

LOWERCASE

straight>straight
(udlijqhmna)R
L(ublijphmnr)

nonnnnnono
nonnunono
nonnbnono
nonninono
nonnjnono
nonnpnono
nonuunono
nonubnono
nonuinono
nonujnono
nonupnono
nonunnono
nonqunono
nonqbnono
nonqinono
nonqjnono
nonqpnono
nonqnnono
nonjunono
nonjbnono
nonjinono
nonjjnono
nonjpnono
nonjnnono
nonnunono
nonnbnono

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

straight>full round
(udlijqhmna)R L
(ceodqgð)
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
nonsnonon
nonsjnonon
nonslnonon

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

nontbnono
nontnonon
nontjnonon
nontlonon
nontpnonon
nonfunono
nonfbnono
nonfnonon
nonfjnonon
nonflonon
nonfpnonon
nonrunono
nonrbnono
nonrnnonon
nonrjnonon
nonrlonon
nonrpnonon
noneunono
nonebnono
nonenonon
nonejnonon
nonelonon
nonepnonon

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

nonocnono
nonoenono
nonognono
nonoðnono
nonpdonon

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
nongvnnono
nonownnono
nonpwonon
nonbwnnono
nongwnnono

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

(kvwyzx)R L (ceodqgđ)
nonkonono
nonvonono
nonwoonon
nonyoonon
nonkđnono
nonvđnono
nonwđnonon
nonyđnonon
nonzđnonon
nonxđnonon
nonkdnono
nonvdnono
nonwdnonon
nonydonon
nonzdnnonon
nonxdnonon

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

full>open
(bpo)R L(fts)

nonofnono
nonpfonon
nonbfnono
nonotnono
nonptnonon
nonbbtnono
nonosnono
nonpsonon
nonbsnono
nonoanonon
nonpaonon
nonbanono

(ctfre) R L (ceodqgđ)
noncononon
noncdnonon

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

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

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

(kvwyzx)R L(as)
nonkanonon
nonksnonon
nonvanonon
nonvsnonon
nonwanonon
nonwsnonon
nonyanonon
nonysnonon
nonzanonon
nonzsnnonon
nonxanonon
nonxsnonon

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

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

void>void
(kvwyzx)R L(vwyzx)
nonkvnnonon
nonkwnnonon
nonkynnonon
nonkznnonon
nonkxnnonon
nonvvnnonon
nonvwnnonon
nonvynnonon
nonvznnonon
nonvxnononon
nonwvnnonon
nonwwnononon
nonwynnonon
nonwznnonon
nonwxnononon
nonyvnnonon
nonywnnonon
nonyynnonon
nonyznnonon
nonyxnnonon
nonzvnnonon
nonzwnnonon
nonzynnonon
nonzznnonon
nonzxnononon
nonxvnnonon
nonxwnnonon
nonxynnonon
nonxznononon
nonxxnononon

void>open
(kvwyzx)R L(fts)
nonkfnnonon
nonktnnonon
nonksnononon
nonvfnnonon
nonvtnononon
nonvsnononon
nonwfnnonon
nonwtnononon
nonwsnononon
nonyfnnonon
nonytnnonon
nonysnnononon
nonzfnnonon
nonztnnonon
nonzsnnonon
nonxfnnonon
nonxtnononon
nonxsnononon

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

nontynnonon
nontznnonon
nontxnnonon
nonfvnnonon
nonfwnnonon
nonfynnonon
nonfznnonon
nonfxnononon
nonrvnnonon
nonrwnnonon
nonrynononon
nonrznnonon
nonrxnononon
nonevnnonon
newnononon
noneynnononon
noneznnononon
nonexnononon

open>open
(ctfre) R L(fts)
noncfnononon
nonctnononon
noncsnononon
nontfnnonon
nonttnnononon
nontsnnononon
nonffnnononon
nonftnnononon
nonfsnononon
nonrfnnononon
nonrtnononon

nonrsnononon
nonefnnononon
nonetnonononon
nonesnononon

UPPERCASE

straight>straight
(HMNUIJ)R
L(HMNUIKLPRBEFÐ)
HOHHHHHOH
HOHHMHOOH
HOHHNHOOH
HOHHUHOH
HOHHIHOOH
HOHHKHOOH
HOHHLHOH
HOHHÐHOH

