

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  
nonojnono  
nonoionono  
nonononono

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  
nonsnnono  
nonsjnnono  
nonslnnono

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  
non**rb**nono

non**k**unono  
non**k**lnono  
non**k**jnono  
nonkpnono  
non**k**bnono

nonvunono  
non**v**lnono  
non**v**jnono  
nonvpnono  
non**v**bnono

non**z**unono  
non**z**lnono  
nonzjnono  
nonzpnono  
non**z**bnono

nonxunono  
non**x**lnono

nonxjnono  
nonxpnono  
nonxbnono  
  
straight>open  
(udlijgqhmna)R L(afts)  
nonufnono  
nonuanono  
non**u**tnono  
nonusnono  
nonqfnono  
nonqanono  
non**q**tnono  
nonqsnono  
nonjfnono  
nonjanono  
nonjtnono  
non**j**snono  
nonnfnon  
non**n**anon  
nonntnon  
non**n**snon

(ctfre) R L(ublijphmnr)

noncunono  
non**c**bnono  
noncnonon  
non**c**jnonon  
nonclonon  
noncpnonon  
non**t**unono

non**t**bnono  
nontnonon  
nontjnonon  
non**t**lonon  
nontpnonon  
non**f**unono  
nonfbnono  
non**f**nnonon  
nonfjnonon  
non**f**lonon  
nonfpnonon  
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  
non**o**enono  
non**o**gnono  
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**vnono  
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  
HOHHMH OH  
HOHHNH OH  
HOHHUH OH  
HOHHIH OH  
HOHHKH OH  
HOHHLH OH  
HOHHÐH OH  
  
HOHMH OH  
HOHMMH OH  
HOHMNH OH  
HOHMH OH  
HOHMIH OH  
HOHMKH OH  
HOHMLH OH  
HOHMÐH OH  
  
HOHNHH OH  
HOHNMH OH  
HOHNNH OH

HOHN<sup>U</sup>HOH  
HOH<sup>N</sup>IHOH  
HOHNKHOH  
HOHNLHOH  
HOHN<sup>Ð</sup>HOH

HOHUHHOH  
HOHUMHOH  
HOHUNHOH  
HOH<sup>U</sup>HOH  
HOHUIHOH  
HOHUKHOH  
HOHULHOH  
HOHU<sup>Ð</sup>HOH

HOHIHHOH  
HOHIMHOH  
HOHINHOH  
HOHIUHOH  
HOHIIHOH  
HOHIKHOH  
HOHIL<sup>HOH</sup>  
HOHI<sup>Ð</sup>HOH

HOHJHHOH  
HOHJMH<sup>HOH</sup>  
HOHJNHOH  
HOHJUHOH  
HOHJIHOH  
HOHJKHOH  
HOHJLHOH  
HOHJ<sup>Ð</sup>HOH

straight>full round  
(HMNUIJ)R L (CGOQ)  
HOHHOHOH  
HOHN<sup>O</sup>HOH  
HOHU<sup>O</sup>HOH  
HOHHCHOH  
HOHNCHOH  
HOHUCHOH

(DOQ<sup>P</sup>)R  
L(HMNUIKLP<sup>R</sup>BEF<sup>Ð</sup>)  
HOHO<sup>U</sup>HOH  
HOHQ<sup>U</sup>HOH  
HOHD<sup>U</sup>HOH  
HOH<sup>P</sup>UHOH  
HOHOHHOH  
HOHQ<sup>H</sup>HOH  
HOHD<sup>H</sup>HOH  
HOH<sup>P</sup>H<sup>HOH</sup>  
HOH<sup>O</sup><sup>Ð</sup>HOH  
HOHQ<sup>Ð</sup>HOH  
HOHD<sup>Ð</sup>HOH  
HOH<sup>P</sup><sup>Ð</sup>HOH

straight>small round  
(HMNUIJ)R L(S)  
OHOHSHOH  
OHONSHOH  
OHOU<sup>S</sup>HOH  
  
