsnono
nonKynono	nonKsnono	nonLwnono	nonLfnono
nonKznono	nonRfnono	nonLynono	nonLtnono
nonKxnono	nonRtnono	nonLznono	nonLsnono
	nonRsnono	nonLxnono	nonTfnono
nonRvnono			

nonTtnono	nonpĐnono	nonqVnono	nonaĀnono
nonTsnono	nonbĐnono	noniVnono	
nonZfnono	nonđĐnono	nonjVnono	(kvwyzx)R
nonZtnono		nonuVnono	L(HMNUIKLPRBEFĐ)
nonZsnono	straight>small round (udlijgqhmna)R L(S)	nonaVnono	
		nonnYnono	nonkHnono
Lowercase > UPPERCASE	nonnSnono	nonqYnono	nonkUnono
	nonqSnono	noniYnono	nonkĐnono
	noniSnono	nonjYnono	nonvHnono
straight>full round (udlijgqhmna)R L (CGOQ)	nonjSnono	nonuYnono	nonvUnono
	nonuSnono	nonaYnono	nonvĐnono
nonnOnono	nonaSnono		nonwHnono
nonqOnono		nonnZnono	nonwUnono
noniOnono	(s)R	nonqZnono	nonwĐnono
nonjOnono	L(HMNUIKLPRBEF')	noniZnono	nonyHnono
nonuOnono		nonjZnono	nonyUnono
nonaOnono	nonsHnono	nonuZnono	nonyĐnono
	nonsUnono	nonaZnono	nonzHnono
			nonzUnono
(bpo)R	straight>void	nonnXnono	nonzĐnono
L(HMNUIKLPRBEFĐ)	(udlijgqhmna)R L(WVYZXA)	nonqXnono	nonxHnono
		noniXnono	nonxUnono
nonoHnono	nonnWnono	nonjXnono	nonxĐnono
nonpHnono	nonqWnono	nonuXnono	
nonbHnono	noniWnono	nonaXnono	straight>open (udlijgqhmna)R L(TJS)
nonđHnono	nonjWnono		
nonoUnono	nonuWnono	nonnĀnono	nonnTnono
nonpUnono	nonaWnono	nonqĀnono	nonqTnono
nonbUnono		noniĀnono	noniTnono
nonđUnono		nonjĀnono	nonjTnono
nonoĐnono	nonnVnono	nonuĀnono	nonuTnono

nonaTnono

nonnJnono
nonqJnono
noniJnono
nonjJnono
nonuJnono
nonaJnono

nonnSnono
nonqSnono
noniSnono
nonjSnono
nonuSnono
nonaSnono

(ctfr) R
L(HMNUIKLPRBEF)

noncHnono
noncUnono
nonfHnono
nonfUnono
nontHnono
nontUnono
nonrHnono
nonrUnono

full round >full round
(bpoe)R L(CGOQ)

nonoOonono
nonpOonono
nonbOonono

full > small
(bpo)R L(S)

nonoSnono
nonpSnono
nonbSnono

(as) R L(CGOQ)

nonaOnono
nonsOnono

full > void
(bpođ)R L(WVYZXA)
(kvwyzx)R L(CGOQ)

nonoWnono
nonpWnono
nonbWnono
nonđWnono
nonoVnono
nonpVnono
nonbVnono
nonđVnono
nonoYnono
nonpYnono
nonbYnono

nonđYnono

nonoZnono
nonpZnono
nonbZnono
nonđZnono
nonoXnono
nonpXnono
nonbXnono
nonđXnono
nonoAnono
nonpAnono
nonbAnono
nonđAnono

full>open
(bpođ)R L(TJS)

nonoTnono
nonpTnono
nonbTnono
nonđTnono

nonoJnono
nonpJnono
nonbJnono
nonđJnono

nonoSnono
nonpSnono
nonbSnono
nonđSnono

(ctfr) R L(CGOQ)

noncOnono
nonfOnono
nontOnono
nonrOnono

small>small
(s)R L(S)

nonsSsnono

small>void
(s)R L(WVYZXA)

nonsWnono
nonsVnono
nonsYnono
nonsZnono
nonsXnono
nonsAnono

(kvwyzx)R L(S)

