16—Step Quintadecimal Scale Generator and Analyzer Report

Generates 16-elementary scales that span two octaves, with additional properties. Here, the 16th element of the scale is the repeated root note transposed up by two octaves. This 16th step corresponds to the eight step of the prototypical C major scale: C D E F G A B *--> C <--*

We require that each consecutive 3 step intervals have at least one and at most 2 semi-tone steps; all 15 intervals must add up to 24 semi-tone steps. This should somehow evenly distribute the small steps.

Candidate count: 1215

Filtering out candidates that have three consecutive semi-tone steps.

Candidate count: 945

Filtering out all candidates that also contain the octave of the root.

Candidate count: 351

Filtering out all candidates with more than three steps that do not have their octave in the scale.

Candidate count: 31

Filtering out all candidates where two consecutive steps do not have their octave in the scale.

Candidate count: 23

Filtering out all candidates that have a diatonic modal scale as a sub-scale with possible additional steps inserted between them.

Candidate count: 15

Generated scales with the desired properties, up to rotation $% \left(1\right) =\left(1\right) \left(1\right)$

#	ID	Code	Steps Has 8a?	xABCDEF
I	0	BFACA	FhFFhhFFhhFFFFh .++++.++.+++++	2323212
II	1	CACDB	hFFFFhhFFhhFFhF .+++++.++.++	2323212
III	2	ECABA	hFhhFFFFhFhFFFh .+.+++++.++++	3222222
IV	3	BDACA	FhFhhFFFhhFFFFh .+++.++++++	3222222
V	5	CBCAE	hFFFhFhFFFFhhFh .+++++.++++.+	3222222
VI	7	CACFB	hFFFFhhFFFhhFhF .+++++.+++.++	3222222
VII	8	CDACA	hFFhhFFFhhFFFFh .+++.+++++	3303303
VIII	9	CFACA	hFFFhhFFhhFFFFh .++++.+++++	3303303
IX	12	ECACA	hFhhFFFFhhFFFFh .++.++++.++++	4202313

```
I - 1
                           hFFhhFFFFhFhFFh
Intervals:
                 8
                           .++.+++++.++++
                 3–
                           +.+.+....++++.
                 8+3-
                           +++.+.+..++...
                 5
                           +...+.++..++..+
                 8+5
                           +..++..+..++
                 7
                           .++++.++++..+++
                 8+7
                           .+++.++++.+.+.
                           .+++.++.+..+.
                 3
                 8+3
                           +.++.++++..+++
                 maj7
                           +..+.+..+.++..
                 8+mai7
                           ++..++...+.+..
                 6-
                           .+++.+.++++.++
                 8+6-
                           .+++.++++..+
                 6
                           +...+++..++..
                 8+6
                           +.+.+.+...++++.
                 4
                           ++..+..++.++..
                 8+4
                           .+..++..+.++..+
                 b5
                           ++++.++.++.
                 8+b5
                           +++++++++..++.
Root-Notes:
                   C C# D#
                             F F#
                                    G
                                       Α
                                          B C# D#
                                                    E F#
                                                           G
                                                              Α
                                                                 В
                                                                     C
                             *
                                                    *
                                                                     *
  Chord [#roots]
                      K
                          L M#`
                                          0
                                              R
                                                 S
                                                    Т
                                                        U`Vb
                                                              Χ
                                                                 Y`
                                                                     J
                                'N'0b
                                       Ρ
             [7]
                                       Χ
         5
                   Χ
                                Χ
                                          Χ
                                                    Χ
                                                        Χ
                                                                 Χ
                                                                     Χ
       5+8
             [5]
                                Χ
                                       Χ
                                          Χ
                                                        Χ
                                                                 Χ
               81
                                Χ
                                                    Χ
                                                                     Χ
         4
                   Χ
                      Χ
                                          Χ
                                              Χ
                                                        Χ
                                                           Χ
        3m
               41
                   Χ
                                Χ
                                                    Χ
                                                        Χ
                                                                     Χ
        3+
             [ 3]
                                       Χ
                                          Χ
                                                                 Χ
      maj7
             [0]
               31
                                          Χ
                                                                 Χ
      dom7
                                       Х
      min7
             [ 1]
                                Χ
        b7
             [ 6]
                   Χ
                          Χ
                                              Χ
                                                 Χ
                                                        Χ
                                                              Χ
                                                                     Χ
    maj7-5
               3]
                             Χ
                                    Χ
                                                           Χ
                             Χ
                                                           Χ
                                                              Χ
    dom7-5
               9]
                      Χ
                          Χ
                                          Χ
                                                 Χ
                                                                 Χ
    min7-5
             [5]
                          Χ
                                Χ
                                              Χ
                                                 Χ
                                                              Χ
                                Χ
                                                              Χ
       8+5
             [5]
                                          Χ
                                                        Χ
                                                                 Χ
               6]
                       Χ
                                Χ
                                    Χ
                                              Χ
                                                        Χ
       8+4
                                                                 Χ
      8 + 3 m
               21
                                Χ
                                                        Χ
      8+3+
             [ 3]
                                          Χ
                                                              Χ
                                                                 Χ
    8+maj7
             [ 0]
    8+dom7
               3]
                                          Χ
                                                              Χ
                                                                 Χ
    8+min7
               11
                                                        Χ
```

 $X \quad X \quad X$

Χ

Χ

X X

Χ

Χ

X X

8+b7

8 + maj7 - 5

8+dom7-5

8+min7-5

[5]

2]

8]

[5]

X X

Χ

Χ

hhffffhfhffhhff

I - 2

```
II - 0
                           hFFFFhhFFhhFFhF
Intervals:
                 8
                           .++++++.++.+++
                 3-
                           + . . . + . + . + . + . + + +
                 8+3-
                           ++..+++...+.+
                 5
                           +.+..++..+.+.
                 8+5
                           +.++..+..++
                 7
                           ++++++.+.+.+.
                 8+7
                           +.+++.++.++.
                 3
                           .+++++.++.+.
                 8+3
                           ++++.+.+++.+++.
                 maj7
                           +..+..++.+..+
                 8+mai7
                           .+...+
                 6-
                           .+++++.++.+++.
                 8+6-
                           .+.+++.++.+++.
                 6
                           ++..+.+.++...+
                 8+6
                           +++...+.+.+.+.+
                 4
                           +..+..++..+
                 8+4
                           +..++.+...+
                 b5
                           .+++++++++.++.
                 8+b5
                           .++.++.++++++
Root-Notes:
                   C C# D#
                                G
                                    A A#
                                          B C# D#
                                                    Ε
                                                        F
                                                           G
                                                              A A#
                                                                     C
                                          *
                                                    *
                   *
                                                                     *
  Chord [#roots]
                   J`
                      Κ
                          L M# N# O#`P#
                                              R
                                                 S
                                                              X`Yb
                                          0
                                                    T`
                                                      Ub Vb
                                                                     J
             [7]
                                    Χ
                                                 Χ
                                                                     Χ
         5
                          Χ
                                       Χ
                                                        Χ
                                                                 Χ
       5+8
             [6]
                          Χ
                                    Χ
                                                 Χ
                                                        Χ
                                                                 Χ
                                       Χ
                                                                     Χ
               81
                                                                 Χ
         4
                   Χ
                             Χ
                                       Χ
                                          Χ
                                                    Χ
                                                        Χ
                                                           Χ
        3m
               31
                   Χ
                                       Х
                                                                 Χ
                                                                     Χ
        3+
             [4]
                          Χ
                                    Χ
                                                 Χ
      maj7
               0]
               41
                          Χ
                                    Χ
                                                 Χ
                                                        Χ
      dom7
      min7
               11
                   Χ
                                                                     Χ
        b7
             [ 6]
                                Χ
                                       Χ
                                              Χ
                                                    Χ
                                                           Χ
                                                              Χ
    maj7-5
               3]
                             Χ
                                          Χ
                                             Χ
                             Χ
                                Χ
                                          Χ
                                                              Χ
    dom7-5
               9]
                      Χ
                          Χ
                                   Χ
                                                 Χ
    min7-5
             [4]
                   Χ
                                Χ
                                                           Χ
                                                              Χ
                             Χ
                                                              Χ
       8+5
               61
                          Χ
                                       Χ
                                                 Χ
                                                                 Χ
               5]
                             Χ
                                Χ
                                       Χ
       8+4
                                                        Χ
                                                                 Χ
               21
      8 + 3 m
                                                                 Χ
      8+3+
             [4]
                          Χ
                             Χ
                                                 Χ
                                                              Χ
    8+maj7
             [ 0]
    8+dom7
             [4]
                          Χ
                             Χ
                                                 Χ
                                                              Χ
    8+min7
               01
      8+b7
             [5]
                       Χ
                                                           Χ
                                Χ
                                    Χ
                       Χ
  8 + maj7 - 5
               2]
                                                        Χ
  8+dom7-5
               8]
                          Χ
                             Χ
                                    Χ
                                              Χ
                                                 Χ
                                                        Χ
                                                           Χ
                                                              Χ
```

8+min7-5

[3]

```
III - 0
                           hFhhFFFFhFhFFFh
Intervals:
                 8
                           .+.+++++.++++
                 3–
                           ++.+....+++
                 8+3-
                           .+.+..+.++
                 5
                           +..+.++..++..
                 8+5
                           +..++.+..+..++.
                 7
                           .+++.++++.++++
                 8+7
                           .++.++++.+.++
                 3
                           +++.+++.+..++
                 8+3
                           +++.++++..+++..
                 maj7
                           +.+.+...++++...
                 8+mai7
                           ++.++....+.+...
                 6-
                           .++.+.++.++++
                 8+6-
                           .+++++++..+.++
                 6
                           +..+++...++..
                 8+6
                           +.++.+...++++..
                 4
                           +..+..+..+..+
                 8+4
                           +..+.+.+.++..++
                           .++.++.++..+++
                 b5
                 8+b5
                           .++.++++..++
Root-Notes:
                   C C# D#
                             Ε
                                    G
                                       Α
                                           B C#
                                                 D
                                                     Ε
                                                           G
                                                               Α
                                                                  В
                                                                     C
                                                 *
                          *
                                                                     *
  Chord [#roots]
                   J`
                       K
                                                     T
                                                              Χ
                                                                  Y`
                                                                     J
                             M`Nb 0b
                                       Ρ
                                           0
                                              R`Sb
                                                       Ub Vb
             [8]
                                                              Χ
         5
                   Χ
                             Χ
                                    Χ
                                       Χ
                                                 Χ
                                                    Χ
                                                        Χ
                                                                     Χ
       5+8
             [6]
                             Χ
                                    Χ
                                       Χ
                                                     Χ
                                                        Χ
                                                              Χ
               81
                                                 Χ
                                                                  Χ
                                                                     Χ
         4
                   Χ
                             Χ
                                       Χ
                                           Χ
                                                    Χ
                                                           Χ
        3m
               51
                   Χ
                             Χ
                                                 Χ
                                                    Χ
                                                              Χ
                                                                     Χ
             [5]
                   Χ
        3+
                                    Χ
                                       Χ
                                                        Χ
                                                               Χ
                                                                     Χ
                   Χ
                                                        Χ
      maj7
             [ 2]
                                                                     Χ
             [4]
                                    Χ
                                                        Χ
                                                              Χ
      dom7
                                       Х
             [ 3]
      min7
                             Χ
                                                 Χ
                                                              Χ
        b7
             [4]
                       Χ
                                           Χ
                                              Χ
                                                              Χ
    maj7-5
               5]
                   Χ
                          Χ
                                 Χ
                                              Χ
                                                        Χ
                                                                     Χ
                       Χ
                          Χ
                                              Χ
                                                        Χ
                                                              Χ
    dom7-5
               9]
                                    Χ
                                       Χ
                                                           Χ
                                                                  Χ
    min7-5
               6]
                       Χ
                             Χ
                                           Χ
                                              Χ
                                                 Χ
                                                              Χ
                             Χ
                                                           Χ
                                                              Χ
       8+5
             [6]
                                 Χ
                                       Χ
                                                     Χ
                             Χ
                                    Χ
                                           Χ
                                                     Χ
                                                               Χ
       8+4
               6]
                                                                  Χ
                             Χ
                                                     Χ
      8 + 3 m
               31
                                       Χ
      8+3+
             [4]
                                 Χ
                                       Χ
                                                           Χ
                                                              Χ
    8+maj7
                                Χ
             [ 1]
                                 Χ
                                                           Χ
    8+dom7
             [4]
                                       Χ
                                                              Χ
    8+min7
               21
                                       Χ
                                                    Χ
      8+b7
             [4]
                       Χ
                                              Χ
                       Χ
  8 + maj7 - 5
               3]
                                 Χ
                                                        Χ
  8+dom7-5
               81
                       Χ
                                 Χ
                                    Χ
                                       Х
                                           Χ
                                              Χ
                                                           Χ
                                                               Χ
  8+min7-5
             [5]
```

I.Albrecht: 8va-Interval-Maximal 16-tone Scales - 9 - on 15ma w/o Diatonic Modes and Root-8va. of 79

```
III - 1
                           hhffffhfhfffhhf
Intervals:
                 8
                           .++++++.++++.+
                 3-
                           .+...++++..+
                 8+3-
                           .+..+.++...+
                 5
                           .+.++..++.+.
                 8+5
                           .++.+..+..+..
                 7
                           ++.++++.+++.+
                 8+7
                           +.++++.+.+.+.+
                 3
                           +.+++.+.
                 8+3
                           +.++++..+++.++
                 maj7
                           +.+...++++...+.
                 8+mai7
                           .++...+.+...++
                 6-
                           +.+.++.++++.+
                 8+6-
                           +++++++..+.+
                 6
                           .+++...+...
                 8+6
                           ++.+...++++..+.
                 4
                           .+..++.++.+.
                 8+4
                           .+.+.+.++..+++.
                 b5
                           +.++.++..
                 8+b5
                           +.++++..++.+
                   C C#
Root-Notes:
                          D
                             E F# G# A#
                                          B C#
                                                D
                                                    E F# G#
                                                             A A#
                                                                    C
                                          *
                                                             * -
                   *
                                                                    *
  Chord [#roots]
                   J`
                                                    Т
                                                             X`Yb
                      K`Lb
                             Μ
                                Ν
                                   0 P#
                                          0
                                             R`
                                               Sb
                                                       U
                                                                    J
             [8]
         5
                      Χ
                             Χ
                                Χ
                                          Χ
                                             Χ
                                                Χ
                                                       Χ
                                                             Χ
       5+8
             [6]
                      Χ
                             Χ
                                Χ
                                             Χ
                                                Χ
                                                       Χ
              81
                                Χ
                                   Χ
                                          Χ
                                                    Χ
         4
                      Χ
                                             Χ
                                                          Χ
                                                             Χ
        3m
              51
                      Χ
                                          Χ
                                             Χ
                                                             Χ
        3+
             [5]
                             Χ
                                Χ
                                                Χ
                                                       Χ
                                                             Χ
                                                Χ
      maj7
             [2]
                                                             Χ
             [4]
                             Χ
                                Χ
                                                Χ
                                                       Χ
      dom7
             [ 3]
      min7
                      Χ
                                          Χ
                                                       Χ
        b7
             [4]
                                   Χ
                                      Χ
                                                       Χ
                                                                Χ
    maj7-5
              5]
                   Χ
                          Χ
                                      Χ
                                                Χ
                                                             Χ
                                                                    Χ
                   Χ
                                                Χ
                                                                    Χ
    dom7-5
              9]
                             Χ
                                Χ
                                      Χ
                                                   Χ
                                                       Χ
                                                          Χ
                                                                Χ
    min7-5
              6]
                      Χ
                                   Χ
                                          Χ
                                                       Χ
                                                                Χ
                      Χ
                                                    Χ
                                                       Χ
       8+5
             [6]
                          Χ
                                Χ
                                             Χ
                      Χ
              6]
                             Χ
                                   Χ
                                             Χ
                                                       Χ
                                                          Χ
       8+4
                      Χ
      8 + 3 m
              31
                                Χ
                                             Χ
      8+3+
             [4]
                          Χ
                                Χ
                                                   Χ
                                                       Χ
    8+maj7
                         Χ
             [ 1]
                          Χ
                                Χ
                                                   Χ
    8+dom7
             [4]
                                                       Χ
                                Χ
    8+min7
              21
                                             Χ
      8+b7
             [4]
                                Χ
                                                          Χ
                                                                Χ
  8 + maj7 - 5
              3]
                          Χ
                                                Χ
                                                                Χ
  8+dom7-5
               81
                          Χ
                             Χ
                                Χ
                                   Χ
                                      Х
                                                    Χ
                                                       Χ
                                                                 Χ
  8+min7-5
             [5]
```