(RBP)R

L(HMNUIKLP<sup>R</sup>BEF<sup>Ð</sup>)  
HOHRHHOH  
HOHRNHOH  
HOHRUHOH  
HOHR<sup>Ð</sup>HOH  
HOHBHHOH  
HOHBNHOH  
HOHBUHOH  
HOHB<sup>Ð</sup>HOH  
HOHPHHOH  
HOHPNHOH  
HOHPUHOH  
HOH<sup>P</sup><sup>Ð</sup>HOH

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

HOHHAHOH  
HOHNAHOH  
HOHUAHOH  
  
(WVYZXAKR)R  
L(HMNUIKLP<sup>R</sup>BEF<sup>'</sup>)  
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<sup>J</sup>HOH  
OHOU<sup>J</sup>HOH

OHOHSHOH  
OHONSHOH  
OHOUSHOH  
  
(CGSEFLTZ)R  
L(HMNUIKLPRBEFÐ)  
HOHC<sup>U</sup>HOH  
HOHCHHOH  
HOHCÐHOH  
HOHGUHOH  
HOHGHHOH  
HOHGÐHOH  
HOHSUHOH  
HOHSHHOH  
HOHSÐHOH  
HOHEUHOH  
HOHEHHOH  
HOHEÐHOH  
HOHFUHOH  
HOHFHHOH  
HOHFÐHOH  
HOHLUHOH  
HOHLHHOH  
HOHLÐHOH  
HOHT<sup>TU</sup>HOH  
HOHTHHOH  
HOHTÐHOH  
HOHZUHOH  
HOHZHHOH  
HOHZÐHOH

full round >full round  
(DOQ<sup>P</sup>)R L(CGOQ)  
HOH<sup>P</sup>OHOH  
HOHD<sup>O</sup>HOH  
HOHDCHOH  
HOHDQHOH  
HOHQOHOH  
HOHQCHOH  
HOHQQHOH  
  
full > small  
(DOQ<sup>P</sup>)R L(S)  
  
HOH<sup>P</sup>SHOH  
HOHDSHOH  
HOHOSHOH  
HOHQSHOH  
  
(RBP)R L(CGOQ)  
HOH<sup>R</sup>OHOH  
HOH<sup>B</sup>OHOH  
HOHP<sup>O</sup>HOH  
  
full > void  
(DOQ<sup>P</sup>)R L(WVYZXA)  
  
HOHD<sup>W</sup>HOH  
HOH<sup>P</sup>WHOH  
HOHOWHOH  
HOHQWHOH  
HOH<sup>P</sup>VHOH  
HOHD<sup>V</sup>HOH

HOHOVHOH  
HOHQVHOH  
HOHDYHOH  
HOH<sup>P</sup>YHOH  
HOHOYHOH  
HOHQYHOH  
HOH<sup>P</sup>ZHOH  
HOHDZHOH  
HOHOZHOH  
HOHQZHOH  
HOH<sup>P</sup>XHOH  
HOHDXHOH  
HOHOXHOH  
HOHQXHOH  
HOH<sup>P</sup>AHOH  
HOHDAHOH  
HOHOAHOH  
HOHQ<sup>A</sup>HOH  
  
(WVYZXAKR)R L(CGOQ)  
HOHWOHOH  
HOHVOHOH  
HOHYOHOH  
HOHZOHOH  
HOH<sup>X</sup>OHOH  
HOHAOHOH  
HOHKOHOH  
HOHROHOH  
  
full>open  
(DOQ)R L(TJSZ)

HOHDTHOH  
HOH<sup>P</sup>THOH  
HOHOTHOH  
HOHQTHOH  
HOHDTJOH  
HOH<sup>P</sup>JHOH  
HOHOJHOH  
HOHQJHOH  
HOHDSHOH  
HOH<sup>P</sup>SHOH  
HOHOSHOH  
HOHQSHOH  
HOHDZHOH  
HOH<sup>P</sup>ZHOH  
HOHOZHOH  
HOHQZHOH  
  