HOHMHOOH
HOHMMHOH
HOHMNHOOH
HOHMHOOH
HOHMIHOH
HOHMKHOH
HOHMLHOH
HOHMÐHOH

HOHNHHOOH
HOHNMHOOH
HOHNNHOOH

HOHNÜHOH		L(HMNUIKLP RBEFÐ)	HOHHAHOH
HOHNIHOH	straight>full round	HOHRHHOH	HOHNAHOH
HOHNKHOH	(HMNUIJ)R L (CGOQ)	HOHRNHOH	HOHUAHOH
HOHNLHOH	HOHHOHOH	HOHRUHOH	
HOHNÐHOH	HOHNOHOH	HOHRÐHOH	
	HOHUOHOH	HOHBHHOH	(WVYZXAKR)R
HOHUHHOH	HOHHCHOH	HOHBNHOH	L(HMNUIKLP RBEF)
HOHUMHOH	HOHNCHOH	HOHBUHOH	HOHWUHOH
HOHUNHOH	HOHUCHOH	HOHBÐHOH	HOHWHHOH
HOHUUHOH		HOHPHHOH	HOHVUHOH
HOHUIHOH	(DOQÞ)R	HOHPNHOH	HOHVHHOH
HOHUKHOH	L(HMNUIKLP RBEFÐ)	HOHPUHOH	HOHYUHOH
HOHULHOH	HOHOUHOH	HOHPÐHOH	HOHYHHOH
HOHUÐHOH	HOHQUHOH		HOHZUHOH
	HOHDUHOH		HOHZHHOH
HOHIHHOH	HOHÞUHOH	straight>void	HOHXUHOH
HOHIMHOH	HOHOHHOH	(HMNUIJ)R L(WVYZXA)	HOHXHHOH
HOHINHOH	HOHQHHOH	HOHHVHOH	HOHAUHOH
HOHIUHOH	HOHDHHOH	HOHNVHOH	HOHAHHOH
HOHIIHOH	HOHÞHHOH	HOHUVHOH	HOHKUHOH
HOHIKHOH	HOHOÐHOH	HOHHWHOH	HOHKHHOH
HOHILHOH	HOHQÐHOH	HOHNWHOH	HOHRUHOH
HOHIÐHOH	HOHDÐHOH	HOHUWHOH	HOHRHHOH
	HOHÞÐHOH	HOHHYHOH	
HOHJHHOH		HOHNYHOH	straight>open
HOHJMHOH	straight>small round	HOHUYHOH	(HMNUIJ)R L(TJS)
HOHJNHOH	(HMNUIJ)R L(S)	HOHHZHOH	OHOHTHOH
HOHJUHOH	OHOHSHOH	HOHNZHOH	OHOHTHOH
HOHJIHOH	OHONSHOH	HOHUZHOH	OHOUTHOH
HOHJKHOH	OHOUSHOH	HOHHXHOH	OHOHJHOH
HOHJLHOH		HOHNXHOH	OHO NJHOH
HOHJÐHOH	(RBP)R	HOHUXHOH	OHO UJHOH

OHOHSHOH
OHO~~NS~~SHOH
OHOUSHOH

(CGSEFLTZR
L(HMNUIKLPRBEFÐ)
HOHCUSHOH
HOHCHHOH
HOHCÐHOH
HOH~~GU~~HOH
HOHGHHOH
HOH~~GD~~HOH
HOHSUHOH
HOHSHHOH
HOHSÐHOH
HOHEUHOH
HOHEHHOH
HOHEÐHOH
HOH~~FU~~HOH
HOHFHHOH
HOHFÐHOH
HOHLUHOH
HOHLHHOH
HOHLÐHOH
HOHTUHOH
HOHTHHOH
HOHTÐHOH
HOHZUHOH
HOHZHHOH
HOHZÐHOH

full round >full round
(DOQ~~P~~)R L(CGOQ)
HOH~~PO~~HOH
HOHDOHOH
HOHDCHOH
HOHDQHOH
HOHQOHOH
HOHQCHOH
HOHQQHOH