I.Albrecht: 8va-Interval-Maximal 16-tone Scales - 10 - on 15ma w/o Diatonic Modes and Root-8va. of 79

```
III - 2
                           FhFFFhhFhhFFFFh
Intervals:
                 8
                           .+++++.+.++++++
                 3–
                           ++..+.+.+....++
                 8+3-
                           ++...+.+.+.+.+
                 5
                           +++.+.+..
                 8+5
                           ++.++.+..++.+.
                 7
                           +.+++.++.++
                 8+7
                           .+.+++.++.++++
                 3
                           ..++++++.++.+
                 8+3
                           ..+++.++++++
                 maj7
                           +++...+.+..+
                 8+mai7
                           +.+...++.++...
                 6-
                           .+++++.++.+.+.
                 8+6-
                           ..+.++.++++++
                 6
                           ++.+..+..++...
                 8+6
                           ++++..+.+..
                 4
                           ++.+.++..+..+.
                 8+4
                           ++..+++..+.+.
                 b5
                           ..++++.++.++.++
                 8+b5
                           ..++.+.++.++++
Root-Notes:
                   C
                      D Eb
                                G
                                   A A#
                                          B C#
                                                D Eb
                                                          G
                                                                    C
                                                              Α
                   *
                                       *
                                             *
                                                                    *
  Chord [#roots]
                          L M# N# O#`P#
                                             R`Sb`Tb Ub
                                                             Χ
                                                                 Υ
                                                                    J
                   J K#`
                                          0
                                                         ۷b
             [8]
                                Χ
         5
                   Χ
                     Χ
                          Χ
                                       Χ
                                                Χ
                                                       Χ
                                                          Χ
                                                                    Χ
       5+8
             [6]
                      Χ
                         Χ
                                Χ
                                                Χ
                                                       Χ
                                                          Χ
               81
                   Χ
                                   Χ
                                                Χ
                                                                    Χ
         4
                      Χ
                             Χ
                                       Х
                                                          Χ
                                                              Χ
        3m
               51
                   Χ
                      Χ
                                Χ
                                       Х
                                                Χ
                                                                    Χ
        3+
             [5]
                          Χ
                                Χ
                                       Χ
                                                       Χ
                                                          Χ
                          Χ
      maj7
             [ 2]
                                       Χ
             [4]
                          Χ
                                Χ
                                                       Χ
                                                          Χ
      dom7
             [ 3]
      min7
                   Χ
                                Χ
                                                Χ
                                                                    Χ
        b7
             [4]
                                Χ
                                          Χ
                                                             Χ
                                                                 Χ
    maj7-5
               5]
                          Χ
                                       Χ
                                             Χ
                                                    Χ
                                                                 Χ
                          Χ
                                Χ
                                             Χ
                                                                 Χ
    dom7-5
               9]
                             Χ
                                   Χ
                                          Χ
                                                          Χ
    min7-5
               6]
                   Χ
                                Χ
                                          Χ
                                                Χ
                                                             Χ
                                                                 Χ
                                                                    Χ
                             Χ
                                                Χ
                                                    Χ
       8+5
             [6]
                      Χ
                                Χ
                                                          Χ
               6]
                      Χ
                                Χ
                                   Χ
                                                Χ
                                                       Χ
                                                              Χ
       8+4
                      Χ
      8 + 3 m
               31
                                                Χ
                                                          Χ
      8+3+
             [4]
                             Χ
                                                    Χ
                                                          Χ
                                Χ
    8+maj7
                                                    Χ
             [ 1]
                             Χ
                                                    Χ
                                                          Χ
    8+dom7
             [4]
                                Χ
                                                          Χ
    8+min7
               21
                      Χ
      8+b7
             [4]
                                          Χ
                                                          Χ
                                   Χ
                                          Χ
                                                    Χ
  8 + maj7 - 5
               3]
                          Χ
  8+dom7-5
                                                    Χ
               8]
                             Χ
                                Χ
                                          Χ
                                                       Χ
                                                          Χ
                                                              Χ
                                                                 Χ
  8+min7-5
             [5]
```

8+min7-5

[5]

```
B Db Eb
                                                      F F# G#
                                                                 Α
                                                                     В
                                                                        C
                                                                         *
                          L M# N#``
Chord [#roots]
                  J`
                      K
                                        Ρ
                                            0
                                               R
                                                   S T#
                                                                 Χ
                                                                        J
                                    0
                                                          U
            [8]
        5
                  Χ
                      Χ
                                    Χ
                                            Χ
                                               Χ
                                                      Χ
                                                          Χ
                                                              Χ
                                                                        Χ
      5+8
            [6]
                      Χ
                                    Χ
                                            Χ
                                               Χ
                                                      Χ
                                                              Χ
              71
                  Χ
                                    Χ
                                                   Χ
                                                                        Χ
        4
                                               Χ
                                                          Χ
                                                              Χ
       3m
              51
                  Χ
                                    Χ
                                                      Χ
                                                          Χ
                                                              Χ
                                                                        Χ
       3+
            [5]
                      Χ
                                            Χ
                                               Χ
                                                      Χ
                                                              Χ
                                                              Χ
    maj7
            [2]
                                               Χ
            [4]
                      Χ
                                            Χ
                                               Χ
                                                      Χ
    dom7
                                                      Χ
    min7
              21
                                    Χ
                                                      Χ
       b7
            [5]
                             Χ
                                                   Χ
                                                          Χ
                                                                 Χ
  maj7-5
            [5]
                                 Χ
                                        Χ
                                               Χ
                                                              Χ
                                                                 Χ
                                                                 Χ
                                 Χ
                                               Χ
                                                      Χ
  dom7-5
              9]
                      Χ
                          Χ
                             Χ
                                            Χ
                                                                     Χ
  min7-5
            [5]
                             Χ
                                    Χ
                                                   Χ
                                                      Χ
                                                                 Χ
                             Χ
                                    Χ
     8+5
            [6]
                      Χ
                                               Χ
                                                              Χ
                                                                     Χ
              5]
                      Χ
                          Χ
                                    Χ
                                                              Χ
     8+4
                                                   Χ
                                    Χ
                                                              Χ
    8 + 3 m
              31
                             Χ
                      Χ
                                    Χ
    8+3+
            [5]
                             Χ
                                               Χ
                                                                     Χ
  8+maj7
            [ 2]
                      Χ
                                    Χ
                      Χ
                             Χ
  8+dom7
            [4]
                                               Χ
                                                                     Χ
                             Χ
  8+min7
              21
                                                              Χ
    8+b7
            [4]
                          Χ
                             Χ
                                        Χ
                      Χ
                                    Χ
                                        Χ
8 + maj7 - 5
            [4]
                                                                 Χ
8+dom7-5
              8]
                      Χ
                             Χ
                                        Χ
                                            Χ
                                               Χ
                                                   Χ
                                                      Χ
                                                                     Χ
8+min7-5
            [5]
```

```
V - 0
                         hFFFhFhFFFFhhFh
Intervals:
                8
                         .+++++.+++++.+
                3-
                         +..++++...+.+.
                8+3-
                         +..+.++...+++..
                5
                         +++..++.+.+.
                8+5
                         ++.+.+.++..+..
                7
                         +++++.++++.
                8+7
                         .++++.+.++++.++
                3
                         .++.+..+++++++
                8+3
                         .+++++.++.+.+.
                maj7
                         +...++.+...+++
                8+mai7
                         ++...+.+...++.
                6-
                         +.+++..++++.++
                8+6-
                         +++++..+.++
                6
                         .+...+++.+.+.+
                8+6
                         +.+..+++...+
                4
                         +.++.++..+.++..
                8+4
                         +.+.+++..++..
                b5
                         .+.++..++++.++
                8+b5
                         .++++..++.++
Root-Notes:
                  C Db Eb
                              G G# A#
                                        B Db Eb
                                    *
                  J``
                        L M# N#``
  Chord [#roots]
                     K
                                 0 P#
                                        0
                                           R
                                              S T#
            [8]
                        Χ
                                                 Χ
         5
                  Χ
                     Χ
                                 Χ
                                    Χ
                                           Χ
       5+8
            [6]
                     Χ
                        Χ
                                 Χ
                                           Χ
                                                 Χ
            [8]
                  Χ
                        Χ
                                 Χ
                                              Χ
         4
                           Χ
                                    Χ
        3m
              51
                  Χ
                                 Χ
                                    Х
                                                 Χ
```

```
G G#
                                                                  Α
                                                                         C
                                                                  *
                                                                         *
                                                         U#
                                                                  Χ
                                                                     Υ
                                                                         J
                                                              Χ
                                                                         Χ
                                                              Χ
                                                                         Χ
                                                          Χ
                                                              Χ
                                                              Χ
                                                                         Χ
            [5]
       3+
                      Χ
                          Χ
                                                Χ
                                                       Χ
                                                              Χ
                                                              Χ
    maj7
            [ 2]
                                                Χ
            [4]
                      Χ
                                                Χ
                                                       Χ
    dom7
                          Χ
            [ 3]
                                                       Χ
    min7
                   Χ
                                        Χ
                                                                         Χ
       b7
            [4]
                              Χ
                                 Χ
                                                       Χ
                                                                 Χ
  maj7-5
            [4]
                                                Χ
                                                              Χ
                                                                 Χ
                                                                     Χ
                                 Χ
                                               Χ
                                                       Χ
                                                                 Χ
  dom7-5
              9]
                      Χ
                          Χ
                                            Χ
                                                   Χ
  min7-5
              6]
                   Χ
                             Χ
                                 Χ
                                                       Χ
                                                                 Χ
                      Χ
                              Χ
     8+5
            [6]
                                     Χ
                                                Χ
                                                   Χ
                                                              Χ
              6]
                          Χ
                                 Χ
                                     Χ
                                                   Χ
                                                       Χ
                                                              Χ
     8+4
                                     Χ
                                                              Χ
    8 + 3 m
              31
                              Χ
                                     Χ
    8+3+
            [5]
                      Χ
                              Χ
                                                   Χ
                                                Χ
  8+maj7
            [ 2]
                      Χ
                                     Χ
                      Χ
                             Χ
                                                Χ
  8+dom7
            [4]
                                                   Χ
                             Χ
  8+min7
              11
    8+b7
            [ 3]
                              Χ
                      Χ
8 + maj7 - 5
            [ 3]
                                     Χ
                                            Χ
8+dom7-5
                      Χ
              8]
                          Χ
                             Χ
                                 Χ
                                                Χ
                                                   Χ
                                                          Χ
                                                                     Χ
8+min7-5
            [ 3]
```

3– + . . . + . + + . + . . + + + 8+3-+...+++..+ 5 +.+.+.+..++ 8+5 +.++..+..+ 7 ++++++.+.+.++++. 8+7 +.+++.++.++. 3 .+++++++.++.+. 8+3 .+++.+.++++++ maj7 +.+...++++...+ 8+mai7 .+...++.++..+ 6-.+++++.++.++. 8+6-.+.+++.++++++ ++.+..+.+.+. 6 8+6 +++...+.+.+.+ 4 +..+.++..+.++.+ 8+4 +..++.+..+.+.++ b5 .+++++.++.+. 8+b5 .++.++.++.+++.

Root-Notes: C C# Eb G A A# B C# D Eb G A A# C * * * * Chord [#roots] J` K L M# N# O#`P# R`Sb`Tb X, J 0 Ub Vb Yb [8] Χ Χ Χ 5 Χ Χ Χ Χ Χ Χ 5+8[6] Χ Χ Χ Χ Χ Χ Χ 81 Χ Χ Χ Χ 4 Χ Χ Χ Χ 3m 51 Χ Χ Х Χ Χ Χ [5] 3+ Χ Χ Χ Χ Χ Χ maj7 [2] Χ [4] Χ Χ Χ dom7 Χ [3] min7 Χ Χ Χ Χ b7 [4] Χ Χ Χ Χ maj7-5[4] Χ Χ Χ Χ Χ Χ Χ Χ dom7-59] Χ Χ Χ Χ Χ min7-5 6] Χ Χ Χ Χ Χ Χ Χ Χ Χ 8+5 [6] Χ Χ Χ 6] Χ Χ Χ Χ 8+4 Χ Χ 8 + 3 m31 Χ Χ 8+3+ [5] Χ Χ Χ Χ Χ 8+maj7 [2] Χ Χ Χ Χ 8+dom7 [4] Χ Χ Χ 8+min7 11 8+b7 [3] Χ Χ Χ 8 + maj7 - 5[3] Χ Χ Χ 8+dom7-5 Χ Χ 8] Χ Χ Χ Χ Χ Χ 8+min7-5 [3]

FhhFFFhFhFFFFhh

V - 2

8+dom7-5

8+min7-5

8]

[3]

Χ

 $X \quad X \quad X \quad X$

X X

Χ

```
VI - 0
                          hFFFFhhFFFhhFhF
Intervals:
                 8
                          .++++++.++.++
                 3–
                          + . . . + . + . . + . ++++
                 8+3-
                          +.+.+++...+
                 5
                          +.+...++.++
                 8+5
                          +.++..+..+..+
                 7
                          ++++++.+.+.++.
                 8+7
                          +.+++.+++.++.
                 3
                          .+++++.++++.
                 8+3
                          .+++.+.+++++
                 maj7
                          +...+.++..+
                 8+mai7
                          .+...++...++
                 6-
                          .+++++++.+.
                 8+6-
                          .+.+++.+++.++
                 6
                          ++...++.+.+.+
                 8+6
                          +++...+.+.++
                 4
                          +..+..+.+.+.+
                 8+4
                          ++.++.+...+
                 b5
                          .+++++.++.++.
                 8+b5
                          +++.++.++.++.
Root-Notes:
                   C Db Eb
                               G
                                   A A#
                                         B Db Eb
                                                   F F#
                                                         G
                                                            A A#
                                                                   C
                                         *
                                                      *
                   *
                                                                   *
  Chord [#roots]
                  J`
                      Κ
                           M# N# O#`P#
                                         0
                                            R
                                               S T#
                                                            X,
                         L
                                                      U`Vb
                                                              Yb
                                                                   J
             [8]
                                               Χ
                                                                  Χ
         5
                  Χ
                         Χ
                                      Χ
                                         Χ
                                                  Χ
                                                               Χ
       5+8
             [5]
                         Χ
                                               Χ
                                                  Χ
                                                               Χ
                                      Χ
              71
                                                                   Χ
                                            Χ
                                                               Χ
         4
                   Χ
                            Χ
                                      Χ
                                                  Χ
        3m
              51
                   Χ
                                      Х
                                               Χ
                                                      Χ
                                                               Χ
                                                                   Χ
                                               Χ
                                                  Χ
                                                      Χ
        3+
             [5]
                         Χ
                                         Χ
                                                      Χ
      maj7
             [2]
                                         Χ
             [4]
                         Χ
                                         Χ
                                               Χ
                                                  Χ
      dom7
                                               Χ
      min7
              21
                   Χ
                                                                   Χ
        b7
             [5]
                               Χ
                                               Χ
                                                      Χ
                                                         Χ
                                                            Χ
    maj7-5
             [4]
                               Χ
                                         Χ
                                            Χ
                                                      Χ
                               Χ
                                                            Χ
    dom7-5
              9]
                      Χ
                         Χ
                            Χ
                                  Χ
                                         Χ
                                               Χ
                                                  Χ
    min7-5
              5]
                   Χ
                               Χ
                                               Χ
                                                         Χ
                                                            Χ
                         Χ
                            Χ
                                               Χ
       8+5
             [5]
                                      Χ
                                                               Χ
              6]
                      Χ
                            Χ
                               Χ
                                      Χ
                                                   Χ
       8+4
                                                               Χ
      8 + 3 m
              31
                         Χ
                                                               Χ
                         Χ
      8+3+
             [ 3]
                            Χ
                                               Χ
    8+maj7
             [ 0]
                         Χ
    8+dom7
              3]
                            Χ
                                               Χ
                         Χ
    8+min7
              11
```