(CSEFLTZG)R L(CGOQ)  
HOHCOHOH  
HOHSOHOH  
HOHEOHOH  
HOHF<sup>O</sup>HOH  
HOHLOHOH  
HOHTOHOH  
HOHZOHOH  
HOHGOHOH  
  
small>small  
(RBP)R L(S)  
HOHRSHOH  
HOHB<sup>S</sup>SHOH

HOHPSHOH

small>void  
(RBP)R L(WVYZXA)

HOHRWHOH  
HOHRVHOH  
HOHRYHOH  
HOHRZHOH  
HOHRXHOH  
HOHRAHOH  
HOHRÆHOH

HOHBWHOH  
HOHBVHOH  
HOHBYHOH  
HOHBZHOH  
HOHBXHOH  
HOHBAHOH  
HOHBÆHOH

HOHPWHOH  
HOHPVHOH  
HOHPYHOH  
HOHPZHOH  
HOHPXHOH  
HOHPAHOH  
HOHPÆHOH

(WVYZXAKR)R L(S)

HOHWSHOH  
HOHVSHOH  
HOHYSHOH  
HOHZSHOH  
HOHXSHOH  
HOHASHOH  
HOHKSHOH  
HOHRSHOH

small>open  
(RBP)R L(TJSZ)

HOHRTHOH  
HOHRTHOH  
HOHRTHOH  
HOHRJHOH  
HOHRJHOH  
HOHRJHOH  
HOHRSHOH  
HOHRSHOH  
HOHRSHOH  
HOHRZHOH  
HOHRZHOH  
HOHRZHOH

HOHBTHOH  
HOHBTHOH  
HOHBTHOH  
HOHBTHOH

HOHBJHOH  
HOHBJHOH  
HOHBSHOH  
HOHBSHOH  
HOHBSHOH  
HOHBZHOH  
HOHBZHOH  
HOHBZHOH

HOHPTHOH  
HOHPTHOH  
HOHPTHOH  
HOHPJHOH  
HOHPJHOH  
HOHPJHOH  
HOHPSHOH  
HOHPSHOH  
HOHPSHOH  
HOHPZHOH  
HOHPZHOH  
HOHPZHOH

(CGSEFLTZ)R L(TJSZ)