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

HOH~~P~~SHOH
HOHDSHOH
HOHOSHOH
HOHQSHOH

(RBP)R L(CGOQ)
HOH~~RO~~HOH
HOHBOHOH
HOH~~PO~~HOH

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

HOHDWHOH
HOH~~PW~~HOH
HOHOWHOH
HOHQWHOH
HOH~~P~~VHOH
HOH~~DV~~HOH

HOHOVHOH
HOHQVHOH
HOHDYHOH
HOH~~P~~YHOH
HOHOYHOH
HOHQYHOH
HOH~~P~~ZHOH
HOHDZHOH
HOHOZHOH
HOHQZHOH
HOH~~PX~~HOH
HOHDXHOH
HOHOXHOH
HOHQXHOH
HOH~~P~~AHOH
HOHDAHOH
HOHOAHOH
HOHQAAHOH

(WVYZXAKR)R L(CGOQ)
HOHWOH
HOH~~VO~~HOH
HOHYOH
HOHZOH
HOH~~XO~~HOH
HOHAAHOH
HOH~~KO~~HOH
HOHROHOH

full>open
(DOQ)R L(TJSZ)

HOH~~DT~~HOH
HOH~~P~~THOH
HOHOTHOH
HOHQTHOH
HOHDJHOH
HOH~~PJ~~HOH
HOHOJHOH
HOH~~QJ~~HOH
HOHDSHOH
HOH~~P~~SHOH
HOH~~OS~~SHOH
HOHQSHOH
HOHDZHOH
HOH~~P~~ZHOH
HOHOZHOH
HOHQZHOH

(CSEFLTZG)R L(CGOQ)
HOH~~CO~~HOH
HOH~~SO~~HOH
HOH~~EO~~HOH
HOH~~FO~~HOH
HOHLOHOH
HOHTHOH
HOHZOH
HOH~~GO~~HOH

small>small
(RBP)R L(S)
HOH~~RS~~HOH
HOHBSHOH

HOHPSHOH

small>void
(RBP)R L(WVYZXA)

HOHRWHOH
HOHRVHOH
HOHRYHOH
HOHRZHOH
HOH**RX**HOH
HOHRAHOH
HOHRÆHOH

HOHBWHOH
HOHBVHOH
HOHBYHOH
HOHBZHOH
HOHBXHOH
HOHBAHOH
HOHBÆHOH

HOH**PW**HOH
HOHPVHOH
HOHPYHOH
HOHPZHOH
HOH**PX**HOH
HOH**PA**HOH
HOHPÆHOH

(WVYZXAKR)R L(S)

HOHWSHOH
HOHVSHOH
HOHYSHOH
HOHZSHOH
HOHXSHOH
HOH**AS**HOH
HOHKSHOH
HOHRSHOH

small>open
(RBP)R L(TJSZ)

HOH**RT**HOH
HOHRTHOH
HOHRTHOH
HOHRJHOH
HOHRJHOH
HOHRJHOH
HOHRSHOH
HOHRSHOH
HOHRZHOH
HOHRZHOH
HOHRZHOH

HOH**BT**HOH
HOHBTHOH
HOHBTHOH
HOHBJHOH

HOHBJHOH
HOHBJHOH
HOHBSHOH
HOHBSHOH
HOHBSHOH
HOHBZHOH
HOHBZHOH
HOHBZHOH

HOH**PT**HOH
HOHPTHOH
HOHPTHOH
HOHPJHOH
HOHPJHOH
HOHPJHOH
HOHPSHOH
HOH**PS**HOH
HOHPSHOH
HOHPZHOH
HOHPZHOH
HOHPZHOH

(CGSEFLTZ)R L(TJSZ)