 $X \quad X \quad X$

Χ

Χ

Χ

Χ

8+b7

8 + maj7 - 5

8+dom7-5

8+min7-5

[4]

2]

8]

[4]

Χ

X X

Χ

X X

Χ

Χ

Χ

Χ

Χ

Χ

Χ

Χ

8 + maj7 - 5

8+dom7-5

8+min7-5

2]

8]

[4]

 $X \quad X \quad X$

```
VI - 2
                           hFhFhFFFFhhFFFh
Intervals:
                 8
                           .+++.+++++.++
                 3-
                           +++++...+.+..+.
                 8+3-
                           ++.++.+.++...
                 5
                           +..++.+...++.++
                 8+5
                           +..++.++..+..+.
                 7
                           .++.+++++.+.+.
                 8+7
                           .++.+.+++.++++
                 3
                           +.+..++++
                 8+3
                           +++..+++.+.
                 maj7
                           +..++...+.++
                 8+mai7
                           ++.+.+....++...
                 6-
                           .++..+++++++
                 8+6-
                           .+++.+.++.+++
                 6
                           +..+++...++.
                 8+6
                           +.++++...+.+..
                 4
                           .+.++..+..+.+
                 8+4
                           +..+++.++.+.
                 b5
                           +++..++++.++.
                 8+b5
                           .++.+++.++.+++
Root-Notes:
                   C C# D#
                             E F#
                                   G
                                       Α
                                          B C# D#
                                                    Ε
                                                       F
                                                          G
                                                              Α
                                                                 В
                                                                    C
                                *
                                                       *
                                                                    *
  Chord [#roots]
                   J`
                      K
                                                S
                                                    T
                                                              Χ
                                                                 Υ`
                                                                    J
                             M
                                N'0b
                                             R
                                                      Ub Vb
             [8]
                                                              Χ
         5
                   Χ
                             Χ
                                Χ
                                       Χ
                                                    Χ
                                                       Χ
                                                                 Χ
                                                                    Χ
       5+8
             [5]
                             Χ
                                                    Χ
                                                              Χ
                                                                 Χ
                                       Χ
               71
                             Χ
                                Χ
                                                                 Χ
         4
                      Χ
                                          Χ
                                                    Χ
                                                          Χ
        3m
               51
                   Χ
                             Χ
                                Χ
                                                    Χ
                                                              Χ
                                                                    Χ
             [5]
                   Χ
                                                              X X
        3+
                                       Χ
                                                       Χ
                                                                    Χ
                   Χ
                                                       Χ
      maj7
             [ 2]
                                                                    Χ
             [4]
                                                       Χ
                                                              Χ
                                                                 Χ
      dom7
                                       Х
                                                              Χ
      min7
               21
                                Χ
        b7
               5]
                   Χ
                      Χ
                          Χ
                                             Χ
                                                              Χ
                                                                    Χ
    maj7-5
             [4]
                   Χ
                                             Χ
                                                       Χ
                                                          Χ
                                                                    Χ
                                             Χ
                                                Χ
                                                              Χ
    dom7-5
               9]
                          Χ
                                   Χ
                                       Χ
                                          Χ
                                                                 Χ
    min7-5
               5]
                      Χ
                          Χ
                                Χ
                                             Χ
                                                              Χ
                                                              Χ
       8+5
             [5]
                             Χ
                                       Χ
                                          Χ
                                                    Χ
               6]
                             Χ
                                   Χ
                                             Χ
                                                    Χ
       8+4
                                          Χ
                                                                 Χ
                             Χ
                                                    Χ
      8 + 3 m
               31
                                       Χ
      8+3+
             [ 3]
                                       Χ
                                                              Χ
                                          Χ
    8+maj7
             [ 0]
    8+dom7
               3]
                                       Χ
                                          Χ
                                                              Χ
    8+min7
               11
                                       Χ
      8+b7
             [4]
                      Χ
                                             Χ
                                                Χ
                      Χ
  8 + maj7 - 5
               2]
                                   Χ
  8+dom7-5
               8]
                      Χ
                                       Χ
                                          Χ
                                                 Χ
                                                          Χ
                                                              Χ
                                                                 Χ
```

8+min7-5

[4]

```
VIII - 0
                           hFFFhhFFhhFFFFh
Intervals:
                 8
                            .++++.++.++++
                  3-
                            + . . + . + . + . + . . . + .
                 8+3-
                            +...++..+.+.+
                 5
                            ++..++...+.+...
                 8+5
                            +..+.+..++..+..
                  7
                            .++++.+++++++
                 8+7
                            .++++.++.++++
                  3
                            .++++.++.+++
                 8+3
                            .+++++++.++++
                 maj7
                            +.+..+..++...+.
                 8+mai7
                            ++...++..++...
                 6-
                            +++++.++.+++
                 8+6-
                            .++++.++.++++
                  6
                            +..+.+...++...+
                 8+6
                           +.+..+.+.+.
                 4
                            +.+..++..+..+..
                  8+4
                            +...++...++..+.
                 b5
                            .+++++++.++++
                 8+b5
                            .++++.+++++++
Root-Notes:
                    C C# Eb F
                                 G G#
                                        Α
                                           B C#
                                                  D Eb
                                                            G
                                                                      C
                                    *
                                                  *
                    *
                                                                      *
  Chord [#roots]
                    J`
                       K
                          L M# N#`
                                              R`Sb`Tb Ub Vb
                                                                      J
                                    0
                                                               Χ
             [6]
                                 Χ
          5
                    Χ
                       Χ
                                                  Χ
                                                        Χ
                                                                      Χ
        5+8
             [ 3]
                       Χ
                                 Χ
                                                        Χ
             [6]
                    Χ
                                                                      Χ
          4
                                    Χ
                                        Х
                                                  Χ
                                                            Χ
         3m
               31
                    Χ
                                    Χ
                                                  Χ
                                                                      Χ
         3+
             [ 3]
                       Χ
                                 Χ
      maj7
             [ 0]
               31
                       Χ
                                 Χ
      dom7
                                                        Χ
      min7
             [ 1]
                                                  Χ
         b7
             [4]
                              Χ
                                    Χ
                                           Χ
                                                               Χ
    maj7-5
             [ 3]
                          Χ
                                              Χ
                                                               Χ
                       Χ
                          Χ
                                              Χ
                                                               Χ
    dom7-5
             [12]
                             Χ
                                        Χ
                                           Χ
                                                        Χ
                                                            Χ
    min7-5
             [ 4]
                              Χ
                                           Χ
                                                  Χ
                                                               Χ
                              Χ
       8+5
             [ 3]
                                              Χ
                                                            Χ
             [ 3]
                                                               Χ
       8+4
                                 Χ
                                                     Χ
      8 + 3 m
               01
      8+3+
             [ 3]
                              Χ
                                                            Χ
                                              Χ
    8+maj7
             [ 0]
                              Χ
    8+dom7
             [ 3]
                                              Χ
                                                            Χ
    8+min7
             [ 0]
      8+b7
             [ 3]
                                                        Χ
                                        Χ
                                                     Χ
  8 + maj7 - 5
             [ 3]
                       Χ
                                        Χ
  8+dom7-5
                                                     Χ
             [12]
                       Χ
                          Χ
                              Χ
                                 Χ
                                        Χ
                                           Χ
                                              Χ
                                                        Χ
                                                            Χ
                                                               Χ
                                                                  Χ
  8+min7-5
             [ 3]
```

```
VIII - 1
                           hFFhhFFFFhhFFFh
Intervals:
                 8
                           .+++.++++.++++
                 3–
                           +.+.+...+.+.
                 8+3-
                           ++..+.+..++...
                 5
                           +...+.+...+
                 8+5
                           +..++..+..+..+.
                 7
                           .++++++++
                 8+7
                           .+++.++++.++++
                 3
                           .+++.++++.+++
                 8+3
                           ++++.++++.++++
                 maj7
                           +..++...+.+.
                 8+mai7
                           ++..++...++...
                 6-
                           .+++.++++++++
                 8+6-
                           .+++.++++.++++
                 6
                           +...++...++..+.
                 8+6
                           +.+.+.+...+.+..
                 4
                           ++..+..+..+..
                 8+4
                           +...++..+.+..+
                 b5
                           ++++.++++.++++
                 8+b5
                           .++++++++.++
Root-Notes:
                   C C# D#
                             F F#
                                    G
                                       Α
                                           B C# D#
                                                    Ε
                                                           G
                                                              Α
                                                                     C
                                                    *
                    *
                                *
                                                                     *
  Chord [#roots]
                          L M#`
                                                 S
                                                              Χ
                                                                  Υ
                                                                     J
                       K
                                'N'0b
                                              R
                                                    T
                                                       Ub Vb
             [6]
         5
                   Χ
                                 Χ
                                       Χ
                                                    Χ
                                                                  Χ
                                                                     Χ
                                                        Χ
       5+8
             [ 3]
                                                        Χ
                                                                  Χ
                                       Χ
             [ 6]
                                 Χ
                                                                     Χ
          4
                   Χ
                       Χ
                                           Χ
                                                    Χ
                                                           Χ
        3m
               31
                   Χ
                                 Χ
                                                    Χ
                                                                     Χ
        3+
             [ 3]
                                       Χ
                                                        Χ
                                                                  Χ
      maj7
             [ 0]
               31
                                                        Χ
                                                                  Χ
      dom7
                                       Х
      min7
             [ 1]
                                 Χ
        b7
             [4]
                   Χ
                          Χ
                                              Χ
                                                              Χ
                                                                     Χ
    maj7-5
             [ 3]
                             Χ
                                              Χ
                                                           Χ
                             Χ
                                              Χ
                                                           Χ
    dom7-5
             [12]
                       Χ
                          Χ
                                    Χ
                                       Χ
                                          Χ
                                                        Χ
                                                              Χ
    min7-5
             [ 4]
                          Χ
                                 Χ
                                              Χ
                                                              Χ
                                                              Χ
       8+5
             [ 3]
                             Χ
                                           Χ
             [ 3]
                                    Χ
       8+4
                                              Χ
                                                                  Χ
      8 + 3 m
               01
      8+3+
             [ 3]
                             Χ
                                                              Χ
                                           Χ
    8+maj7
             [ 0]
                             Χ
    8+dom7
             [ 3]
                                          Χ
                                                              Χ
    8+min7
             [ 0]
      8+b7
             [ 3]
                       Χ
                                                 Χ
                                       Χ
                       Χ
  8 + maj7 - 5
             [ 3]
                                    Χ
                                                        Χ
  8+dom7-5
                       Χ
             [12]
                          Χ
                             Χ
                                    Χ
                                       Χ
                                           Χ
                                              Χ
                                                 Χ
                                                        Χ
                                                           Χ
                                                              Χ
                                                                  Χ
  8+min7-5
             [ 3]
```

```
VIII - 2
                           hFFFFhhFFFhhFFh
Intervals:
                 8
                           .+++++.+++.++
                 3-
                           + . . . + . + . . + . + . + .
                 8+3-
                           +.+..++...++..
                 5
                           +.+...++..+
                 8+5
                           +..+..+..+..+
                 7
                           ++++++.+++.++
                 8+7
                           .+++++.+++.++
                 3
                            .+++++.+++.++
                 8+3
                           .+++++.+++++++
                 maj7
                           +...+.+.+..+..+
                 8+mai7
                           ++....++...++..
                 6-
                            .+++++++++.++
                 8+6-
                           .+++++.+++.++
                 6
                           ++...++..+.+..
                 8+6
                           +.+...+.+..+.
                 4
                           +..+..+..+..+..
                 8+4
                           ++..+.+...++...
                 b5
                           .+++++.+++++++
                 8+b5
                           ++++++.+++.++
Root-Notes:
                   C Db Eb
                                 G A A#
                                           B Db Eb
                                                     F F#
                                                           G
                                                               Α
                                                                     C
                                                        *
                                       *
                                                                     *
                   J``
  Chord [#roots]
                       Κ
                          L M# N# O#`P#
                                           0
                                                 S T#
                                                              Χ
                                                                     J
                                              R
                                                        U`Vb
             [6]
                          Χ
         5
                   Χ
                                       Χ
                                                     Χ
                                                        Χ
                                                                     Χ
                                           Χ
       5+8
             [ 3]
                          Χ
                                           Χ
                                                     Χ
             [6]
                   Χ
                                                                     Χ
          4
                             Χ
                                       Х
                                              Χ
                                                        Χ
                                                           Χ
        3m
               31
                   Χ
                                       Χ
                                                        Χ
                                                                     Χ
        3+
             [ 3]
                          Χ
                                           Χ
                                                     Χ
      maj7
             [ 0]
               31
                          Χ
                                           Χ
                                                    Χ
      dom7
      min7
             [ 1]
                   Χ
                                                                     Χ
        b7
             [4]
                                 Χ
                                                 Χ
                                                        Χ
                                                              Χ
    maj7-5
             [ 3]
                                 Χ
                                              Χ
                                                                  Χ
                                 Χ
                                              Χ
    dom7-5
             [12]
                       Χ
                          Χ
                             Χ
                                    Χ
                                           Χ
                                                 Χ
                                                    Χ
                                                           Χ
                                                              Χ
    min7-5
             [ 4]
                   Χ
                                 Χ
                                                 Χ
                                                              Χ
                             Χ
                                                 Χ
       8+5
             [ 3]
                                                                  Χ
             [ 3]
                       Χ
                                 Χ
                                                     Χ
       8+4
      8 + 3 m
               01
                             Χ
      8+3+
             [ 3]
                                                 Χ
                                                                  Χ
    8+maj7
             [ 0]
                             Χ
    8+dom7
             [ 3]
                                                 Χ
                                                                  Χ
    8+min7
             [ 0]
      8+b7
             [ 3]
                          Χ
                                    Χ
                                                           Χ
                       Χ
                                                           Χ
  8+maj7-5
             [ 3]
                                           Χ
  8+dom7-5
                                                           Χ
             [12]
                       Χ
                          Χ
                             Χ
                                 Χ
                                    Χ
                                           Χ
                                              Χ
                                                 Χ
                                                    Χ
                                                               Χ
                                                                  Χ
  8+min7-5
             [ 3]
```

I.Albrecht: 8va-Interval-Maximal 16-tone Scales

on 15ma w/o Diatonic Modes and Root-8va.

