

LOWERCASE

straight>straight
(udlijqhmna)R
L(ublijphmnr)

nonnnnono
nonn**u**nono
nonnbnono
nonninono
nonn**j**nono
nonnpnono
nonuunono
non**u**bnono
nonuinono
nonujnono
nonupnono
nonunnono
nonqunono
non**q**bnono
nonqinono
nonqjnono
nonqpnono
nonqnnono
nonjunono
nonjbnono
nonjinono
nonjjnono
nonjpnono
nonjnnono
nonnunono
nonnbnono

nonninono
nonnjnono
nonnpnono
nonnnnono
non**a**unono
non**a**bnono
nonainono
nonajnono
nonapnono
non**a**nnono
noniunono
nonibnono
noniinono
nonijnono
nonipnono
noninnono

straight>full round
(udlijqhmna)R L
(ceodqgđ)
non**u**onono
nonugnono
nonuđnono
non**q**onono
nonqgnono
nonqđnono
non**j**onono
nonjgnono
nonjđnono
nonionono
non**i**gnono

noniđnono
nonnonono
nonngnono
nonn**đ**nono
nononono

(bpo)R L(ublijphmnr)
non**o**unono
nonobnono
nonojonon
nonoionon
nonononon

straight>small round
(udlijqhmna)R L(as)
non**u**anono
nonusnono
non**q**anono
nonqsnono
nonjanono
non**j**snono
non**a**aanono
nonasnono
nonianono
nonisnono
nonlanono
nonlsnono
nonnanono
nonn**s**nono

(s)R L(ublijphmnr)
nonsunono

non**s**bnono
non**s**nnonon
nonsjnonon
non**s**lnnonon

straight>void
(udlijqhmna)R
L(vwyzx)

nonavnono
nonaynono
non**a**znono
non**a**xnono
nonuvnono
nonuynono
non**u**znono
non**u**xnono
nonqvnono
nonqwnono
nonqynono
nonqznono
nonqxnono
nonjvnono
nonjynono
non**j**znono
non**j**xnono
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
non**e**unono
non**e**bnono
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
nonownnono
nonpwonon
nonbwnnono
nongwnnono

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
nonewnnonon
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
HOHHMH OH
HOHHNH OH
HOHHUH OH
HOHHIH OH
HOHHKH OH
HOHHLH OH
HOHHÐH OH

HOHMH OH
HOHMMH OH
HOHMNH OH
HOHMUH OH
HOHMIH OH
HOHMKH OH
HOHMLH OH
HOHMÐH OH

HOHNHH OH
HOHNMH OH
HOHNNH OH

HOHNÜHOH
HOHN^IHOH
HOHNKHOH
HOHNLHOH
HOHNÐHOH

HOHÜHHOH
HOHÜMHOH
HOHÜNHOH
HOH^UHOH
HOHÜIHOH
HOHÜKHOH
HOHÜLHOH
HOHÜÐHOH

HOHIHHOH
HOHIMHOH
HOHINHOH
HOHIUHOH
HOHIIHOH
HOHIKHOH
HOHIL^HHOH
HOHIÐHOH

HOHJHHOH
HOHJMHÖH
HOHJNHOH
HOHJUHOH
HOHJIHOH
HOHJKHOH
HOHJLHOH
HOHJÐHOH

straight>full round
(HMNUIJ)R L (CGOQ)
HOHHÖHOH
HOHNÖHOH
HOHUÖHOH
HOHHCHÖH
HOHNCHÖH
HOHUCHÖH

(DOQ^P)R
L(HMNUIKLP^RBEF^Ð)
HOHOÜHOH
HOHQÜHOH
HOHDÜHOH
HOH^PÜHOH
HOHOHHÖH
HOHQHHÖH
HOHDHHÖH
HOH^PHHÖH
HOH^OÐHOH
HOHQÐHOH
HOHDÐHOH
HOH^PÐHOH

straight>small round
(HMNUIJ)R L(S)
OHÖHSHÖH
OHÖNSHÖH
OHÖ^USHÖH

(RBP)R

L(HMNUIKLP^RBEF^Ð)
HOHRHHÖH
HOHRNHHÖH
HOHRUHHÖH
HOHRÐHHÖH
HOHBHHÖH
HOHBNHHÖH
HOHBUHHÖH
HOHBÐHHÖH
HOHPHHÖH
HOHPNHHÖH
HOHPÜHHÖH
HOH^PÐHOH

straight>void
(HMNUIJ)R L(WVYZXA)
HOHHVHHÖH
HOHNVHHÖH
HOHUVHHÖH
HOHHWHHÖH
HOHNWHHÖH
HOHUWHHÖH
HOHHYHHÖH
HOHNYHHÖH
HOHUYHHÖH
HOHHZHHÖH
HOHNZHHÖH
HOHUZHHÖH
HOHHXHHÖH
HOHNXHHÖH
HOHUXHHÖH