HOH**CS**HOH
HOHGSHOH
HOHSSH OH
HOHESH OH
HOHFSHOH
HOHLSHOH
HOHTSHOH
HOH**ZS**HOH

HOHCTHOH
HOH**GT**HOH
HOHSTHOH
HOHETHOH
HOHFTHOH
HOH**LT**HOH
HOH**TT**HOH
HOHZTHOH

HOHCJHOH
HOH**GJ**HOH
HOH**SJ**HOH
HOHEJHOH
HOH**FJ**HOH
HOHLJHOH
HOH**TJ**HOH
HOH**ZJ**HOH

HOHCZHOH
HOHGZHOH
HOHSZHOH
HOH**EZ**HOH
HOHFZHOH
HOH**LZ**HOH
HOHTZHOH
HOHZZHOH

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

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

HOHVWHOH HVVWH
HOHVVHOH HVVWH
HOHVVHOH HVVWH
HOHVZHOH HVZWH
HOHVXHOH HVXWH
HOHVAHOH HVAWH

HOHYWHOH HYWYH
HOHYVHOH HYVYH
HOHYWHOH HYWYH
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
HOH**WJ**HOH
HOH**WS**HOH

HOH**VT**HOH
HOH**VJ**HOH
HOHVSHOH

HOHYTHOH
HOH**YJ**HOH
HOHYSHOH

HOHZTHOH
HOHZJHOH
HOH**ZS**HOH

HOHXTHOH
HOHXJHOH
HOHXSHOH

HOHATHOH
HOHAJHOH
HOHASHOH

HOH**KT**HOH HKTXH
HOHKJHOH HKJXH
HOHKSHOH HKSXH

HOH**RT**HOH HRTXH
HOHRJHOH HRJXH
HOHRSHOH HRSXH

(CSEFLTZ)R
L(WVYZXA)

HOHCWHOH
HOHCYHOH
HOHCVHOH
HOH**CZ**HOH
HOH**CX**HOH
HOH**CA**HOH

HOHSWHOH HSWSH
HOHSYHOH HSYSH

HOHSVHOH HSVSH
HOHSZHOH HSZSH
HOHSXHOH HSXSH
HOHSAHOH HSASH

HOHEWHOH
HOHEYHOH
HOHEVHOH
HOH**EZ**HOH
HOH**EX**HOH
HOH**EA**HOH

HOH**FW**HOH
HOHFWHOH
HOHFVHOH
HOHFZHOH
HOH**FX**HOH
HOHFAHOH

HOHLWHOH
HOHLYHOH
HOHLVHOH
HOHLZHOH
HOHLXHOH
HOHLAHOH

HOHTWHOH HTWTH
HOHTYHOH HTYTH
HOHTVHOH HTVTH
HOHTZHOH HT**Z**TH
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
HOHSSH OH
HOHSZHOH
HOHETHOH
HOHEJHOH
HOHESHOH
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
nonHbnono
nonNbnono
nonUbnono
nonHjnnono
nonNjnnono
nonUjnnono
nonHinono
nonNinono
nonUinono

nonHjnnono
nonNjnnono
nonUjnnono
nonHpnnono
nonNpnnono
nonUpnnono
nonHhnnono
nonNhnnono
nonUhnnono

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

nonHonono
nonNonono
nonUonono
nonHdnono
nonNdnono
nonUdnono
nonHgnono
nonNgnono
nonUgnono
nonHðnnono
nonNðnnono
nonUðnnono

(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
nonHsnono
nonNsnono
nonUsnono

(RBPG)R L(ublijphmnr)

nonRunono
nonRbnnono
nonRjnnono

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
nonAprnono

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

nonF̣unono
nonF̣ḅnonono
nonF̣jnono
nonF̣nnono
nonF̣pnono

nonLunono
nonLḅnonono
nonḶjnono
nonḶnnono
nonḶpnono

nonTunono
nonṬḅnonono
nonṬjnono
nonṬnnono
nonṬpnono

nonZunono
nonẒḅnonono
nonẒjnono
nonẒnnono
nonẒpnono

nonZḥnonono
nonZḥnonono
nonZḥnonono
nonZḥnonono
nonZḥnonono

full round >full round
(DOQ)R L (ceodqgđ)

nonḌonono
nonḌdnono
nonḌgnono
nonḌđnonono
nonF̣onono
nonF̣dnono
nonF̣gnono
nonF̣đnonono
nonOonono
nonOdnono
nonOgnono
nonOđnonono
nonQonono
nonQ̣dnono
nonQ̣gnono
nonQ̣đnonono

full > small
(DOQ)R L(as)

nonḌanono
nonḌsnono
nonF̣anono
nonF̣snono
nonOanono
nonOsnono
nonQanono
nonQsnono