- 27 - of 79

```
F
                                                           G G#
                                                                   Α
                                                                          C
                                                                          *
                                                    S T#
                                                          U#
                                                                   Χ
                                                                          J
                                                               ٧
                                                        Χ
                                                               Χ
                                                                          Χ
                                                        Χ
                                                                          Χ
                                                           Χ
                                                               Χ
       3m
            [4]
                   Χ
                                         Х
                                                        Χ
                                                               Χ
                                                                          Χ
       3+
            [4]
                          Χ
                                                Χ
                                                        Χ
                                                               Χ
                                                               Χ
    maj7
              2]
                                                Χ
              31
                          Χ
                                                Χ
                                                        Χ
    dom7
                                                        Χ
    min7
            [ 3]
                   Χ
                                                                          Χ
       b7
            [ 3]
                                  Χ
                                                        Χ
                                                                   Χ
  maj7-5
            [4]
                                     Χ
                                                Χ
                                                               Χ
                                                                      Χ
                                     Χ
                                                Χ
                                                        Χ
  dom7-5
            [12]
                       Χ
                          Χ
                              Χ
                                  Χ
                                             Χ
                                                    Χ
                                                                   Χ
                                                                      Χ
  min7-5
            [5]
                   Χ
                                  Χ
                                                        Χ
                                                                   Χ
      8+5
            [ 3]
                       Χ
                              Χ
                                                    Χ
            [ 3]
                          Χ
                                                        Χ
      8+4
                                  Χ
    8 + 3 m
              11
                              Χ
    8+3+
            [ 3]
                       Χ
                              Χ
                                                    Χ
  8+maj7
            [ 1]
                       Χ
            [ 3]
                       Χ
                              Χ
  8+dom7
                                                    Χ
                              Χ
  8+min7
              11
    8+b7
            [ 3]
                              Χ
                                     Χ
                       Χ
8 + maj7 - 5
            [ 3]
                                             Χ
                                                                   Χ
8+dom7-5
                       Χ
            [12]
                          Χ
                              Χ
                                  Χ
                                     Χ
                                             Χ
                                                Χ
                                                    Χ
                                                        Χ
                                                           Χ
                                                                   Χ
                                                                      Χ
8+min7-5
            [ 3]
```

```
IX - 2
                           hFFFFhhFhhFFFFh
Intervals:
                 8
                            .+++++.++.++++
                  3–
                            +...+.+.+....+.
                 8+3-
                           +...++..+..+
                 5
                           +.+.+.+..+..
                 8+5
                           + . . + . . + . . + + . + . .
                  7
                           ++++++.+++++++
                 8+7
                            .+++++.++.++++
                  3
                            .+++++++.++++
                 8+3
                            .+++++.++.++++
                 maj7
                            +.+...+.++...+
                 8+mai7
                            ++....++.++...
                 6-
                            .+++++.++.+++
                 8+6-
                            .+++++.+++++++
                  6
                           ++.+..+..+..
                 8+6
                           +.+...+.+.
                 4
                           +..+.++..+..+..
                  8+4
                           +...+.+..+.+.
                 b5
                            .+++++.++.++++
                 8+b5
                            .+++++.++.+++
Root-Notes:
                    C C# Eb
                                 G
                                    A A#
                                           B C#
                                                 D Eb
                                                            G
                                                                      C
                                                  *
                    *
                                        *
                                                                      *
  Chord [#roots]
                   J`
                       Κ
                          L M# N# O#`P#
                                           0
                                              R`Sb`Tb Ub
                                                                      J
                                                          ۷b
                                                               Χ
             [6]
                          Χ
                                 Χ
          5
                   Χ
                                        Χ
                                                 Χ
                                                        Χ
                                                                      Χ
       5+8
             [ 3]
                          Χ
                                 Χ
                                                        Χ
             [6]
                              Χ
                                    Χ
                                                                      Χ
          4
                    Χ
                                        Х
                                                  Χ
                                                            Χ
         3m
             [4]
                    Χ
                                 Χ
                                        Х
                                                 Χ
                                                                      Χ
         3+
             [4]
                          Χ
                                 Χ
                                        Χ
                                                        Χ
                          Χ
      maj7
               2]
                                        Χ
               31
                          Χ
                                 Χ
      dom7
                                                        Χ
      min7
             [ 3]
                    Χ
                                 Χ
                                                 Χ
                                                                      Χ
         b7
             [ 3]
                                 Χ
                                           Χ
                                                               Χ
    maj7-5
             [4]
                          Χ
                                        Χ
                                              Χ
                                                                  Χ
                       Χ
                          Χ
                                 Χ
                                              Χ
                                                               Χ
    dom7-5
             [12]
                             Χ
                                    Χ
                                           Χ
                                                        Χ
                                                            Χ
    min7-5
             [5]
                                 Χ
                                           Χ
                                                 Χ
                                                               Χ
                              Χ
       8+5
             [ 3]
                                                     Χ
                                                            Χ
             [ 3]
                                                        Χ
       8+4
                                 Χ
                                                               Χ
      8 + 3 m
               11
                                                            Χ
                             Χ
      8+3+
             [ 3]
                                                     Χ
                                                            Χ
    8+maj7
                                                     Χ
             [ 1]
                              Χ
                                                     Χ
                                                            Χ
    8+dom7
             [ 3]
                                                            Χ
    8+min7
               11
      8+b7
             [ 3]
                                                            Χ
                                    Χ
                                                     Χ
  8 + maj7 - 5
             [ 3]
                       Χ
                                           Χ
```

X X

Χ

 $X \quad X \quad X \quad X$

8+dom7-5

8+min7-5

[12]

[3]

 $X \quad X \quad X \quad X$

Classical Mode Representants:

- I 0: C-G#-C#|C#- A- D| D-A#-D#|D#- B- E| E- C- F| F-C#-F#
 F#- D- G| G-D#-G#|G#- E- A| A- F-A#|A#-F#- B| B- G- C
- I 1: C- F- E|C#-F#- F| D- G-F#|D#-G#- G| E- A-G#| F-A#- A F#- B-A#| G- C- B|G#-C#- C| A- D-C#|A#-D#- D| B- E-D#
- I 2: C- B- G|C#- C-G#| D-C#- A|D#- D-A#| E-D#- B| F- E- C F#- F-C#| G-F#- D|G#- G-D#| A-G#- E|A#- A- F| B-A#-F#
- II 0: C- B- E|C#- C- F| D-C#-F#|D#- D- G| E-D#-G#| F- E- A F#- F-A#| G-F#- B|G#- G- C| A-G#-C#|A#- A- D| B-A#-D#
- II 1: C- F-C#|C#-F#- D| D- G-D#|D#-G#- E| E- A- F| F-A#-F#
 F#- B- G| G- C-G#|G#-C#- A| A- D-A#|A#-D#- B| B- E- C
- II 2: C-G#- G|C#- A-G#| D-A#- A|D#- B-A#| E- C- B| F-C#- C F#- D-C#| G-D#- D|G#- E-D#| A- F- E|A#-F#- F| B- G-F#
- III 0: C-D#- D|C#- E-D#| D- F- E|D#-F#- F| E- G-F#| F-G#- G F#- A-G#| G-A#- A|G#- B-A#| A- C- B|A#-C#- C| B- D-C#
- III 1: C- B- A|C#- C-A#| D-C#- B|D#- D- C| E-D#-C#| F- E- D F#- F-D#| G-F#- E|G#- G- F| A-G#-F#|A#- A- G| B-A#-G#
- III 2: C-A#-C#|C#- B- D| D- C-D#|D#-C#- E| E- D- F| F-D#-F#
 F#- E- G| G- F-G#|G#-F#- A| A- G-A#|A#-G#- B| B- A- C
 - IV 0: C-F#-C#|C#- G- D| D-G#-D#|D#- A- E| E-A#- F| F- B-F#
 F#- C- G| G-C#-G#|G#- D- A| A-D#-A#|A#- E- B| B- F- C
 - IV 1: C- G-F#|C#-G#- G| D- A-G#|D#-A#- A| E- B-A#| F- C- B F#-C#- C| G- D-C#|G#-D#- D| A- E-D#|A#- F- E| B-F#- F
 - IV 2: C- B- F|C#- C-F#| D-C#- G|D#- D-G#| E-D#- A| F- E-A# F#- F- B| G-F#- C|G#- G-C#| A-G#- D|A#- A-D#| B-A#- E
 - V 0: C-A#- A|C#- B-A#| D- C- B|D#-C#- C| E- D-C#| F-D#- D F#- E-D#| G- F- E|G#-F#- F| A- G-F#|A#-G#- G| B- A-G#
 - V 1: C- B- D|C#- C-D#| D-C#- E|D#- D- F| E-D#-F#| F- E- G F#- F-G#| G-F#- A|G#- G-A#| A-G#- B|A#- A- C| B-A#-C#
 - V 2: C-D#-C#|C#- E- D| D- F-D#|D#-F#- E| E- G- F| F-G#-F# F#- A- G| G-A#-G#|G#- B- A| A- C-A#|A#-C#- B| B- D- C

Classical Mode Representants:

- VI 0: C- B-F#|C#- C- G| D-C#-G#|D#- D- A| E-D#-A#| F- E- B F#- F- C| G-F#-C#|G#- G- D| A-G#-D#|A#- A- E| B-A#- F
- VI 1: C- G-C#|C#-G#- D| D- A-D#|D#-A#- E| E- B- F| F- C-F# F#-C#- G| G- D-G#|G#-D#- A| A- E-A#|A#- F- B| B-F#- C
- VI 2: C-F#- F|C#- G-F#| D-G#- G|D#- A-G#| E-A#- A| F- B-A# F#- C- B| G-C#- C|G#- D-C#| A-D#- D|A#- E-D#| B- F- E
- VII 0: C-F#- D|C#- G-D#| D-G#- E|D#- A- F| E-A#-F#| F- B- G F#- C-G#| G-C#- A|G#- D-A#| A-D#- B|A#- E- C| B- F-C#
- VII 1: C-G#-F#|C#- A- G| D-A#-G#|D#- B- A| E- C-A#| F-C#- B F#- D- C| G-D#-C#|G#- E- D| A- F-D#|A#-F#- E| B- G- F
- VII 2: C-A#- E|C#- B- F| D- C-F#|D#-C#- G| E- D-G#| F-D#- A F#- E-A#| G- F- B|G#-F#- C| A- G-C#|A#-G#- D| B- A-D#
- VIII 0: C-G#- D|C#- A-D#| D-A#- E|D#- B- F| E- C-F#| F-C#- G F#- D-G#| G-D#- A|G#- E-A#| A- F- B|A#-F#- C| B- G-C#
- VIII 1: C-F#- E|C#- G- F| D-G#-F#|D#- A- G| E-A#-G#| F- B- A F#- C-A#| G-C#- B|G#- D- C| A-D#-C#|A#- E- D| B- F-D#
- VIII 2: C-A#-F#|C#- B- G| D- C-G#|D#-C#- A| E- D-A#| F-D#- B F#- E- C| G- F-C#|G#-F#- D| A- G-D#|A#-G#- E| B- A- F
 - IX 0: C- E- D|C#- F-D#| D-F#- E|D#- G- F| E-G#-F#| F- A- G
 F#-A#-G#| G- B- A|G#- C-A#| A-C#- B|A#- D- C| B-D#-C#
 - IX 1: C-A#-G#|C#- B- A| D- C-A#|D#-C#- B| E- D- C| F-D#-C#
 F#- E- D| G- F-D#|G#-F#- E| A- G- F|A#-G#-F#| B- A- G
 - IX 2: C-A#- D|C#- B-D#| D- C- E|D#-C#- F| E- D-F#| F-D#- G F#- E-G#| G- F- A|G#-F#-A#| A- G- B|A#-G#- C| B- A-C#

```
1
        A- C- B is of form III - 0
2
       A-C-A\# is of form V-2
 3
       A-D-A\# is of form II-1
 4
        A-D-C\# is of form I-1
 5
       A-E-A\# is of form VI-1
       A- E-D\# is of form IV-1
6
7
       A- F- B is of form VIII - 0
8
       A-F-E is of form II-2
9
       A- F-A\# is of form I-\emptyset
       A- F-D\# is of form VII - 1
10
11
       A-G-B is of form IX-2
12
       A-G-F is of form IX-1
       A-G-A\# is of form III - 2
13
14
       A-G-C\# is of form VII-2
15
       A- G-D# is of form VIII - 2
       A-G-F\# is of form V-\emptyset
16
       A-C\#-B is of form IX-0
17
18
        A-D#- B is of form VII - 0
19
        A-D\#-D is of form VI-2
       A-D\#-A\# is of form IV-0
20
       A-D\#-C\# is of form VIII - 1
21
22
       A-G\#-B is of form V-1
23
       A-G\#-D is of form IV-2
24
       A-G\#-E is of form I-2
       A-G\#-C\# is of form II-0
25
26
       A-G\#-D\# is of form VI-\emptyset
27
       A-G\#-F\# is of form III - 1
       B-A-C is of form III-2
28
29
        B-A-F is of form VIII-2
30
        B-A-G is of form IX-1
        B-A-C\# is of form IX-2
31
        B- A-D# is of form VII - 2
32
33
        B- A-G\# is of form V-\emptyset
34
        B-D-C is of form V-2
        B- D-C# is of form III - 0
35
        B-E-C is of form II-1
36
37
        B- E-D\# is of form I-1
38
        B-F-C is of form IV-0
        B-F-E is of form VI-2
39
        B- F-C# is of form VII - 0
40
41
        B- F-D# is of form VIII - 1
42
        B-G-C is of form I-0
43
       B-G-F is of form VII-1
44
        B- G-C# is of form VIII - 0
45
        B-G-F\# is of form II-2
        B-A\#-E is of form IV-2
46
       B-A\#-F is of form VI-0
47
48
       B-A\#-C\# is of form V-1
```

```
49
        B-A\#-D\# is of form II-0
        B-A\#-F\# is of form I-2
50
51
        B-A\#-G\# is of form III - 1
52
        B-D\#-C\# is of form IX - 0
53
        B-F\#-C is of form VI-1
        B-F\#-F is of form IV-1
54
        C- B- A is of form III - 1
55
56
        C-B-D is of form V-1
57
        C- B- E is of form II - 0
        C-B-F is of form IV-2
58
59
        C-B-G is of form I-2
60
        C- B-F\# is of form VI-0
        C-E-D is of form IX-0
61
62
        C-F-E is of form I-1
        C- F-C\# is of form II - 1
63
        C- G-C\# is of form VI-1
64
        C-G-F\# is of form IV-1
65
66
        C-A\#-A is of form V-\emptyset
67
        C-A\#-D is of form IX-2
        C-A\#-E is of form VII-2
68
        C-A\#-C\# is of form III - 2
69
70
        C-A#-F# is of form VIII - 2
71
        C-A\#-G\# is of form IX-1
72
        C-D#- D is of form III - 0
        C-D\#-C\# is of form V-2
73
74
        C-F#- D is of form VII - 0
75
        C-F#- E is of form VIII - 1
        C-F\#-F is of form VI-2
76
77
        C-F\#-C\# is of form IV-0
        C-G#- D is of form VIII - 0
78
79
        C-G\#-G is of form II-2
        C-G\#-C\# is of form I-\emptyset
80
81
        C-G\#-F\# is of form VII - 1
82
        D-A-D\# is of form VI-1
        D- A-G\# is of form IV-1
83
        D-C-B is of form V-\emptyset
84
85
        D-C-E is of form IX-2
86
        D- C-A\# is of form IX - 1
87
        D- C-D# is of form III - 2
        D- C-F\# is of form VII-2
88
89
        D- C-G# is of form VIII - 2
90
        D- F- E is of form III - 0
91
        D- F-D\# is of form V-2
92
        D- G-D\# is of form II-1
        D- G-F\# is of form I-1
93
        D-A\#-A is of form II-2
94
        D-A#- E is of form VIII - 0
95
96
        D-A\#-D\# is of form I-\emptyset
```

```
97
         D-A\#-G\# is of form VII - 1
         D-C\#-A is of form I-2
98
99
         D-C#- B is of form III - 1
100
         D-C\#-E is of form V-1
         D-C\#-G is of form IV-2
101
102
         D-C\#-F\# is of form II-0
         D-C\#-G\# is of form VI-\emptyset
103
104
         D-F\#-E is of form IX-0
105
         D-G#- E is of form VII - 0
106
         D-G\#-G is of form VI-2
         D-G\#-D\# is of form IV-0
107
108
         D-G#-F# is of form VIII - 1
         E-A-F is of form II-1
109
110
         E-A-G\# is of form I-1
         E-B-F is of form VI-1
111
         E- B-A\# is of form IV-1
112
         E-C-B is of form II-2
113
114
         E-C-F is of form I-0
115
         E- C-A# is of form VII - 1
         E- C-F# is of form VIII - 0
116
         E-D-C is of form IX-1
117
         E- D- F is of form III - 2
118
         E- D-A# is of form VIII - 2
119
120
         E-D-C\# is of form V-0
         E-D-F\# is of form IX-2
121
         E-D-G\# is of form VII-2
122
123
         E-G-F is of form V-2
         E-G-F\# is of form III-0
124
         E-A\#-A is of form VI-2
125
126
         E-A\#-F is of form IV-0
         E-A#-F# is of form VII - 0
127
         E-A#-G# is of form VIII - 1
128
129
         E-D\#-A is of form IV-2
130
         E-D\#-B is of form I-2
131
         E-D\#-A\# is of form VI-\emptyset
         E-D#-C# is of form III - 1
132
133
         E-D\#-F\# is of form V-1
134
         E-D\#-G\# is of form II-0
         E-G\#-F\# is of form IX-0
135
         F-A-G is of form IX-0
136
         F- B- A is of form VIII - 1
137
         F- B- G is of form VII - 0
138
         F-B-A\# is of form VI-2
139
         F- B-F\# is of form IV- 0
140
         F-C-B is of form IV-1
141
         F- C-F\# is of form VI-1
142
         F-E-A is of form II-0
143
         F- E- B is of form VI - 0
144
```

```
145
         F-E-C is of form I-2
         F- E- D is of form III - 1
146
147
         F-E-G is of form V-1
148
         F-E-A\# is of form IV-2
         F-A\#-A is of form I-1
149
150
         F-A\#-F\# is of form II-1
         F-C#- B is of form VII - 1
151
152
         F-C\#-C is of form II-2
153
         F-C#- G is of form VIII - 0
154
         F-C\#-F\# is of form I-\emptyset
         F-D\#-A is of form VII-2
155
         F-D#- B is of form VIII - 2
156
         F-D\#-D is of form V-0
157
158
         F-D\#-G is of form IX-2
         F-D\#-C\# is of form IX-1
159
         F-D#-F# is of form III - 2
160
         F-G#- G is of form III - 0
161
162
         F-G\#-F\# is of form V-2
163
         G-B-A is of form IX-0
164
         G-C-B is of form I-1
         G- C-G\# is of form II - 1
165
         G- D-C\# is of form IV-1
166
167
         G-D-G\# is of form VI-1
168
         G-F-A is of form IX-2
         G-F-B is of form VII-2
169
         G-F-E is of form V-0
170
         G-F-C\# is of form VIII - 2
171
         G-F-D\# is of form IX-1
172
173
         G- F-G\# is of form III - 2
174
         G-A\#-A is of form III-0
         G-A\#-G\# is of form V-2
175
         G-C\#- A is of form VII - 0
176
177
         G-C#- B is of form VIII - 1
178
         G-C\#-C is of form VI-2
179
         G-C\#-G\# is of form IV-0
         G-D#- A is of form VIII - 0
180
181
         G-D\#-D is of form II-2
182
         G-D\#-C\# is of form VII - 1
         G-D\#-G\# is of form I-\emptyset
183
         G-F\#-A is of form V-1
184
         G-F\#-B is of form II-0
185
         G-F\#-C is of form IV-2
186
         G-F\#-D is of form I-2
187
         G-F#- E is of form III - 1
188
         G-F\#-C\# is of form VI-\emptyset
189
        A\#-A-C is of form V-1
190
        A\#-A-D is of form II-0
191
        A\#-A-E is of form VI-0
192
```

```
193
        A\#-A-F is of form I-2
        A\#-A-G is of form III -1
194
195
        A\#-A-D\# is of form IV-2
196
        A\#-D-C is of form IX-0
197
        A\#-E-B is of form IV-0
198
        A#- E- C is of form VII - 0
        A\#-E-D is of form VIII-1
199
200
        A\#-E-D\# is of form VI-2
201
        A\#-F-B is of form VI-1
        A\#-F-E is of form IV-1
202
203
        A\#-C\#-B is of form V-2
204
        A\#-C\#-C is of form III-0
        A\#-D\#-B is of form II-1
205
206
        A\#-D\#-D is of form I-1
        A\#-F\#-B is of form I-0
207
        A\#-F\#-C is of form VIII-0
208
        A\#-F\#-E is of form VII-1
209
210
        A\#-F\#-F is of form II-2
211
        A\#-G\#-B is of form III -2
212
        A\#-G\#-C is of form IX-2
        A\#-G\#-D is of form VII-2
213
        A#-G#- E is of form VIII - 2
214
215
        A\#-G\#-G is of form V-O
216
        A\#-G\#-F\# is of form IX-1
        C\#-A-D is of form I-\emptyset
217
218
        C\#-A-G is of form VII-1
219
        C#- A-D# is of form VIII - 0
        C#- A-G# is of form II - 2
220
        C\#-B-A is of form IX-1
221
222
        C\#-B-D is of form III-2
        C\#-B-F is of form VII-2
223
        C#- B- G is of form VIII - 2
224
225
        C\#-B-A\# is of form V-\emptyset
226
        C\#-B-D\# is of form IX-2
227
        C\#-C-F is of form II-0
        C\#-C-G is of form VI-0
228
229
        C\#-C-A\# is of form III-1
230
        C\#-C-D\# is of form V-1
231
        C#-C-F\# is of form IV-2
        C\#-C-G\# is of form I-2
232
233
        C\#-E-D is of form V-2
234
        C#- E-D# is of form III - 0
235
        C\#-F-D\# is of form IX-\emptyset
        C#-G-D is of form IV-0
236
237
        C#- G- F is of form VIII - 1
        C#- G-D# is of form VII - 0
238
        C\#-G-F\# is of form VI-2
239
        C\#-F\#-D is of form II-1
240
```