nonkSnono
nonvSnono
nonwSnono
nonySnono
nonzSnono
nonxSnono

small>open

(s)R L(TJS)	nonwYnono	nonyTnono	nonfYnono
	nonyYnono	nonzTnono	nonrYnono
nonsTsnono	nonzYnono	nonxTnono	
nonsJnono	nonxYnono		noncZnono
nonsSsnono		nonkJnono	nontZnono
	nonkZnono	nonvJnono	nonfZnono
(ctfr) R L(S)	nonvZnono	nonwJnono	nonrZnono
	nonwZnono	nonyJnono	
noncSnono	nonyZnono	nonzJnono	noncXnono
nontSnono	nonzZnono	nonxJnono	nontXnono
nonfSnono	nonxZnono		nonfXnono
nonrSnono		nonkSnono	nonrXnono
	nonkXnono	nonvSnono	
void>void	nonvXnono	nonwSnono	noncAnono
(kvwyzx)R L(WVYZXA)	nonwXnono	nonySnono	nontAnono
	nonyXnono	nonzSnono	nonfAnono
nonkWnono	nonzXnono	nonxSnono	nonrAnono
nonvWnono	nonxXnono		
nonwWnono		(ctfr) R L(WVYZXA)	
nonyWnono	nonkAnono	noncWnono	open>open
nonzWnono	nonvAnono	nontWnono	(ctfr) R L(TJS)
nonxWnono	nonwAnono	nonfWnono	
	nonyAnono	nonrWnono	noncTnono
nonkVnono	nonzAnono		nontTnono
nonvVnono	nonxAnono	noncVnono	nonfTnono
nonwVnono		nontVnono	nonrTnono
nonyVnono	void>open	nonfVnono	
nonzVnono	(kvwyzx)R L(TJS)	nonrVnono	noncJnono
nonxVnono			nontJnono
	nonkTnono	noncYnono	nonfJnono
nonkYnono	nonvTnono	nontYnono	nonrJnon
nonvYnono	nonwTnono		

noncSnono			
nontSnono	straight>small round	007100	000000
nonfSnono	(1) R L(98)	002100	000600
nonrSnono			009000
	001900	straight>open	009600
	001800	(1) R L(239)	
Figures			full round >small
	111911	111211	round
straight > straight	111811	111311	(09) R L(98)
001100		111911	
111111	(8356) R L (1)		110911
HH11HH		001200	110811
nn11nn	008100	001300	119911
	003100	001900	119811
straight>full round	005100		
(1) R L (06)	006100	(654)R L(1)	000900
			000800
001000	118111	116111	009900
001600	113111	115111	009800
	115111	114111	
111011	116111		L(98) L (06)
111611		006100	
	straight>void	005100	119011
	(1) R L(4)	004100	119611
(09) R L (1)			118011
	111411	full round >full round	118611
009100	001400	(09) R L (06)	
000100			009000
	(72)R L (1)	110011	009600
119111		110611	008000
110111	117111	119011	008600
	112111	119611	

full > void (09) R L(4)	000200 000300 000900 009200 009300 009900	116911 116811	112811
110411 119411		008900 008800 003900 003800	007900 002900 007800 002800
000400 009400	(654)R L (06)	005900 005800 006900 006800	small > open (8356) R L(239)
(72)R L (06)	116011 116611 115011 115611 114011 114611		118211 118311 118911
117011 117611 112011 112611		small > void (8356) R L(4)	113211 113311 113911
007000 007600 002000 002600	006000 006600 005000 005600 004000 004600	118411 113411 115411 116411	
full > open (09) R L(239)	small > small (8356) R L(98)	008400 003400 005400 006400	115211 115311 115911
110211 110311 110911 119211 119311 119911	118911 118811 113911 113811 115911 115811	(72)R L(98)	116211 116311 116911
			008200 008300 008900
		117911 112911 117811	003200 003300

003900	112411	004400	jj, jy, qj, qg, gg, gp, gy, fh, fk, fl, fb, fi, fj, ff, ft
005200	007400	open > open	
005300	002400	(654)R L(239)	L4 F'7 6T T'7
005900			
006200	void > open	116211	
006300	(72)R L(239)	116311	
006900		116911	
	117211	115211	
	117311	115311	
	117911	115911	
	112211	114211	
(654)R L(98)	112311	114311	
	112911	114911	
116911			
116811	007200	006200	
115911	007300	006300	
115811	007900	006900	
114911	002200	005200	
114811	002300	005300	
	002900	005900	
006900		004200	
006800		004300	
005900		004900	
005800	(654)R L(4)		
004900			
004800	116411	collisions U>L & L>U	
	115411		
void > void	114411	fT fY	
(72)R L(4)		Qj Qy Qp Qj F'l tA gT gV	
	006400	gX	
117411	005400		