HOHCSHOH  
HOHGSHOH  
HOHSSHOH  
HOHESHOH  
HOHFSHOH  
HOHLSHOH  
HOHTSHOH  
HOHZSHOH

HOHCTHOH  
HOHGTHOH  
HOHSTHOH  
HOHETHOH  
HOHFTHOH  
HOHLTHOH  
HOHTTHOH  
HOHZTHOH

HOHCJHOH  
HOHGJHOH  
HOHSJHOH  
HOHEJHOH  
HOHFJHOH  
HOHLJHOH  
HOHTJHOH  
HOHZJHOH

HOHCZHOH  
HOHGZHOH  
HOHSZHOH  
HOHEZHOH  
HOHFZHOH  
HOHLZHOH  
HOHTZHOH  
HOHZZHOH

|  |  |  |  |
|--|--|--|--|
| void>void<br>(WVYZXA KR)R<br>L(WVYZXA)   | HOHZXHOH HZXZH<br>HOHZAHOH HZAZH<br><br>HOHXWHOH HXWXH<br>HOHXVHOH HXVXH<br>HOHXYHOH HXYXH<br>HOHXZHOH HXZXH<br>HOHXXHOH HXXXH<br>HOHXAHOH HXAXH | HOHZTHOH<br>HOHZJHOH<br>HOHZSHOH<br><br>HOHXTHOH<br>HOHXJHOH<br>HOHXSHOH<br><br>HOHATHOH<br>HOHAJHOH<br>HOHASHOH | HOHSVHOH HSVSH<br>HOHSZHOH HSZSH<br>HOHSXHOH HSXSH<br>HOHSAHOH HSASH                                     |
| HOHWWHOH HWWWH<br>HOHWVHOH HWVWH<br>HOHWYHOH HWYWH<br>HOHWZHOH HWZWH<br>HOHWXHOH HWXWH<br>HOHWAHOH HWAWH<br>HOHWÆHOH HWÆWH | HOHAWHOH HAWAH<br>HOHAVHOH HAVAH<br>HOHAYHOH HAYAH<br>HOHAZHOH HAZAH<br>HOHAXHOH HAXAH<br>HOHAAHOH HAAAH   | HOHKTHOH HKTXH<br>HOHKJHOH HKJXH<br>HOHKSHOH HKSXH   | HOHEWHOH<br>HOHEYHOH<br>HOHEVHOH<br>HOHEZHOH<br>HOHEXHOH<br>HOHEAHOH                                     |
| HOHVWHOH HVVWH<br>HOHVVHOH HVVVH<br>HOHVVHOH HVVWH<br>HOHVZHOH HVZVH<br>HOHVXHOH HVXVH<br>HOHVAHOH HVAVH                   | void>open<br>(WVYZXAKR)R L(TJS)  | HOHRTHOH HRTXH<br>HOHRJHOH HRJXH<br>HOHRSHOH HRSXH   | HOHFWHOH<br>HOHFWHOH<br>HOHFVHOH<br>HOHFZHOH<br>HOHFXHOH<br>HOHFAHOH                                     |
| HOHYWHOH HYWYH<br>HOHYVHOH HYVYH<br>HOHYWHOH HYYYH<br>HOHYZHOH HYZYH<br>HOHYXHOH HYXYH<br>HOHYAHOH HYAYH                   | HOHWTHOH<br>HOHWJHOH<br>HOHWSHOH<br><br>HOHVTHOH<br>HOHVJHOH<br>HOHVSHOH   | (CSEFLTZ)R<br>L(WVYZXA)<br><br>HOHCWHOH<br>HOHCYHOH<br>HOHCVHOH<br>HOHCZHOH<br>HOHCXHOH<br>HOHCAHOH              | HOHLWHOH<br>HOHLYHOH<br>HOHLVHOH<br>HOHLZHOH<br>HOHLXHOH<br>HOHLAHOH                                     |
| HOHZWHOH HZWZH<br>HOHZVHOH HZVZH<br>HOHZYHOH HZYZH<br>HOHZZHOH HZZZH   | HOHYTHOH<br>HOHYJHOH<br>HOHYSHOH   | HOHSWHOH HSWSH<br>HOHSYHOH HSYSH   | HOHTWHOH HTWTH<br>HOHTYHOH HTYTH<br>HOHTVHOH HTVTH<br>HOHTZHOH HTZTH<br>HOHTXHOH HTXTH<br>HOHTAHOH HTATH |