Classical Representant to Type and Mode Conversion Chart:

```
241
        C\#-F\#-F is of form I-1
        C\#-G\#-D is of form VI-1
242
243
        C\#-G\#-G is of form IV-1
244
        D\#-A-E is of form IV-0
245
        D#- A- F is of form VII - 0
246
        D#- A- G is of form VIII - 1
        D\#-A-G\# is of form VI-2
247
        D\#-B-A is of form VII-1
248
249
        D\#-B-E is of form I-\emptyset
        D#- B- F is of form VIII - 0
250
251
        D\#-B-A\# is of form II-2
252
        D\#-D-A is of form VI-0
        D\#-D-C is of form III-1
253
254
        D\#-D-F is of form V-1
255
        D\#-D-G is of form II-0
        D\#-D-A\# is of form I-2
256
        D\#-D-G\# is of form IV-2
257
258
        D\#-G-F is of form IX-\emptyset
259
        D\#-A\#-A is of form IV-1
260
        D\#-A\#-E is of form VI-1
        D#-C#- A is of form VIII - 2
261
        D\#-C\#-B is of form IX-1
262
        D\#-C\#-C is of form V-0
263
264
        D#-C#- E is of form III - 2
        D\#-C\#-F is of form IX-2
265
266
        D\#-C\#-G is of form VII-2
        D\#-F\#-E is of form V-2
267
        D\#-F\#-F is of form III-0
268
269
        D\#-G\#-E is of form II-1
        D\#-G\#-G is of form I-1
270
        F#- A- G is of form V-2
271
272
        F#- A-G# is of form III - 0
273
        F\#-B-G is of form II-1
274
        F#- B-A# is of form I - 1
275
        F\#-C-B is of form VI-2
        F#-C-G is of form IV-0
276
277
        F#- C-A# is of form VIII - 1
278
        F#- C-G# is of form VII - 0
279
        F\#-D-C is of form VII-1
        F#- D- G is of form I-\emptyset
280
        F\#-D-C\# is of form II-2
281
282
        F#- D-G# is of form VIII - 0
        F#- E- C is of form VIII - 2
283
        F#-E-D is of form IX-1
284
        F#-E-G is of form III-2
285
        F#- E-A# is of form VII - 2
286
        F#- E-D# is of form V - 0
287
        F#- E-G# is of form IX - 2
288
```

Classical Representant to Type and Mode Conversion Chart:

```
F#- F- B is of form IV - 2
289
290
        F#-F-C is of form VI-0
291
        F#-F-A# is of form II - 0
292
        F#- F-C# is of form I-2
        F#- F-D# is of form III - 1
293
        F#- F-G# is of form V-1
294
295
        F\#-A\#-G\# is of form IX-\emptyset
        F\#-C\#-C is of form IV-1
296
        F\#-C\#-G is of form VI-1
297
298
        G#-B-A is of form V-2
299
        G#-B-A# is of form III - 0
        G#-C-A# is of form IX - 0
300
301
        G#-D-A is of form IV-0
        G#- D- C is of form VIII - 1
302
        G\#-D-A\# is of form VII-0
303
        G#-D-C# is of form VI-2
304
305
        G#-E-A is of form I-0
306
        G#-E-D is of form VII-1
        G#- E-A# is of form VIII - 0
307
        G#- E-D# is of form II - 2
308
        G#-G-C is of form II-0
309
310
        G#-G-D is of form VI-0
311
        G#-G-F is of form III-1
        G#- G-A# is of form V-1
312
313
        G#-G-C# is of form IV-2
314
        G#- G-D# is of form I-2
        G\#-C\#-A is of form II-1
315
316
        G\#-C\#-C is of form I-1
        G\#-D\#-A is of form VI-1
317
        G\#-D\#-D is of form IV-1
318
        G\#-F\#-A is of form III-2
319
320
        G\#-F\#-C is of form VII-2
321
        G\#-F\#-D is of form VIII-2
322
        G\#-F\#-E is of form IX-1
        G\#-F\#-F is of form V-\emptyset
323
324
        G\#-F\#-A\# is of form IX-2
```

Quintadecimal Mode Representants:

```
I - 0 J- 0- R| K- P-R#|K#-P#- S| L- Q- T| M-Q#-T#|M#- R- U N-R#-U#|0b- S- V| 0- T- X| P-T#-X#|P#- U- Y| Q-Vb- J Q#- V-J#| R- X-K#|Sb-Yb- L| S- Y-L#| T- J-M#|Ub- K- N U-K#-N#|Vb- L- 0| V- M- P| X-M#-P#|Yb- N- Q| Y-N#-Q#
```

- I 1 J-M#- T| K- N-Ub|K#-N#- U| L- 0-Vb| M- P- V|M#-P#- X N- Q-Yb|N#-Q#- Y| 0- R- J| P-R#- K|P#- S-K#| Q- T- L Q#-T#- M| R- U-M#|R#-U#- N| S- V-0b| T- X- 0|T#-X#- P U- Y-P#|Vb- J- Q| V-J#-Q#| X-K#- R|Yb- L-Sb| Y-L#- S
- I 2 J- Q-Vb|J#-Q#- V|K#- R- X| L-Sb-Yb|L#- S- Y|M#- T- J
 N-Ub- K|N#- U-K#| O-Vb- L| P- V- M|P#- X-M#| Q-Yb- N
 Q#- Y-N#| R- J- 0|R#- K- P| S-K#-P#| T- L- Q|T#- M-Q#
 U-M#- R|U#- N-R#| V-0b- S| X- 0- T|X#- P-T#| Y-P#- U
- II 0 J- Q- T| K-Rb-T#|K#- R- U| L-Sb-Vb| M- S- V|M#- T- X N-Ub-Yb|N#- U- Y| 0-Vb- J| P-Xb- K|P#- X-K#| Q-Yb- L Q#- Y- M| R- J-M#|Sb- K- N| S-Lb-N#| T- L- 0|T#- M- P U-Nb-P#|Vb- N- Q| V-0b-Q#| X- 0- R|Yb- P-Sb| Y-P#- S
- II 1 J-M#- R| K- N-Sb|Lb-N#- S| L- 0- T| M- P-T#|Nb-P#- U
 N- Q-Vb|0b-Q#- V| 0- R- X| P-Sb-Yb|P#- S- Y| Q- T- J
 Rb-T#- K| R- U-K#|Sb-Vb- L| S- V- M| T- X-M#|Ub-Yb- N
 U- Y-N#|Vb- J- 0|Xb- K- P| X-K#-P#|Yb- L- Q| Y- M-Q#
- II 2 J- 0-Vb| K- P-Xb|K#-P#- X| L- Q-Yb| M-Q#- Y|M#- R- J N-Sb- K|N#- S-Lb| 0- T- L| P-T#- M|P#- U-Nb| Q-Vb- N Q#- V-0b| R- X- 0|Sb-Yb- P| S- Y-P#| T- J- Q|T#- K-Rb U-K#- R|Vb- L-Sb| V- M- S| X-M#- T|Yb- N-Ub| Y-N#- U
- III 0 J- L-Sb|J#-L#- S|K#-M#- T| L- N-Ub| M-N#- U|M#- 0-Vb N- P- V|N#-P#- X| 0- Q-Yb| P-Q#- Y|P#- R- J| Q-R#- K Q#- S-Lb| R- T- L|R#-T#- M| S- U-M#| T-U#- N|T#- V-0b U- X- 0|Vb-Yb- P| V- Y-P#| X- J- Q|Yb- K-Rb| Y-K#- R
- III 1 J- Q- X| K-Rb-Yb|K#- R- Y| L-Sb- J|L#- S-J#|M#- T-K#
 N-Ub- L|N#- U- M| O-Vb-M#| P- V- N|P#- X-N#| Q-Yb- O
 Q#- Y- P| R- J-P#|R#- K- Q| S-Lb-Q#| T- L- R|T#- M-R#
 U-M#- S|U#- N- T| V-0b-T#| X- O- U|Yb- P-Vb| Y-P#- V
- III 2 J-P#- R| K- Q-R#|Lb-Q#- S| L- R- T| M-R#-T#|M#- S- U N- T-U#|0b-T#- V| 0- U- X| P-Vb-Yb|P#- V- Y| Q- X- J Rb-Yb- K| R- Y-K#|Sb- J- L| S-J#-L#| T-K#-M#|Ub- L- N U- M-N#|Vb-M#- 0| V- N- P| X-N#-P#|Yb- 0- 0| Y- P-0#

Quintadecimal Mode Representants:

- IV 0 J- N- R | K-N#-R# | K#- 0- S | L- P- T | M-P#-T# | M#- Q- U N-Q#-U# | 0b- R- V | 0-Sb- X | P- S-X# | P#- T- Y | Q-T#- J Q#- U-J# | R-Vb-K# | Sb- V- L | S- X-L# | T-Yb-M# | Ub-Jb- N U- J-N# | Vb- K- 0 | V-K#-0# | X- L-P# | Yb- M- Q | Y-M#-Q#
- IV 1 J-N#- U| K- 0-Vb|K#-0#- V| L-P#- X| M- Q-Yb|M#-Q#- Y
 N- R- J|N#-R#- K| 0- S-K#| P- T- L|P#-T#- M| Q- U-M#
 Q#-U#- N| R- V-0b|Sb- X- 0| S-X#- P| T- Y-P#|T#- J- Q
 U-J#-Q#|Vb-K#- R| V- L-Sb| X-L#- S|Yb-M#- T|Jb- N-Ub
- IV 2 J- Q-T#|J#-Q#- U|K#- R-Vb| L-Sb- V|L#- S- X|M#- T-Yb N-Ub-Jb|N#- U- J| O-Vb- K|O#- V-K#|P#- X- L| Q-Yb- M Q#- Y-M#| R- J- N|R#- K-N#| S-K#- 0| T- L- P|T#- M-P# U-M#- Q|U#- N-Q#| V-0b- R| X- 0-Sb|X#- P- S| Y-P#- T
- V 0 J-P#- X| K- Q-Yb|K#-Q#- Y| L- R- J| M-Sb- K|M#- S-K#
 N- T- L|N#-T#- M| 0- U-M#| P-Vb- N|P#- V-0b| Q- X- 0
 Q#-X#- P| R- Y-P#|Sb- J- Q| S- K-Q#| T-K#- R|T#- L-Sb
 U- M- S|Vb-M#- T| V- N-T#| X-N#- U|Yb- 0-Vb|Jb- P-Xb
- V 1 J- Q-Sb| K-Q#- S|K#- R- T| L-Sb-T#| M- S- U|M#- T-Vb N-T#- V|N#- U- X| 0-Vb-Yb| P-Xb-Jb|P#- X- J| Q-Yb- K Q#- Y-K#| R- J- L|Sb- K- M| S-K#-M#| T- L- N|T#- M-N# U-M#- 0|Vb- N- P| V-0b-P#| X- 0- Q|X#- P-Q#| Y-P#- R
- V 2 J- L- R| K- M-Sb|K#-M#- S| L- N- T| M-N#-T#|M#- 0- U
 N- P-Vb|0b-P#- V| 0- Q- X| P-Q#-X#|P#- R- Y| Q-Sb- J
 Q#- S- K| R- T-K#|Sb-T#- L| S- U- M| T-Vb-M#|T#- V- N
 U- X-N#|Vb-Yb- 0|Xb-Jb- P| X- J-P#|Yb- K- Q| Y-K#-Q#
- VI 0 J- Q- U| K-Rb-Vb|K#- R- V| L-Sb- X| M-Tb-Yb|M#- T- Y
 N-Ub- J|N#- U-J#| 0-Vb-K#| P-Xb- L|P#- X- M| Q-Yb-M#
 Q#- Y- N| R- J-N#|Sb- K- 0| S-Lb- P| T- L-P#|T#- M- Q
 U-Nb-Q#|Vb- N- R| V-0b-R#| X- 0- S|Yb- P- T| Y-Qb-T#
- VI 1 J-N#- R| K- 0-Sb|Lb- P- S| L-P#- T| M- Q-T#|Nb-Q#- U N- R-Vb|0b-R#- V| 0- S- X| P- T-Yb|Qb-T#- Y| Q- U- J Rb-Vb- K| R- V-K#|Sb- X- L|Tb-Yb- M| T- Y-M#|Ub- J- N U-J#-N#|Vb-K#- 0|Xb- L- P| X- M-P#|Yb-M#- Q| Y- N-Q#
- VI 2 J- N-Ub|J#-N#- U|K#- 0-Vb| L- P-Xb| M-P#- X|M#- Q-Yb N-Q#- Y|N#- R- J| 0-Sb- K| P- S-Lb|P#- T- L| Q-T#- M Q#- U-Nb| R-Vb- N|R#- V-0b| S- X- 0| T-Yb- P|T#- Y-Qb U- J- Q|Vb- K-Rb| V-K#- R| X- L-Sb|Yb- M-Tb| Y-M#- T