(RBP)R L (ceodqg)

nonRonono
nonṚdnono
nonṚgnono
nonṚđnonono

nonḄonono
nonḄdnono
nonḄgnono
nonḄđnonono

nonPonono
nonP̣dnono
nonP̣gnono
nonP̣đnonono

full > void
(DOQ)R L(vwyzx)

nonḌvnono
nonḌwnono
nonḌynono
nonḌznono
nonḌxnono

nonF̣vnono
nonF̣wnono
nonF̣ynono
nonF̣znono
nonF̣xnono

nonỌvnono
nonỌwnono

nonOynono
nonỌznono
nonỌxnono

nonQvnono
nonQwnono
nonQynono
nonQznono
nonQxnono

(WVYZXAKR)R L
(ceodqgđ)

nonẈonono
nonẈdnono
nonẈgnono
nonẈđnonono

nonṾonono
nonṾdnono
nonṾgnono
nonṾđnonono

nonYonono
nonỴdnono
nonỴgnono
nonỴđnonono

nonZonono
nonẒdnono
nonẒgnono
nonẒđnonono

nonZonono	nonOfnonono	nonLonono	nonRwnono	nonZanono	
nonZdnono	nonOtnono	nonLdnono	nonRynono	nonZsnono	nonCsnono
nonZgnono	nonOsnono	nonLgnono	nonRznono	nonXanono	nonCanono
nonZðnonono		nonLðnonono	nonRxnono	nonXsnono	nonSsnono
	nonQfnono	nonTonono	nonBvnono	nonAanono	nonSanono
nonXonono	nonQtnono	nonTdnono	nonBwnono	nonAsnonono	nonEsnono
nonXdnonono	nonQsnono	nonTgnono	nonBynono	nonKanono	nonEanono
nonXgnono		nonTðnonono	nonBznono	nonKsnono	nonFsnono
nonXðnonono	(CSEFLTZ)R L		nonBxnono	nonRanono	nonFanono
	(ceodqgð)	nonZonono		nonRsnono	nonLsnono
nonAonono		nonZdnono	nonPvnono	small>open	nonLanono
nonAdnonono	nonConono	nonZgnono	nonPwnono	(RBPG)R L(fts)	nonTsnono
nonAgnono	nonCdnono	nonZðnonono	nonPynono		nonTanono
nonAðnonono	nonCgnono		nonPznono	nonRfnono	nonZsnono
	nonCðnonono	small>small	nonPxnonono	nonRtnono	nonZanono
nonKonono		(RBPG)R L(as)		nonRsnono	void>void
nonKdnono	nonSonono		nonGvnono		(WVYZXAKR)R
nonKgnono	nonSdnono	nonRanono	nonGwnono	nonBfnono	L(vwyzx)
nonKðnonono	nonSgnono	nonRsnono	nonGynono	nonBtnono	
	nonSðnonono	nonBanono	nonGznono	nonBsnono	nonWvnono
nonRonono		nonBsnono	nonGxnono		nonWwnono
nonRdnono	nonEonono	nonPanono		nonPfnono	nonWynono
nonRgnono	nonEdnonono	nonPsnono	(WVYZXAKR)R	nonPtnonono	nonWznono
nonRðnonono	nonEgnono	nonGanono	L(as)	nonPsnono	nonWxnono
	nonEðnonono	nonGsnono			
full>open			nonWanono	nonGfnono	nonVvnono
(DOQ)R L(fts)	nonFonono	small>void	nonWsnono	nonGtnono	nonVwnono
	nonFdnonono	(RBPG)R	nonVanono	nonGsnono	nonVynono
nonDfnono	nonFgnono	L(vwyzx)	nonVsnono		nonVznono
nonDtnonono	nonFðnonono	nonRvnono	nonYanono	(CSEFLTZ)R	nonVxnono
nonDsnono			nonYsnono	L(as)	