|                   |                   |                       |                      |
|-------------------|-------------------|-----------------------|----------------------|
| HOHZWHOH HZWZH    | HOHTTHOH          | nonHjnono             | nonFpnono            |
| HOHZYHOH HZYZH    | HOHTJHOH          | nonNjnono             | nonDunono            |
| HOHZVHOH HZVZH    | HOHTSHOH          | nonUjnono             | nonDbnono            |
| HOHZZHOH HZZZH    | HOHTZHOH          | nonHpnono             | nonDjnono            |
| HOHZXHOH HZXZH    | HOHZTHOH          | nonNpnono             | nonDnnono            |
| HOHZAHOH HZAZH    | HOHZJHOH          | nonUpnono             | nonDpnono            |
|                   | HOHZSHOH          | nonHhnono             | nonOunono            |
|                   | HOHZZHOH          | nonNhnono             | nonObnono            |
|                   |                   | nonUhnono             | nonOjnono            |
| open>open         | UPPERCASE >       |                       | nonOnnono            |
| (CSEFLTZ)R L(TJZ) | Lowercase         | straight>full round   | nonOpnono            |
|                   |                   | (HMINUJ)R L (ceodqgđ) | nonQunono            |
| HOHCTHOH          | straight>straight |                       | nonQbnono            |
| HOHCJHOH          |                   | nonHonono             | nonQjnono            |
| HOHCSHOH          | (HMINUJ)R         | nonNonono             | nonQnnono            |
| HOHCZHOH          | L(ublijphmnr)     | nonUonono             | nonQpnono            |
| HOHSTHOH          |                   | nonHdnono             |                      |
| HOHSJHOH          | nonHnnono         | nonNdnono             |                      |
| HOHSSH OH         | nonNnnono         | nonUdnono             | straight>small round |
| HOHSZHOH          | nonUnnono         | nonHgnono             | (HMNUIJ)R L(as)      |
| HOHETHOH          | nonHunono         | nonNgnono             | nonHanono            |
| HOHEJHOH          | nonNunono         | nonUgnono             | nonNanono            |
| HOHESH OH         | nonUunono         | nonHđnono             | nonUanono            |
| HOHEZHOH          | nonHbnono         | nonNđnono             | nonHsnono            |
| HOHFTHOH          | nonNbnono         | nonUđnono             | nonNsnono            |
| HOHFJHOH          | nonUbnono         |                       | nonUsnono            |
| HOHFSHOH          | nonHjnono         | (DOQ)R L(ublijphmnr)  |                      |
| HOHFZHOH          | nonNjnono         |                       | (RBPG)R              |
| HOHLTHOH          | nonUjnono         | nonFunono             | L(ublijphmnr)        |
| HOHLJHOH          | nonHinono         | nonFbnono             |                      |
| HOHLSHOH          | nonNinono         | nonFjnono             | nonRunono            |
| HOHLZHOH          | nonUinono         | nonFnnono             | nonRbnono            |

|                    |               |                  |               |
|--------------------|---------------|------------------|---------------|
| 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     | nonAprnono       | 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        | nonSpnono     |
| 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 (ceodqgǵ) |                 | nonOwnono     |
| nonFunono              |                    | nonRonono       | nonOynono     |
| nonFbnono              | nonDonono          | nonRdnono       | nonOznono     |
| nonFjnono              | nonDdnono          | nonRgnono       | nonOxnono     |
| nonFnnono              | nonDgnono          | nonRǵnono       |               |
| nonFpnono              | nonDǵnono          |                 | nonQvnono     |
|                        | nonFonono          | nonBonono       | nonQwnono     |
| nonLunono              | nonFdnono          | nonBdnono       | nonQynono     |
| nonLbnono              | nonFgnono          | nonBgnono       | nonQznono     |
| nonLjnono              | nonFǵnono          | nonBǵnono       | nonQxnono     |
| nonLnnono              | nonOonono          |                 |               |
| nonLpnono              | nonOdnono          | nonPonono       | (WVYZXAKR)R L |
|                        | nonOgnono          | nonPdnono       | (ceodqgǵ)     |
| nonTunono              | nonOǵnono          | nonPgnono       |               |
| nonTbnono              | nonQonono          | nonPǵnono       | nonWonono     |
| nonTjnono              | nonQdnono          |                 | nonWdnono     |
| nonTnnono              | nonQgnono          | full > void     | nonWgnono     |
| nonTpnono              | nonQǵnono          | (DOQ)R L(vwyzx) | nonWǵnono     |
|                        |                    |                 |               |
| nonZunono              | full > small       | nonDvnono       | nonVonono     |
| nonZbnono              | (DOQ)R L(as)       | nonDwnono       | nonVdnono     |
| nonZjnono              |                    | nonDynono       | nonVgnono     |
| nonZnnono              | nonDanono          | nonDznono       | nonVǵnono     |
| nonZpnono              | nonDsnono          | nonDxnono       |               |
|                        | nonFanono          |                 | nonYonono     |
| nonZhnono              | nonFsnono          | nonFvnono       | nonYdnono     |
| nonZhnono              | nonOanono          | nonFwnono       | nonYgnono     |
| nonZhnono              | nonOsnono          | nonFynono       | nonYǵnono     |
| nonZhnono              | nonQanono          | nonFznono       |               |
| nonZhnono              | nonQsnono          | nonFxnono       | nonZonono     |
|                        |                    |                 | nonZdnono     |
| full round >full round | (RBP)R L (ceodqg)  | nonOvnono       | nonZgnono     |