Quintadecimal Mode Representants:

- VII 0 J- N-Sb| K-N#- S|K#- 0- T| L- P-T#| M-P#- U|M#- Q-Vb N-Q#- V|N#- R- X| 0-Sb-Yb| P- S- Y|P#- T- J| Q-T#- K Q#- U-K#| R-Vb- L|R#- V- M| S- X-M#| T-Yb- N|T#- Y-N# U- J- 0|Vb- K- P| V-K#-P#| X- L- Q|X#- M-Q#| Y-M#- R
- VII 1 J- 0- U| K- P-Vb|K#-P#- V| L- Q- X| M-Q#-X#|M#- R- Y
 N-Sb- J|N#- S- K| 0- T-K#| P-T#- L|P#- U- M| Q-Vb-M#
 Q#- V- N| R- X-N#|Sb-Yb- 0| S- Y- P| T- J-P#|T#- K- Q
 U-K#-Q#|Vb- L- R| V- M-R#| X-M#- S|Yb- N- T| Y-N#-T#
- VII 2 J-P#- T| K- Q-T#|K#-Q#- U| L- R-Vb| M-R#- V|M#- S- X
 N- T-Yb|N#-T#- Y| 0- U- J| P-Vb- K|P#- V-K#| Q- X- L
 Q#-X#- M| R- Y-M#|Sb- J- N| S- K-N#| T-K#- 0|T#- L- P
 U- M-P#|Vb-M#- 0| V- N-0#| X-N#- R|Yb- 0-Sb| Y- P- S
- VIII 0 J- 0-Sb| K- P- S|K#-P#- T| L- Q-T#| M-Q#- U|M#- R-Vb N-R#- V|N#- S- X| 0- T-Yb| P-T#- Y|P#- U- J| Q-Vb- K Q#- V-K#| R- X- L|Sb-Yb- M| S- Y-M#| T- J- N|T#- K-N# U-K#- 0|Vb- L- P| V- M-P#| X-M#- Q|X#- N-Q#| Y-N#- R
- VIII 1 J- N- T| K-N#-T#|K#- 0- U| L- P-Vb| M-P#- V|M#- Q- X N-Q#-X#|N#- R- Y| 0-Sb- J| P- S- K|P#- T-K#| Q-T#- L Q#- U- M| R-Vb-M#|R#- V- N| S- X-N#| T-Yb- 0|T#- Y- P U- J-P#|Vb- K- Q| V-K#-Q#| X- L- R|Yb- M-Sb| Y-M#- S
- VIII 2 J-P#- U| K- Q-Vb|K#-Q#- V| L- R- X| M-Sb-Yb|M#- S- Y
 N- T- J|N#-T#- K| 0- U-K#| P-Vb- L|P#- V- M| Q- X-M#
 Q#-X#- N| R- Y-N#|Sb- J- 0| S- K- P| T-K#-P#|T#- L- Q
 U- M-Q#|Vb-M#- R| V- N-R#| X-N#- S|Yb- 0- T| Y- P-T#
 - IX 0 J- M-Sb|J#-M#- S|K#- N- T| L-N#-T#| M- 0- U|M#- P-Vb N-P#- V|N#- Q- X| 0-Q#-X#| P- R- Y|P#-Sb- J| Q- S- K Q#- T-K#| R-T#- L|R#- U- M| S-Vb-M#| T- V- N|T#- X-N# U-Yb- 0|Vb-Jb- P| V- J-P#| X- K- Q|X#-K#-Q#| Y- L- R
 - IX 1 J-P#- V | K- Q- X | K#-Q#-X# | L- R- Y | M-Sb- J | M#- S-J#
 N- T-K# | N#-T#- L | O- U- M | P-Vb-M# | P#- V- N | Q- X-N#
 Q#-X#- O | R- Y- P | Sb- J-P# | S- K- Q | T-K#-Q# | T#- L- R
 U- M-R# | Vb-M#- S | V- N- T | X-N#-T# | Yb- O- U | Jb- P-Vb
 - IX 2 J-P#-Sb| K- Q- S|K#-Q#- T| L- R-T#| M-R#- U|M#- S-Vb N- T- V|N#-T#- X| O- U-Yb| P-Vb-Jb|P#- V- J| Q- X- K Q#-X#-K#| R- Y- L|Sb- J- M| S-J#-M#| T-K#- N|T#- L-N# U- M- 0|Vb-M#- P| V- N-P#| X-N#- Q|X#- 0-Q#| Y- P- R
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```
J-L-R is of form V-2
1
2
       J- L-Sb is of form III - 0
 3
       J-M-Sb is of form IX-0
 4
       J-N-R is of form IV-0
 5
       J- N- T is of form VIII - 1
       J- N-Sb is of form VII - 0
6
7
       J-N-Ub is of form VI-2
8
       J- O- R is of form I- O
       J- O- U is of form VII - 1
9
       J- O-Sb is of form VIII - 0
10
11
       J- O-Vb is of form II - 2
       J-Q-T is of form II-0
12
       J-Q-U is of form VI-Q
13
14
       J-Q-X is of form III-1
15
       J-Q-Sb is of form V-1
       J-Q-T\# is of form IV-2
16
       J- Q-Vb is of form I- 2
17
18
       J-M\#-R is of form II-1
19
       J-M\#-T is of form I-1
       J-N\#-R is of form VI-1
20
       J-N\#-U is of form IV-1
21
22
       J-P#- R is of form III - 2
23
       J-P#- T is of form VII - 2
24
       J-P#- U is of form VIII - 2
       J-P\#-V is of form IX-1
25
26
       J-P\#-X is of form V-0
27
       J-P\#-Sb is of form IX - 2
       K-M-Sb is of form V-2
28
29
       K-N-Sb is of form II-1
30
       K-N-Ub is of form I-1
       K- 0-Sb is of form VI-1
31
       K- 0-Vb is of form IV - 1
32
33
       K- P- S is of form VIII - 0
34
       K- P-R# is of form I - 0
       K- P-Vb is of form VII - 1
35
       K-P-Xb is of form II-2
36
37
       K-Q-S is of form IX-2
38
       K-Q-X is of form IX-1
       K-Q-R\# is of form III - 2
39
       K-Q-T\# is of form VII-2
40
41
       K-Q-Vb is of form VIII-2
42
       K-Q-Yb is of form V-Q
       K-N\#-S is of form VII-0
43
44
       K-N\#-R\# is of form IV-0
45
       K-N\#-T\# is of form VIII-1
       K-0\#-S is of form V-1
46
       K-Rb-T# is of form II - 0
47
48
       K-Rb-Vb is of form VI - 0
```

```
K-Rb-Yb is of form III - 1
49
50
        L-N-T is of form V-2
51
        L- N-Ub is of form III - 0
52
        L- 0- T is of form II- 1
53
        L- 0-Vb is of form I-1
        L-P-T is of form IV-0
54
55
        L- P-T# is of form VII - 0
56
        L- P-Vb is of form VIII - 1
        L- P-Xb is of form VI - 2
57
        L-Q-T is of form I-Q
58
59
        L-Q-X is of form VII-1
        L- Q-T# is of form VIII - 0
60
        L- O-Yb is of form II - 2
61
62
        L-R-J is of form V-0
        L- R- T is of form III - 2
63
        L- R- X is of form VIII - 2
64
        L-R-Y is of form IX-1
65
66
        L- R-T\# is of form IX - 2
67
        L- R-Vb is of form VII - 2
        L-N\#-T\# is of form IX-0
68
        L-P\#-T is of form VI-1
69
70
        L-P\#-X is of form IV-1
71
        L-Sb- J is of form III - 1
72
        L-Sb-V is of form IV-2
        L-Sb-X is of form VI-0
73
74
        L-Sb-T\# is of form V-1
75
        L-Sb-Vb is of form II - 0
        L-Sb-Yb is of form I-2
76
77
       M- 0- U is of form IX - 0
       M-\ P-\ V is of form I -\ 1
78
79
       M-P-T\# is of form II-1
       M- 0-T\# is of form VI-1
80
81
       M-Q-Yb is of form IV-1
82
       M-S-U is of form V-1
       M-S-V is of form II-0
83
       M-N\#-U is of form III-0
84
85
       M-N\#-T\# is of form V-2
86
       M-P#- U is of form VII - 0
       M-P\#-V is of form VIII-1
87
       M-P\#-X is of form VI-2
88
89
       M-P\#-T\# is of form IV-0
90
       M-Q\#-U is of form VIII-0
91
       M-Q\#-Y is of form II-2
92
       M-Q\#-T\# is of form I-\emptyset
93
       M-Q\#-X\# is of form VII-1
       M-R\#-U is of form IX-2
94
       M-R\#-V is of form VII-2
95
96
       M-R\#-T\# is of form III - 2
```

```
M-Sb-J is of form IX-1
97
        M-Sb-K is of form V-0
98
99
        M-Sb-Yb is of form VIII - 2
100
        M-Tb-Yb is of form VI - 0
        N-P-V is of form III-0
101
        N- P-Vb is of form V-2
102
        N- Q-Vb is of form II-1
103
        N- Q-Yb is of form I - 1
104
105
        N-R-J is of form IV-1
        N- R-Vb is of form VI- 1
106
107
        N- T- J is of form VIII - 2
108
        N-T-L is of form V-0
        N-T-V is of form IX-2
109
110
        N- T-K\# is of form IX-1
        N- T-U\# is of form III - 2
111
        N- T-Yb is of form VII - 2
112
        N-P\#-V is of form IX-0
113
114
        N-Q\#-V is of form VII-0
115
        N-Q\#-Y is of form VI-2
116
        N-Q\#-U\# is of form IV-0
        N-0\#-X\# is of form VIII - 1
117
        N-R#- V is of form VIII - 0
118
119
        N-R\#-U\# is of form I-0
120
        N-Sb- J is of form VII - 1
        N-Sb-K is of form II-2
121
        N-T\#-V is of form V-1
122
123
        N-Ub- J is of form VI - 0
        N-Ub-K is of form I-2
124
125
        N-Ub- L is of form III - 1
        N-Ub-Jb is of form IV-2
126
        N-Ub-Yb is of form II - 0
127
        0-Q-X is of form V-2
128
129
        0- Q-Yb is of form III - 0
130
        0-R-J is of form I-1
131
        0-R-X is of form II -1
        0-S-X is of form VI-1
132
133
        0-S-K\# is of form IV-1
134
        0- T- L is of form II - 2
        0-T-X is of form I-0
135
        0- T-K# is of form VII - 1
136
        0- T-Yb is of form VIII - 0
137
        0- U- J is of form VII - 2
138
        0- U- M is of form IX-1
139
        0- U- X is of form III-2
140
        0- U-K# is of form VIII - 2
141
        0- U-M\# is of form V- 0
142
        0- U-Yb is of form IX - 2
143
        0-Q\#-X\# is of form IX - 0
144
```

```
0-Sb- J is of form VIII - 1
145
         0-Sb-K is of form VI-2
146
147
         0-Sb-X is of form IV-0
148
         0-Sb-Yb is of form VII - 0
         0-Vb-J is of form II-0
149
         0-Vb-K is of form IV-2
150
         0-Vb-L is of form I-2
151
152
         0-Vb-K\# is of form VI-0
153
         0-Vb-M\# is of form III - 1
         0-Vb-Yb is of form V-1
154
155
         P-R-Y is of form IX-0
156
         P- S- K is of form VIII - 1
         P- S- Y is of form VII - 0
157
158
         P-S-Lb is of form VI-2
         P-S-X\# is of form IV-0
159
         P-T-L is of form IV-1
160
         P-T-Yb is of form VI-1
161
162
         P-V-M is of form I-2
163
         P- V- N is of form III - 1
164
         P-Q\#-Y is of form III-0
         P-0\#-X\# is of form V-2
165
         P-R\#-K is of form I-1
166
167
         P-Sb-Yb is of form II - 1
168
         P-T#- L is of form VII - 1
         P-T\#-M is of form II-2
169
         P-T#- Y is of form VIII - 0
170
         P-T\#-X\# is of form I-\emptyset
171
         P-Vb- K is of form VII - 2
172
173
         P-Vb- L is of form VIII - 2
174
         P-Vb-N is of form V-0
         P-Vb-Jb is of form IX - 2
175
         P-Vb-M\# is of form IX - 1
176
177
         P-Vb-Yb is of form III - 2
178
         P-Xb- K is of form II - 0
         P-Xb-L is of form VI-0
179
         P-Xb-Jb is of form V-1
180
181
         Q-S-K is of form IX-0
182
         0-T-J is of form II-1
         0- T- L is of form I - 1
183
         Q-U-J is of form VI-1
184
         0- U-M# is of form IV-1
185
         0- X- J is of form III - 2
186
         Q-X-K is of form IX-2
187
         Q-X-L is of form VII-2
188
         0-X-0 is of form V-0
189
         Q-X-M\# is of form VIII - 2
190
        Q- X-N# is of form IX - 1
191
         Q-R#- K is of form III - 0
192
```

```
193
         0-Sb-J is of form V-2
         Q-T\#-J is of form IV-0
194
195
         Q-T#- K is of form VII - 0
196
         0-T#- L is of form VIII - 1
197
         Q-T\#-M is of form VI-2
198
         Q-Vb-J is of form I-0
         Q-Vb- K is of form VIII - 0
199
200
         Q-Vb-N is of form II-2
         Q-Vb-M\# is of form VII - 1
201
         Q-Yb-K is of form V-1
202
203
         Q-Yb- L is of form II - 0
204
         Q-Yb-M is of form IV-2
         Q-Yb-N is of form I-2
205
206
         0-Yb-0 is of form III -1
         Q-Yb-M# is of form VI - 0
207
         R-J-L is of form V-1
208
         R-J-N is of form IV-2
209
210
         R-J-0 is of form I-2
211
         R- J-M# is of form II - 0
         R- J-N\# is of form VI- \emptyset
212
         R- J-P\# is of form III - 1
213
         R- T- L is of form III - 0
214
215
         R- T-K\# is of form V - 2
216
         R- U-K\# is of form II-1
         R- U-M\# is of form I-1
217
         R-V-K\# is of form VI-1
218
219
         R-V-0b is of form IV-1
         R- X- L is of form VIII - 0
220
221
         R-X-0 is of form II-2
222
         R- X-K# is of form I- 0
         R- X-N\# is of form VII - 1
223
         R-Y-L is of form IX-2
224
225
         R-Y-P is of form IX-1
226
         R- Y-K# is of form III - 2
227
         R- Y-M# is of form VII - 2
         R- Y-N# is of form VIII - 2
228
229
         R- Y-P# is of form V-0
230
         R-T\#-L is of form IX-0
         R-Vb- L is of form VII - 0
231
         R-Vb-N is of form VI-2
232
233
         R-Vb-K\# is of form IV-0
234
         R-Vb-M# is of form VIII - 1
         S-K-P is of form VIII-2
235
         S-K-Q is of form IX-1
236
         S- K-N# is of form VII - 2
237
         S- K-0\# is of form V-0
238
         S-U-M is of form V-2
239
         S- U-M\# is of form III-0
240
```