nonYvnono
nonYwnono
nonYynono
nonYznono
nonYxnono

nonZvnono
nonZwnono
nonZynono
nonZznono
nonZxnono

nonXvnono
nonXwnono
nonXynono
nonXznono
nonXxnono

nonAvnono
nonAwnono
nonAynono
nonAznono
nonAxnono

nonKvnono
nonKwnono
nonKynono
nonKznono
nonKxnono

nonRvnono
nonRwnono

nonRynono
nonRznono
nonRxnono

void>open
(WVYZXAKR)R L(fts)

nonWfnono
nonWtnono
nonWsnono
nonVfnono
nonVtnono

nonVsnono
nonYfnono
nonYtnono
nonYsnono
nonZfnono
nonZtnono

nonZsnono
nonXfnono
nonXtnono
nonXsnono
nonAfnono
nonAtnono

nonAsnono
nonKfnono
nonKtnono
nonKsnono
nonRfnono
nonRtnono

nonRsnono

(CSEFLTZ)R L(vwyzx)

nonCvnono
nonCwnono
nonCynono
nonCznono
nonCxnono

nonSvnono
nonSwnono
nonSynono
nonSznono
nonSxnono

nonEvnono
nonEwnono
nonEynono
nonEznono
nonExnono

nonFvnono
nonFwnono
nonFynono
nonFznono
nonFxnono

nonLvnono
nonLwnono
nonLynono
nonLznono
nonLxnono

nonTvnono
nonTwnono
nonTynono
nonTznono
nonTxnono

nonZvnono
nonZwnono
nonZynono
nonZznono
nonZxnono

open>open
(CSEFLTZ)R L(fts)

nonCfnono
nonCtnono
nonCsnono
nonSfnono
nonStnono
nonSsnono

nonEfnono
nonEtnono
nonEsnono
nonFfnono
nonFtnono
nonF'snono

nonLfnono
nonLtnono
nonLsnono
nonTfnono
nonTtnono

nonTsnono	nonbÐnono	noniVnono	
nonZfnono	nonðÐnono	nonjVnono	(kvwyzx)R
nonZtnono		nonuVnono	L(HMNUIKLPRBEFÐ)
nonZsnono	straight>small round	nonaVnono	
	(udlijgqhmna)R L(S)		
Lowercase >		nonnYnono	nonkHnono
UPPERCASE	nonnSnono	nonqYnono	nonkUnono
	nonqSnono	noniYnono	nonkÐnono
	noniSnono	nonjYnono	nonvHnono
straight>full round	nonjSnono	nonuYnono	nonvUnono
(udlijgqhmna)R L	nonuSnono	nonaYnono	nonvÐnono
(CGOQ)	nonaSnono		nonwHnono
nonnOnono		nonnZnono	nonwUnono
nonqOnono	(s)R	nonqZnono	nonwÐnono
noniOnono	L(HMNUIKLPRBEF')	noniZnono	nonyHnono
nonjOnono		nonjZnono	nonyUnono
nonuOnono	nonsHnono	nonuZnono	nonyÐnono
nonaOnono	nonsUnono	nonaZnono	nonzHnono
			nonzUnono
(bpo)R	straight>void	nonnXnono	nonzÐnono
L(HMNUIKLPRBEFÐ)	(udlijgqhmna)R	nonqXnono	nonxHnono
	L(WVYZXA)	noniXnono	nonxUnono
nonoHnono		nonjXnono	nonxÐnono
nonpHnono	nonnWnono	nonuXnono	
nonbHnono	nonqWnono	nonaXnono	straight>open
nonðHnono	noniWnono		(udlijgqhmna)R L(TJS)
nonoUnono	nonjWnono	nonnAnono	
nonpUnono	nonuWnono	nonqAnono	nonnTnono
nonbUnono	nonaWnono	noniAnono	nonqTnono
nonðUnono		nonjAnono	noniTnono
nonoÐnono	nonnVnono	nonuAnono	nonjTnono
nonpÐnono	nonqVnono	nonaAnono	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
(bpoð)R L(WVYZXA)
(kvwyzx)R L(CGOQ)

nonoWnono
nonpWnono
nonbWnono
nonðWnono
nonoVnono
nonpVnono
nonbVnono
nonðVnono
nonoYnono
nonpYnono
nonbYnono
nonðYnono