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

|           |                    |                     |                   |
|-----------|--------------------|---------------------|-------------------|
| nonYvnono | nonRwnono          | (CSEFLTZ)R L(vwyzx) | nonTvnono         |
| nonYwnono | nonRynono          |                     | nonTwnono         |
| nonYynono | nonRznono          | nonCvnono           | nonTynono         |
| nonYznono | nonRxnono          | nonCwnono           | nonTznono         |
| nonYxnono |                    | nonCynono           | nonTxnono         |
|           | void>open          | nonCznono           |                   |
|           | (WVYZXAKR)R L(fts) | 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<br>(udlijgqhmna)R L(S)  | nonaVnono |  |
|   |  | nonnYnono | nonkHnono                              |
| Lowercase ><br>UPPERCASE                          | nonnSnono                                    | nonqYnono | nonkUnono                              |
|   | nonqSnono                                    | noniYnono | nonkĐnono                              |
|   | noniSnono                                    | nonjYnono | nonvHnono                              |
| straight>full round<br>(udlijgqhmna)R L<br>(CGOQ) | nonjSnono                                    | nonuYnono | nonvUnono                              |
| nonnOnono   | nonuSnono                                    | nonaYnono | nonvĐnono                              |
| nonqOnono   | nonaSnono                                    |           | nonwHnono                              |
| noniOnono   | (s)R   | nonnZnono | nonwUnono                              |
| nonjOnono   | L(HMNUIKLPRBEF')                             | nonqZnono | nonwĐnono                              |
| nonuOnono   |  | noniZnono | nonyHnono                              |
| nonaOnono   | nonsHnono                                    | nonjZnono | nonyUnono                              |
|   | nonsUnono                                    | nonuZnono | nonyĐnono                              |
| (bpo)R  |  | nonaZnono | nonzHnono                              |
| L(HMNUIKLPRBEFĐ)                                  | straight>void<br>(udlijgqhmna)R<br>L(WVYZXA) | nonnXnono | nonzUnono                              |
| nonoHnono   |  | nonqXnono | nonzĐnono                              |
| nonpHnono   | nonnWnono                                    | noniXnono | nonxHnono                              |
| nonbHnono   | nonqWnono                                    | nonjXnono | nonxUnono                              |
| nonđHnono   | noniWnono                                    | nonuXnono | nonxĐnono                              |
| nonoUnono   | nonjWnono                                    | nonaXnono |  |
| nonpUnono   | nonuWnono                                    |           | straight>open<br>(udlijgqhmna)R L(TJS) |
| nonbUnono   | nonaWnono                                    | nonnĀnono | nonnTnono                              |
| nonđUnono   |  | nonqĀnono | nonqTnono                              |
| nonoĐnono   | nonnVnono                                    | noniĀnono | noniTnono                              |
|   |  | nonjĀnono | nonjTnono                              |
|   |  | nonuĀnono | nonuTnono                              |