HOHHAHHÖH
HOHNAHHÖH
HOHUAHHÖH

(WVYZXAKR)R
L(HMNUIKLP^RBEF^Ð)
HOHWUHHÖH
HOHWVHHÖH
HOHVUHHÖH
HOHVHHHÖH
HOHYUHHÖH
HOHYHHHHÖH
HOHZUHHÖH
HOHZHHHHÖH
HOHXUHHÖH
HOHXHHHHÖH
HOHAUHHÖH
HOHAHHHHÖH
HOHKUHHÖH
HOHKHHHHÖH
HOHRUHHÖH
HOHRHHHHÖH

straight>open
(HMNUIJ)R L(TJS)
OHÖHTHÖH
OHÖNTHÖH
OHÖUTHÖH
OHÖHJHÖH
OHÖN^JHÖH
OHÖ^UJHÖH

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^AHOH

(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
HOHDJHOH
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}
HOHRS^{HOH}
HOHRS^{HOH}
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^{SHOH}
HOHFS^{SHOH}
HOHLS^{HOH}
HOHTS^{SHOH}
HOHZS^{SHOH}

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
HOHVVOH HVVOH
HOHVYHOH HVYVH
HOHVZHOH HVZVH
HOHVXHOH HVXVH
HOHVAHOH HVAVH

HOHYWHOH HYWYH
HOHYVHOH HYVYH
HOHYWHO 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

HOHEWHO H
HOHEYHOH
HOHEVHOH
HOHEZHOH
HOHEXHOH
HOHEAHOH

HOHFWHO H
HOHFWHOH
HOHFVHOH
HOHFXHOH
HOHFAHOH

HOHLWHO H
HOHLYHOH
HOHLVHOH
HOHLZHOH
HOHLXHOH
HOHLAHOH

HOHTWHO 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
HOHSSH OH
HOHSZHOH
HOHETHOH
HOHEJHOH
HOHESH OH
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	nonHynono	nonZbnono	nonHfnono
nonRnnono	nonNynono	nonZjnono	nonNfnono
nonRpnono	nonUynono	nonZnnono	nonUfnono
	nonHznono	nonZpnono	
nonBunono	nonNznono		nonHtnono
nonBbnono	nonUznono	nonXunono	nonNtnono
nonBjnono	nonHxnono	nonXbnono	nonUtnono
nonBnnono	nonNxnono	nonXjnono	
nonBpnono	nonUxnono	nonXnnono	nonHsnono
		nonXpnono	nonNsnono
nonPunono	(WVYZXAKR)R		nonUsnono
nonPbnono	L(ublijphmnr)	nonAunono	
nonPjnono		nonAbnono	(CSEFLTZ)R
nonPnnono	nonWunono	nonAjnono	L(ublijphmnr)
nonPpnono	nonWbnono	nonAnnono	
	nonWjnono	nonAprono	nonCunono
nonGunono	nonWnnono		nonCbnono
nonGbnono	nonWpnono	nonKunono	nonCjnono
nonGjnono		nonKbnono	nonCnnono
nonGnnono	nonVunono	nonKjnono	nonCpnono
nonGpnono	nonVbnono	nonKnnono	
	nonVjnono	nonKpnono	nonSunono
straight>void	nonVnnono		nonSbnono
(HMNUIJ)R L(vwyzx)	nonVpnono	nonRunono	nonSjnono
		nonRbnono	nonSnnono
nonHvnono	nonYunono	nonRjnono	nonSppnono
nonNvnono	nonYbnono	nonRnnono	
nonUvnono	nonYjnono	nonRpnono	nonEunono
nonHwnono	nonYnnono		nonEbnono
nonNwnono	nonYpnono	straight>open	nonEjnono
nonUwnono		(HMNUIJ)R L(fts)	nonEnnono
	nonZunono		nonEpnono