nonoZnono
nonpZnono
nonbZnono
nonðZnono
nonoXnono
nonpXnono
nonbXnono
nonðXnono
nonoAnono
nonpAnono
nonbAnono
nonðAnono

full>open
(bpoð)R L(TJS)

nonoTnono
nonpTnono
nonbTnono
nonðTnono

nonoJnono
nonpJnono
nonbJnono
nonðJnono

nonoSnono
nonpSnono
nonbSnono
nonðSnono

(ctfr) R L(CGOQ)

noncOnono
nonfOnono
nontOnono
nonrOnono

small>small
(s)R L(S)

nonsSnono

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)

nonsTsnono
nonsJnono
nonsSsnono

(ctfr) R L(S)

noncSnono
nontSnono
nonfSnono
nonrSnono

void>void
(kvwyzx)R L(WVYZXA)

nonkWnono
nonvWnono
nonwWnono
nonyWnono
nonzWnono
nonxWnono

nonkVnono
nonvVnono
nonwVnono
nonyVnono
nonzVnono
nonxVnono

nonkYnono
nonvYnono
nonwYnono

nonyYnono
nonzYnono
nonxYnono

nonkZnono
nonvZnono
nonwZnono
nonyZnono
nonzZnono
nonxZnono

nonkXnono
nonvXnono
nonwXnono
nonyXnono
nonzXnono
nonxXnono

nonkAnono
nonvAnono
nonwAnono
nonyAnono
nonzAnono
nonxAnono

void>open
(kvwyzx)R L(TJS)

nonkTnono
nonvTnono
nonwTnono
nonyTnono

nonzTnono
nonxTnono

nonkJnono
nonvJnono
nonwJnono
nonyJnono
nonzJnono
nonxJnono

nonkSnono
nonvSnono
nonwSnono
nonySnono
nonzSnono
nonxSnono

(ctfr) R L(WVYZXA)

noncWnono
nontWnono
nonfWnono
nonrWnono

noncVnono
nontVnono
nonfVnono
nonrVnono

noncYnono
nontYnono
nonfYnono

nonrYnono

noncZnono
nontZnono
nonfZnono
nonrZnono

noncXnono
nontXnono
nonfXnono
nonrXnono

noncAnono
nontAnono
nonfAnono
nonrAnono

open>open
(ctfr) R L(TJS)

noncTnono
nontTnono
nonfTnono
nonrTnono

noncJnono
nontJnono
nonfJnono
nonrJnon

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 round
	111911	111211	
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)	000300	116811	
	000900		007900
110411	009200	008900	002900
119411	009300	008800	007800
	009900	003900	002800
000400		003800	
009400	(654)R L (06)	005900	small > open
		005800	(8356) R L(239)
	116011	006900	
(72)R L (06)	116611	006800	118211
	115011		118311
117011	115611		118911
117611	114011	small > void	
112011	114611	(8356) R L(4)	113211
112611			113311
	006000	118411	113911
007000	006600	113411	
007600	005000	115411	115211
002000	005600	116411	115311
002600	004000		115911
	004600	008400	
full > open		003400	116211
(09) R L(239)	small > small	005400	116311
	(8356) R L(98)	006400	116911
110211	118911		008200
110311	118811	(72)R L(98)	008300
110911	113911		008900
119211	113811	117911	
119311	115911	112911	003200
119911	115811	117811	003300
	116911	112811	003900

005200
005300
005900

006200
006300
006900

(654)R L(98)

116911
116811
115911
115811
114911
114811

006900
006800
005900
005800
004900
004800

void > void
(72)R L(4)

117411
112411

007400
002400

void > open
(72)R L(239)

117211
117311
117911
112211
112311
112911

007200
007300
007900
002200
002300
002900

(654)R L(4)

116411
115411
114411

006400
005400
004400

fh, fk, fl, fb, fi, fj, ff, ft

open > open
(654)R L(239)

116211
116311
116911
115211
115311
115911
114211
114311
114911

006200
006300
006900
005200
005300
005900
004200
004300
004900

collisions U>L & L>U

fT fY
Qj Qy Qp Qj F1 tA gT gV
gX

jj, jy, qj, qg, gg, gp, gy,