```
S-V-M is of form II-1
241
         S-V-0b is of form I-1
242
243
         S-X-0 is of form VI-2
244
         S- X-L\# is of form IV - 0
245
         S- X-M# is of form VII - 0
246
         S- X-N# is of form VIII - 1
         S-Y-P is of form VII-1
247
248
         S- Y-L# is of form I - 0
249
         S- Y-M# is of form VIII - 0
         S- Y-P# is of form II - 2
250
251
         S-J\#-L\# is of form III - 2
252
         S-J\#-M\# is of form IX - 2
         S-K\#-0 is of form IV-2
253
254
         S-K\#-M\# is of form V-1
         S-K\#-P\# is of form I-2
255
         S-Lb-P is of form VI-0
256
         S-Lb-N\# is of form II-0
257
258
         S-Lb-Q\# is of form III - 1
259
         S-Vb-M\# is of form IX - 0
         S-X\#-P is of form IV-1
260
         T- J- N is of form VIII - 0
261
        T-J-Q is of form II-2
262
263
         T- J-M# is of form I - 0
264
        T- J-P# is of form VII - 1
         T-L-N is of form V-1
265
266
        T-L-0 is of form II-0
         T-L-P is of form IV-2
267
         T-L-Q is of form I-2
268
269
         T- L- R is of form III - 1
270
        T- L-P\# is of form VI - 0
        T-V-N is of form IX-0
271
        T- X- 0 is of form I- 1
272
273
        T- X-M# is of form II - 1
274
        T- Y-M# is of form VI - 1
275
        T- Y-P# is of form IV - 1
        T-K\#-N is of form IX-2
276
        T-K\#-0 is of form VII-2
277
278
        T-K\#-R is of form V-0
279
        T-K\#-M\# is of form III - 2
        T-K#-P# is of form VIII - 2
280
        T-K\#-0\# is of form IX-1
281
282
         T-U\#-N is of form III-0
        T-Vb-M\# is of form V-2
283
         T-Yb- N is of form VII - 0
284
        T-Yb- 0 is of form VIII - 1
285
        T-Yb-P is of form VI-2
286
        T-Yb-M# is of form IV - 0
287
        U-J-0 is of form VII-0
288
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289
         U-J-0 is of form VI-2
         U- J-N\# is of form IV - 0
290
291
         U- J-P# is of form VIII - 1
292
         U-M-0 is of form IX-2
293
         U-M-S is of form V-0
294
         U- M-N\# is of form III - 2
         U- M-P\# is of form VII - 2
295
         U- M-Q\# is of form VIII - 2
296
297
         U- M-R\# is of form IX - 1
         U-X-0 is of form III-0
298
299
         U- X-N\# is of form V-2
300
         U- Y-N# is of form II - 1
         U- Y-P\# is of form I - 1
301
302
         U-J\#-N\# is of form VI-1
         U-J\#-Q\# is of form IV-1
303
         U-K#- 0 is of form VIII - 0
304
         U-K\#-R is of form II-2
305
306
         U-K\#-N\# is of form I-\emptyset
307
         U-K\#-0\# is of form VII-1
         U-M\#-0 is of form V-1
308
         U-M\#-Q is of form IV-2
309
         U-M\#-R is of form I-2
310
311
         U-M#- S is of form III - 1
312
         U-Nb-P# is of form II - 0
         U-Nb-Q\# is of form VI-0
313
         U-Yb-0 is of form IX-0
314
         V- J-P\# is of form IX - \emptyset
315
         V-L-Sb is of form IV-1
316
317
         V-M-P is of form I-0
         V-M-S is of form II-2
318
         V- M-P# is of form VIII - 0
319
         V- M-R# is of form VII - 1
320
321
         V-N-P is of form III -2
322
         V-N-T is of form IX-1
323
         V-N-P\# is of form IX-2
         V- N-0\# is of form VII - 2
324
325
         V- N-R# is of form VIII - 2
326
         V-N-T\# is of form V-0
         V- Y-P# is of form III - 0
327
         V-J\#-0\# is of form I-1
328
         V-K\#-R is of form VI-2
329
330
         V-K\#-0\# is of form IV-0
         V-K#-P# is of form VII - 0
331
         V-K\#-Q\# is of form VIII-1
332
         V-0b-R is of form IV-2
333
         V-0b-S is of form I-2
334
         V-0b-P\# is of form V-1
335
         V-0b-Q\# is of form II - 0
336
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```
V-0b-R\# is of form VI-0
337
        V-0b-T\# is of form III - 1
338
339
        X-J-Q is of form III-Q
340
         X- J-P\# is of form V-2
        X-K-Q is of form IX-Q
341
        X-L-Q is of form VII-Q
342
        X- L- R is of form VIII - 1
343
344
        X- L-P\# is of form IV - 0
345
        X-L-Sb is of form VI-2
        X-M-P\# is of form VI-1
346
347
        X-0-0 is of form V-1
348
        X- O- R is of form II - O
        X- O- S is of form VI - O
349
350
        X- \ 0- \ T is of form I-2
        X- 0- U is of form III - 1
351
        X- 0-Sb is of form IV-2
352
        X-K\#-R is of form I-1
353
354
        X-K\#-P\# is of form II-1
355
         X-L\#-S is of form IV-1
        X-M\#-Q is of form VIII-Q
356
         X-M\#-S is of form VII-1
357
        X-M\#-T is of form II-2
358
        X-M\#-P\# is of form I-0
359
360
        X-N\#-Q is of form IX-2
        X-N\#-R is of form VII-2
361
        X-N\#-S is of form VIII-2
362
        X-N\#-U is of form V-0
363
        X-N\#-P\# is of form III - 2
364
365
        X-N\#-T\# is of form IX-1
366
        Y-L-R is of form IX-0
         Y- M-Q\# is of form II - 1
367
         Y-N-0\# is of form VI-1
368
        Y-P-R is of form IX-2
369
370
         Y-P-S is of form VII-2
371
         Y- P-Q# is of form III - 2
         Y- P-T# is of form VIII - 2
372
373
         Y-K#- R is of form III - 0
         Y-K\#-0\# is of form V-2
374
375
        Y-L\#-S is of form I-1
        Y-M#-R is of form VII - 0
376
        Y-M#- S is of form VIII - 1
377
378
         Y-M#-T is of form VI-2
         Y-M#-Q# is of form IV - 0
379
         Y-N#- R is of form VIII - 0
380
        Y-N\#-U is of form II-2
381
        Y-N\#-0\# is of form I-0
382
        Y-N\#-T\# is of form VII-1
383
        Y-P\#-R is of form V-1
384
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Y-P\#-S is of form II-0
385
         Y-P\#-T is of form IV-2
386
387
         Y-P\#-U is of form I-2
388
         Y-P#- V is of form III - 1
389
        Y-Qb-T\# is of form VI-0
390
        J#-L#- S is of form III - 0
        J\#-M\#-S is of form IX-0
391
392
        J\#-N\#-U is of form VI-2
393
        J\#-0\#-U is of form IV-2
394
        J\#-Q\#-V is of form I-2
395
        Jb- N-Ub is of form IV - 1
396
        Jb- P-Vb is of form IX - 1
        Jb- P-Xb is of form V-0
397
398
        K\#-N-T is of form IX-0
        K\#-0-S is of form IV-0
399
400
        K\#-0-T is of form VII-0
        K\#-0-U is of form VIII-1
401
402
        K\#- 0-Vb is of form VI - 2
403
        K\#-R-T is of form V-1
404
        K\#-R-U is of form II-0
        K\#-R-V is of form VI-0
405
        K\#-R-X is of form I-2
406
        K\#-R-Y is of form III-1
407
408
        K\#-R-Vb is of form IV-2
409
        K\#-M\#-S is of form V-2
410
        K\#-M\#-T is of form III-0
411
        K\#-N\#-U is of form I-1
        K\#-0\#-V is of form IV-1
412
413
        K\#-P\#-S is of form I-0
414
        K#-P#- T is of form VIII - 0
        K\#-P\#-V is of form VII-1
415
        K\#-P\#-X is of form II-2
416
417
        K\#-Q\#-T is of form IX-2
418
        K\#-0\#-U is of form VII-2
419
        K\#-Q\#-V is of form VIII-2
        K\#-Q\#-Y is of form V-0
420
421
        K\#-Q\#-X\# is of form IX-1
422
        L\#-S-X is of form IV-2
423
        L\#-S-Y is of form I-2
        L\#-S-J\# is of form III -1
424
425
        Lb- P- S is of form VI - 1
426
        Lb-N\#-S is of form II-1
        Lb-Q\#-S is of form III-2
427
       M\#-0-U is of form V-2
428
429
       M\#- O-Vb is of form III - O
       M\#- P-Vb is of form IX - 0
430
       M#-Q-U is of form IV-0
431
432
       M\#-Q-X is of form VIII-1
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433
       M\#- 0-Vb is of form VII - 0
       M\#-Q-Yb is of form VI-2
434
435
       M\#-R-J is of form II-2
436
       M\#-R-U is of form I-0
437
       M\#-R-Y is of form VII-1
438
       M#- R-Vb is of form VIII - 0
439
       M\#-S-U is of form III-2
440
       M\#-S-X is of form VII-2
441
       M\#-S-Y is of form VIII-2
       M\#-S-J\# is of form IX-1
442
443
       M\#-S-K\# is of form V-0
444
       M\#-S-Vb is of form IX-2
       M\#-T-J is of form I-2
445
446
       M\#-T-X is of form II-0
447
       M\#- T- Y is of form VI - 0
       M\#- T-K\# is of form III - 1
448
       M\#- T-Vb is of form V-1
449
450
       M\#- T-Yb is of form IV - 2
451
       M\#-P\#-X is of form I-1
452
       M\#-0\#-Y is of form IV-1
       N\#-Q-X is of form IX-Q
453
       N\#-R-J is of form VI-2
454
455
       N\#-R-X is of form VII-0
456
       N#- R- Y is of form VIII - 1
       N\#-S-K is of form VII-1
457
458
       N#- S- X is of form VIII - 0
459
       N\#-S-Lb is of form II-2
       N\#-U-J is of form IV-2
460
461
       N\#-U-M is of form III-1
462
       N\#-U-X is of form V-1
       N\#-U-Y is of form II-0
463
       N\#-U-J\# is of form VI-0
464
465
       N\#-U-K\# is of form I-2
466
       N\#-P\#-X is of form III-0
467
       N\#-Q\#-Y is of form I-1
       N\#-R\#-K is of form IV-1
468
469
       N\#-T\#-K is of form VIII-2
470
       N\#-T\#-L is of form IX-1
471
       N\#-T\#-M is of form V-0
472
       N\#-T\#-X is of form IX-2
473
       N\#-T\#-Y is of form VII-2
474
       Nb-P\#-U is of form II-1
       Nb-Q\#-U is of form VI-1
475
       0#-V-K# is of form IV-2
476
       0b-R-V is of form IV-0
477
       0b-S-V is of form I-0
478
       0b-P\#-V is of form V-2
479
       0b-Q\#-V is of form II-1
480
```

```
481
        0b-R\#-V is of form VI-1
        0b-T#- V is of form III - 2
482
483
        P#- R- J is of form III - 0
484
        P\#-R-Y is of form V-2
485
        P\#-S-Y is of form II-1
486
        P\#-S-K\# is of form I-1
        P#- T- J is of form VII - 0
487
        P\#-T-L is of form VI-2
488
489
        P\#- T- Y is of form IV - 0
        P#- T-K# is of form VIII - 1
490
491
        P#- U- J is of form VIII - 0
492
        P\#-U-M is of form VII-1
        P\#-U-Y is of form I-0
493
494
        P\#-U-Nb is of form II-2
495
        P\#-V-J is of form IX-2
        P\#-V-M is of form VIII-2
496
        P\#-V-N is of form IX-1
497
498
        P\#-V-Y is of form III-2
499
        P\#-V-K\# is of form VII-2
500
        P\#-V-0b is of form V-0
        P\#-X-J is of form V-1
501
        P\#-X-L is of form IV-2
502
503
        P\#-X-M is of form VI-0
504
        P\#-X-K\# is of form II-0
        P\#-X-M\# is of form I-2
505
        P\#-X-N\# is of form III -1
506
507
        P#-Sb- J is of form IX - 0
        P\#-T\#-M is of form IV-1
508
509
        Q#-S-K is of form V-2
510
        Q#- S-Lb is of form III - 0
        Q#- T-K# is of form IX - 0
511
512
        0#- U- M is of form VIII - 1
513
        Q#-U-J# is of form IV-0
514
        Q#-U-K# is of form VII - 0
515
        Q\#-U-Nb is of form VI-2
        0\#-V-N is of form VII-1
516
517
        Q#-V-J\# is of form I-\emptyset
518
        0\#-V-K\# is of form VIII -0
519
        0\#-V-0b is of form II -2
520
        0\#-Y-M is of form II-0
        0#-Y-N is of form VI-0
521
        0\#-Y-P is of form III -1
522
        Q#- Y-K# is of form V-1
523
        0#- Y-M# is of form IV - 2
524
        0\#-Y-N\# is of form I-2
525
526
        0\#-T\#-M is of form I-1
527
        Q\#-U\#-N is of form IV-1
        Q#-X#-M is of form VII - 2
528
```

```
0\#-X\#-N is of form VIII -2
529
       Q#-X#-0 is of form IX-1
530
531
       Q#-X#-P is of form V-0
532
       0\#-X\#-K\# is of form IX - 2
533
       Qb-T\#-Y is of form VI-1
       R\#-K-P is of form I-2
534
       R\#-K-Q is of form III-1
535
       R\#- K-N\# is of form IV - 2
536
537
       R\#-U-M is of form IX-0
       R\#-V-M is of form VII-0
538
539
       R\#-V-N is of form VIII-1
540
       R\#-V-0b is of form VI-2
       R\#-T\#-M is of form III-0
541
542
       R\#-U\#-N is of form I-1
       Rb-T\#-K is of form II-1
543
       Rb-Vb-K is of form VI-1
544
       Rb-Yb- K is of form III - 2
545
546
       Sb- J- L is of form III - 2
547
       Sb-J-M is of form IX-2
548
       Sb-J-N is of form VII-2
       Sb-J-0 is of form VIII-2
549
550
       Sb-J-Q is of form V-Q
551
       Sb- J-P\# is of form IX - 1
552
       Sb-K-M is of form V-1
       Sb-K-N is of form II-0
553
554
       Sb-K-0 is of form VI-0
555
       Sb-V-L is of form IV-0
       Sb- X- L is of form VI - 1
556
557
       Sb-X-0 is of form IV-1
       Sb-T\#-L is of form V-2
558
       Sb-Vb- L is of form II - 1
559
       Sb-Yb-L is of form I-0
560
561
       Sb-Yb- M is of form VIII - 0
562
       Sb-Yb- 0 is of form VII - 1
       Sb-Yb-P is of form II-2
563
       T\#-J-Q is of form IV-1
564
565
       T\#-K-Q is of form VII-1
       T#- K-N# is of form VIII - 0
566
       T\#- K-Rb is of form II - 2
567
       T\#-L-P is of form VII-2
568
569
       T#- L- 0 is of form VIII - 2
570
       T\#-L-R is of form IX-1
       T\#- L-N\# is of form IX - 2
571
       T\#-L-Sb is of form V-0
572
573
       T\#-M-P is of form II-0
       T\#-M-Q is of form VI-Q
574
       T\#-M-N\# is of form V-1
575
       T\#-M-P\# is of form IV-2
576
```