	(DOQ)R L (ceodqgđ)		
nonFunono		nonR ^o nonono	nonOwnono
nonF ^b nonono	nonD ^o nonono	nonR ^d nonono	nonOynono
nonF ^j nonono	nonD ^d nonono	nonR ^g nonono	nonOznono
nonF ⁿ nonono	nonD ^g nonono	nonR ^đ nonono	nonOxnonono
nonF ^p nonono	nonD ^đ nonono		
	nonF ^o nonono	nonBonono	nonQvnonono
nonLunono	nonF ^d nonono	nonB ^d nonono	nonQwnono
nonL ^b nonono	nonF ^g nonono	nonB ^g nonono	nonQynono
nonL ^j nonono	nonF ^đ nonono	nonB ^đ nonono	nonQznonono
nonL ⁿ nonono	nonOonono		nonQxnonono
nonL ^p nonono	nonO ^d nonono	nonPonono	(WVYZXAKR)R L
	nonO ^g nonono	nonP ^d nonono	(ceodqgđ)
nonT ^o nonono	nonO ^đ nonono	nonP ^g nonono	
nonT ^b nonono	nonQ ^o nonono	nonP ^đ nonono	nonWonono
nonT ^j nonono	nonQ ^d nonono		nonWdnonono
nonT ⁿ nonono	nonQ ^g nonono	full > void	nonWgnono
nonT ^p nonono	nonQ ^đ nonono	(DOQ)R L(vwyzx)	nonWđnonono
nonZunono	full > small	nonDvnonono	nonVonono
nonZ ^b nonono	(DOQ)R L(as)	nonDwnono	nonVdnonono
nonZ ^j nonono		nonDynono	nonV ^g nonono
nonZ ⁿ nonono	nonDanono	nonD ^z nonono	nonVđnonono
nonZ ^p nonono	nonDsnonono	nonDxnonono	
	nonF ^a nonono		nonY ^o nonono
nonZhnonono	nonF ^s nonono	nonF ^v nonono	nonYdnonono
nonZh ⁿ nonono	nonOanono	nonF ^w nonono	nonYgnono
nonZh ⁿ nonono	nonOsnono	nonF ^y nonono	nonYđnonono
nonZh ⁿ nonono	nonQ ^a nonono	nonF ^z nonono	
nonZh ⁿ nonono	nonQsnono	nonF ^x nonono	nonZ ^o nonono
			nonZdnonono
full round >full round	(RBP)R L (ceodqg)	nonOvnonono	nonZgnono

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

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
nonFsnono
nonLfnono
nonLtnono
nonLsnono
nonTfnono

nonTtnono
nonTsnono
nonZfnono
nonZtnono
nonZsnono

Lowercase >
UPPERCASE

straight>full round
(udlijqhmna)R L
(CGOQ)

nonnnOnono
nonqOnono
noniOnono
nonjOnono
nonuOnono
nonaOnono

(bpo)R
L(HMNUIKLPRBEFÐ)

nonoHnono
nonpHnono
nonbHnono
nonðHnono
nonoUnono
nonpUnono
nonbUnono
nonðUnono
nonoÐnono

nonpÐnono
nonbÐnono
nonðÐnono

straight>small round
(udlijqhmna)R L(S)

nonnnSnono
nonqSnono
noniSnono
nonjSnono
nonuSnono
nonaSnono

(s)R
L(HMNUIKLPRBEF')

nonsHnono
nonsUnono

straight>void
(udlijqhmna)R
L(WVYZXA)

nonnnWnono
nonqWnono
noniWnono
nonjWnono
nonuWnono
nonaWnono

nonnnVnono

nonqVnono
noniVnono
nonjVnono
nonuVnono
nonaVnono

nonnnYnono
nonqYnono
noniYnono
nonjYnono
nonuYnono
nonaYnono

nonnnZnono
nonqZnono
noniZnono
nonjZnono
nonuZnono
nonaZnono

nonnnXnono
nonqXnono
noniXnono
nonjXnono
nonuXnono
nonaXnono

nonnnAnono
nonqAnono
noniAnono
nonjAnono
nonuAnono

nonaAnono

(kvwyxz)R
L(HMNUIKLPRBEFÐ)

nonkHnono
nonkUnono
nonkÐnono
nonvHnono
nonvUnono
nonvÐnono
nonwHnono
nonwUnono

nonwÐnono
nonyHnono
nonyUnono
nonyÐnono
nonzHnono
nonzUnono
nonzÐnono
nonxHnono
nonxUnono
nonxÐnono

straight>open
(udlijqhmna)R L(TJS)

nonnnTnono
nonqTnono
noniTnono
nonjTnono
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)

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)	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		