|                        |                   |                |                  |
|------------------------|-------------------|----------------|------------------|
| nonaTnono              |                   | nonďYnono      | (ctfr) R L(CGOQ) |
|                        | nonoOonono        | nonoZnono      |                  |
| nonnJnono              | nonpOonono        | nonpZnono      | noncOonono       |
| nonqJnono              | nonbOonono        | nonbZnono      | nonfOonono       |
| noniJnono              |                   | nonďZnono      | nontOonono       |
| nonjJnono              | full > small      | nonoXnono      | nonrOonono       |
| nonuJnono              | (bpo)R L(S)       | nonpXnono      |                  |
| nonaJnono              |                   | nonbXnono      | small>small      |
|                        | nonoSnono         | nonďXnono      | (s)R L(S)        |
| nonnSnono              | nonpSnono         | nonoAnono      |                  |
| nonqSnono              | nonbSnono         | nonpAnono      | nonsSnono        |
| noniSnono              |                   | nonbAnono      |                  |
| nonjSnono              | (as) R L(CGOQ)    | nonďAnono      | small>void       |
| nonuSnono              |                   |                | (s)R L(WVYZXA)   |
| nonaSnono              | nonaOonono        | full>open      |                  |
|                        | nonsOonono        | (bpoď)R L(TJS) | nonsWnono        |
| (ctfr) R               |                   |                | nonsVnono        |
| L(HMNUIKLPRBEF)        | full > void       | nonoTnono      | nonsYnono        |
|                        | (bpoď)R L(WVYZXA) | nonpTnono      | nonsZnono        |
| noncHnono              | (kvwyzx)R L(CGOQ) | nonbTnono      | nonsXnono        |
| noncUnono              |                   | nonďTnono      | nonsAnono        |
| nonfHnono              | nonoWnono         |                |                  |
| nonfUnono              | nonpWnono         | nonoJnono      | (kvwyzx)R L(S)   |
| nontHnono              | nonbWnono         | nonpJnono      |                  |
| nontUnono              | nonďWnono         | nonbJnono      | nonkSnono        |
| nonrHnono              | nonoVnono         | nonďJnono      | nonvSnono        |
| nonrUnono              | nonpVnono         |                | nonwSnono        |
|                        | nonbVnono         | nonoSnono      | nonySnono        |
|                        | nonďVnono         | nonpSnono      | nonzSnono        |
|                        | nonoYnono         | nonbSnono      | nonxSnono        |
| full round >full round | nonpYnono         | nonďSnono      |                  |
| (bpoe)R L(CGOQ)        | nonbYnono         |                | 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<br>(09) R L(4)                               | 000200<br>000300<br>000900<br>009200<br>009300<br>009900 | 116911<br>116811                     | 112811                               |
| 110411<br>119411   |  | 008900<br>008800<br>003900<br>003800 | 007900<br>002900<br>007800<br>002800 |
| 000400<br>009400   | (654)R L (06)  | 005900<br>005800<br>006900<br>006800 | small > open<br>(8356) R L(239)      |
| (72)R L (06)   | 116011<br>116611<br>115011<br>115611<br>114011<br>114611 |                                      | 118211<br>118311<br>118911           |
| 117011<br>117611<br>112011<br>112611                     |  | small > void<br>(8356) R L(4)        | 113211<br>113311<br>113911           |
| 007000<br>007600<br>002000<br>002600                     | 006000<br>006600<br>005000<br>005600<br>004000<br>004600 | 118411<br>113411<br>115411<br>116411 |                                      |
| full > open<br>(09) R L(239)                             | small > small<br>(8356) R L(98)                          | 008400<br>003400<br>005400<br>006400 | 115211<br>115311<br>115911           |
| 110211<br>110311<br>110911<br>119211<br>119311<br>119911 | 118911<br>118811<br>113911<br>113811<br>115911<br>115811 | (72)R L(98)                          | 116211<br>116311<br>116911           |
|  |  |                                      | 008200<br>008300<br>008900           |
|  |  | 117911<br>112911<br>117811           | 003200<br>003300                     |

|              |              |                          |   |
|--------------|--------------|--------------------------|---|
| 003900       | 112411       | 004400                   | jj, jy, qj, qg, gg, gp, gy,<br>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       |                          |   |