```
T\#- M-0\# is of form I - 2
577
       T\#-M-R\# is of form III - 1
578
579
       T\#-V-N is of form V-2
580
       T\#-V-0b is of form III-0
       T\#-X=N\# is of form IX-0
581
       T#- Y- P is of form VIII - 1
582
       T\#-Y=N\# is of form VII-0
583
584
       T\#-Y-0b is of form VI-2
585
       T\#-X\#-P is of form I-1
       Tb-Yb-M is of form VI-1
586
587
       U\#-N-T is of form III-1
588
       U\#-N-0\# is of form IV-2
       U\#-N-R\# is of form I-2
589
590
       Ub-J-N is of form VI-1
591
       Ub- K- N is of form I - 0
       Ub- L- N is of form III -2
592
       Ub-Jb-N is of form IV-0
593
594
       Ub-Yb- N is of form II - 1
595
       Vb- J- 0 is of form II - 1
596
       Vb- J- Q is of form I-1
       Vb-K-0 is of form IV-0
597
       Vb- K- P is of form VII - 0
598
       Vb- K- Q is of form VIII - 1
599
600
       Vb- K-Rb is of form VI - 2
       Vb-L-0 is of form I-0
601
602
       Vb- L- P is of form VIII - 0
603
       Vb- L- R is of form VII - 1
       Vb- L-Sb is of form II - 2
604
605
       Vb-N-P is of form V-1
606
       Vb- N- Q is of form II - 0
       Vb-N-R is of form VI-0
607
       Vb-Jb-P is of form IX-0
608
609
       Vb-K\#-0 is of form VI-1
610
       Vb-K\#-R is of form IV-1
611
       Vb-M\#-0 is of form III-2
       Vb-M\#-P is of form IX-2
612
613
       Vb-M\#-Q is of form VII-2
       Vb-M#- R is of form VIII - 2
614
       Vb-M\#-S is of form IX-1
615
       Vb-M\#- T is of form V-0
616
       Vb-Yb-0 is of form V-2
617
       Vb-Yb- P is of form III - 0
618
       X\#-M-Q\# is of form VII-0
619
       X\#-N-0\# is of form VIII-0
620
621
       X\#-0-0\# is of form IX-2
       X\#-P-S is of form IV-2
622
       X\#-P-Q\# is of form V-1
623
       X\#-P-T\# is of form I-2
624
```

```
625
        X\#-K\#-Q\# is of form IX-0
626
        Xb-K-P is of form II-1
        Xb-L-P is of form VI-1
627
628
        Xb-Jb-P is of form V-2
        Yb-K-Q is of form V-2
629
        Yb- K-Rb is of form III - 0
630
631
        Yb-L-Q is of form II-1
        Yb- L-Sb is of form I-1
632
        Yb-M-Q is of form IV-0
633
634
        Yb- M-Sb is of form VIII - 1
635
        Yb-M-Tb is of form VI-2
        Yb-N-Q is of form I-0
636
637
        Yb- N- T is of form VII - 1
        Yb- N-Ub is of form II - 2
638
        Yb- 0- Q is of form III - 2
639
        Yb- O- T is of form VIII - 2
640
641
        Yb- 0- U is of form IX - 1
642
        Yb- O-Sb is of form VII - 2
        Yb- O-Vb is of form V- O
643
        Yb- P- T is of form VI - 0
644
645
        Yb- P-Sb is of form II - 0
        Yb- P-Vb is of form III - 1
646
        Yb-M#-Q is of form VI-1
647
        Yb-M#- T is of form IV - 1
648
```

```
G A
           C
               D
                   ΕF
                               ВС
                                     D E F
                                                  Α
                                                     B C
                                              G
                                   R SbTb Ub Vb X Y J
  I - 0
                    M# N#0 P
                               Q
           J K#L
                    M#N Ob P
  I - 1 |
           J K L
                               Q
                                   R S T
                                          U Vb X
  I - 2 \dot{I}
                          0
                              P#0
                                   R Sb T U VbXb Yb J
           J K Lb M
                      N
 II - 0 |
                                   R S T Ub Vb X Yb
           J K L
                    M# N# 0#P#Q
 II - 1 |
           J
               K#
                          0
                              P#0
                                   R Sb T U V
                                                   X#Y J
                  L#M#N
 II - 2 |
           J K L
                    M#N
                        0 P
                               0
                                   R S
                                          T#U Vb X
           JK LMNb Ob P
III - 0 |
                             0
                                   R Sb T Ub Vb X
                      N 0 P#Q
III - 1 |
           J K Lb M
                                   R Sb T U V X Yb J
III – 2 |
                                                    ΥJ
                    M# N# 0#P#Q
                                   R SbTb Ub Vb X
               K#L
           J
 IV - 0 |
           J
               K#L
                    M#N 0b P Q
                                   R SbTb Ub Vb X
                        N#0 P Q
                                              V X Y J
 IV - 1 |
                    M#
                                   R S
           JK L
                                          T#U
                                   R Sb T T#U
 IV - 2 |
           J K Lb M
                     N
                        0
                              P#Q
                                              V
                                   R S
                                          T# U#V X Y J
  V - 0 |
           JK L
                    M# N#0
                              P#Q
  V - 1 |
           JK L
                    M# N#
                            0#P#Q
                                   R SbTb Ub Vb X Yb J
  V - 2 |
           J
               K#L M
                      N 0
                              P#0
                                   R Sb T U V
                                   R S T#U Vb
                    M# N#
 VI - 0 |
           J K L
                            0#P#Q
                                                  X Yb
                                   R Sb T U V
                                                    X#Y J
 VI - 1 |
           J
               K# M
                      N N#0
                             P#Q
 VI - 2 |
                                   R S T Ub Vb
           JΚ
               LM
                      N Ob
                            Ρ
                              Q
                                                 Χ
                                                    ΥJ
VII - 0 |
                            Ρ
           JΚ
               L
                    M#N Ob
                               Q
                                   R SbTb Ub Vb
                                                  Χ
VII - 1 |
                        N#0 P Q
           JΚ
                 L
                    M#
                                   R
                                       S
                                          T#U Vb
                                                  Χ
                                                     ΥJ
                                       S T Ub
VII - 2 |
           JΚ
                L
                    M#
                        N#
                            0#P#Q
                                   R
                                              ۷b
                                                  Χ
                                                     ΥJ
                        N#0 P
           JΚ
                L M#
                               Q
                                   R SbTb Ub
                                                  XYJ
VIII - 0 |
                                             ٧b
VIII - 1 |
           JΚ
                            Р
                                       S T Ub Vb
                L
                    M#N Ob
                               Q
                                   R
                                                  XYJ
VIII - 2 |
                                   R
                                                  X Y J
           JΚ
                            0#P#Q
                                       S
                L
                    M#
                        N#
                                          T#U Vb
 IX - 0 |
           J K
                L M Nb
                        0b
                           P Q
                                   R SbTb Ub
                                             Vb
                                                 Χ
                                                    ΥJ
 IX - 1 |
           JΚ
                L
                    M#
                        N#
                            0#P#Q
                                   R S
                                          T#
                                             U#V X
                                                     ΥJ
 IX - 2 |
           JΚ
                 L
                    M# N#
                            0#P#Q
                                   R SbTb
                                          Ub Vb X
                                                     ΥJ
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^//-----
```

```
E F G
                              ВС
                                    D EF G A B C
                           Α
                     N 0 P P# Q#
                                                   X# J K
  I - 0
            K L M
                                    R#S T U V
  I - 1 |
            K Lb M
                     N ObPb Qb Rb
                                    Sb T Ub VbXb Yb J K
                   M# N# P 0 0#
                                    R#S
                                         T# U#V X Y
  I - 2 |
            J#K#L
 II - 0 |
                                                   X#Y
                     N 0
                            P#0 Rb
                                    Sb T T#U V
            K Lb M
 II – 1 İ
            K L
                   M#N Ob P O Rb
                                    SbTb Ub Vb X Y J K
 II - 2 |
                     N Ob P Qb Rb
                                    Sb T
                                          U VbXb Yb J K
            K Lb M
                         0
III - 0 |
            J#K# L#M#N
                            P# 0#
                                    R#S
                                          T#U V
                                                   X# Y#J#
            K LbMb Nb Ob P Q Rb
III - 1 |
                                    SbTb Ub Vb X YbJb K
III - 2 |
                            P#0 0#
              LM
                                    R#S T
                                          U V
                                                   X# J K
                     Ν
                       0
 IV - 0 |
            K
              LM
                     N N#0
                            P# Q#
                                    R#S T
                                           U V
                                                   X# J K
 IV - 1 |
            K Lb M
                     N
                         0 P Qb Rb
                                    Sb T
                                           U Vb X Yb J K
 IV - 2 |
            J#K#L
                   M# N# P
                             Q Q#
                                    R#S
                                          T#U Vb X Y J#
                            Q Rb
                                    Sb T
                                          U VXYb JK
  V - 0 |
            K Lb M
                     N 0 P
            K Lb M
  V - 1 |
                     N 0
                            P#Q Q#
                                    R#S T
                                           U V
                                                   X#Y K
  V - 2 |
            K L M Nb Ob P O Rb
                                    SbTb Ub Vb X Y J K
                                    Sb T U VbXb YbJb K
 VI - 0 |
                     N 0
                            P#Q Rb
            K Lb M
                                    SbTb Ub Vb X Y J K
                       N#0 P Q Rb
 VI - 1 |
            K L
                   M#
 VI - 2 |
            J#K# L#M#
                       N#0
                            P# Q#
                                    R# S#T#U
                                                   X# Y#J#
                                              V
VII - 0 |
            K Lb M
                     N N#0
                            P# Q#
                                    R#S T
                                           U V
                                                   X# J K
VII - 1 |
                         0 P Qb Rb
            K Lb
                 Μ
                     N
                                    Sb
                                        Τ
                                           U VbXb
                                                   Yb J K
                                                   X# J K
VII - 2 |
           K Lb M
                         0
                            P#Q Rb
                                    Sb T T#U
                     Ν
                                              V
                     N 0 P P# Q#
                                    R#S T
                                               ٧
                                                   X# J K
VIII - 0 |
            K Lb
                 М
                                           U
VIII - 1 |
                     N N#0
                            P#
                                    R# S#T#U
                                              V
                                                   X# J K
            K Lb M
                                Q#
VIII - 2
                                           U VbXb
                                    Sb
                                                   Yb J K
            K Lb
                       0
                            P#Q Rb
                                       Τ
                 М
                     Ν
                            P# Q#
 IX - 0 |
            J#K#
                 L#M#N
                       0
                                    R#S T
                                           U
                                              V
                                                   X# Y#J#
 IX - 1 |
            K Lb
                 Μ
                     Ν
                       0
                            P#Q Rb
                                    Sb T
                                           U
                                               V X Yb J K
                                    R#S T
 IX - 2 \mid
           K Lb
                Μ
                     N
                       0
                            P#Q Q#
                                           U
                                               ٧
                                                   X# J K
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^-----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^//-----
```

```
E F
                              BC D EF
                                             G
            D
                      G
                          Α
                                                 Α
                                                     B C
                                     S T Ub Vb X
  I - 0
                      N# 0#P#Q
                                  R
                                                     Υ
            K# L#M#
                                                         J#K#
                                     S T#U V X
  I - 1 |
            K#L
                  M#
                      N#0 P
                            Q R
                                                     Υ
                                                         J#K#
  I - 2
                      0
                            P# Q#R
                                     ST U V X Yb J
            K#L M
                  N
                                     S
 II - 0 |
            K#L
                  M# N#
                          Р
                              Q Q#R
                                         T#U Vb X Y J
 II - 1 |
                                     ST U V X# JKLb
            Lb M
                            P# Q#R
                    N N#0
                                     S T# U#V X
                                                   Υ
 II - 2 |
                  M# N#0
                            P#Q R
            K#L
                                     S T U Vb X Y J#K#
S T U V X#Y J K#
                                  R
 III - 0 |
            K#L
                  M#N Ob P
                              Q
III - 1 |
            K#L M
                    Ν
                        0
                            P# Q#R
                                     S T Ub Vb X \, Y
III - 2
                      0b P 0 0#R
                                                         K Lb
            Lb M Nb
                                                   Υ
                      N#0 P 0 R
 IV - 0 |
            K#
                L#M#
                                     S T Ub Vb X
                                                         J#K#
                                     S T# U#V
                      N#
                          0#P#0 R
 IV - 1 |
                  M#
                                                   X#Y
            K#L
                                     S T U VbXb Yb J
 IV - 2 |
            K#L M
                  N
                        0
                            P# Q#R
                                     S T# U# V#X#Y
  V - 0 |
                          0#P#
            K#L
                  M#
                      N#
                                Q#R
                                                         J#K#
  V - 1 |
            K#L
                  M#
                      N#
                          Р
                              Q Q#R
                                     S T Ub Vb X Y J
                                     S T U V
  V - 2 |
            K#
                L#M#N
                        0
                            P# 0#R
                                                   X# Y#J#K#
                                     S T# U#V X Y J K#
 VI - 0
                  M# N# P
                              Q Q#R
            K#L
                                     STUVX#JKLbST#UVbXYJ#K#
                        0 P P# Q#R
 VI - 1 |
            Lb M N
                  M#N
                        0 P
                              Q R
 VI - 2 |
            K#L
                                      S T Ub Vb X
VII - 0 |
                      N#0 P
                                 R
            K#L
                  M#
                              Q
                                                     Υ
                                                        J#K#
VII - 1 |
                          0#P#Q R
            K#L
                  M#
                      N#
                                     S
                                         T# U#V X
                                                     Υ
                                                         J#K#
                                     S
VII - 2 |
                  M#
                      N#
                          Р
                              Q Q#R
                                         T#U Vb X
            K#L
                                                     Υ
                                                         J#K#
                          0#P#Q R
                                     S T Ub Vb
                                                 Χ
VIII - 0 |
            K#L
                  M#
                      N#
                                                     Y J#K#
                      N#0 P
                              Q R
                                     S
                                         T#U Vb
VIII - 1 |
            K#L
                  M#
                                                 Χ
                                                     Y J#K#
VIII - 2
                              Q Q#R
                                     S
                                         T#
                                             U#V X
            K#L
                  M#
                      N#
                          Ρ
                                                         J#K#
 IX - 0 |
            K#L
                  M#N Ob
                          Р
                            Q R
                                     S T Ub
                                             Vb X
                                                     Υ
                                                        J#K#
                          Ρ
                                     S
 IX - 1 |
            K#L
                  M#
                      N#
                              Q Q#R
                                         T#
                                             U#
                                                V#X#Y
                                                         J#K#
                  M# N# P
                                     S T Ub
 IX - 2 \mid
            K#L
                              Q Q#R
                                             Vb X
                                                         J#K#
                                                     Υ
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+---^/^----^/^-|
```

```
B C
             E F
                   G A
                          ВС
                               D
                                   E F G A
                     O P#Q Rb Sb T T#U V X# J
  I - 0
               M#N
                                                     K#L
                                   T U Vb X Yb J
  I - 1 |
           L M
                 Ν
                     0 P Qb Rb Sb
           L M Nb Ob P Q R Sb
                                   T Ub Vb X YbJb K
  I - 2 |
 II - 0 |
                     0
           L M
                 Ν
                        P# Q#R Sb
                                   T U VbXb Yb J K L
 II - 1 İ
                   N#0 P Q R Sb
               M#
                                   T Ub Vb X Y
           L
                    0 P Q Rb Sb
 II - 2 |
                 N
                                   T U V X Yb J
           L M
 III - 0 |
           L M
                 N ObPb Qb Rb Sb
                                   T Ub VbXb Yb J
 III - 1 |
           L M Nb
                   Ob P Q R Sb
                                   T Ub Vb X Y J K L
III - 2 |
                     0
                        P# 0#R Sb
                                   T T#U
                                        V X# J K#L
               M#N
               M#N
 IV - 0 |
           L
                     0 P Qb Rb Sb
                                   T T#U
                                          V
                                              X# J
                                   T U VX YJ
 IV - 1 |
                     0
                        P#0 Rb Sb
           L M N
                            R Sb
                                   T T# U#V X Y K L
 IV - 2 |
           L M Nb Ob P Q
                                   T U V
                                              X#Y J
  V - 0 |
                        P#0
                            R Sb
           L M N
                     0
                                                     K#L
  V - 1 |
           L M
                 Ν
                        P# Q#R Sb
                                   T T#U V
                                              X# JK L
                     0
  V - 2 |
               M#N Ob P Q R Sb
                                   T Ub Vb X Y
           L
           L M
                     0 P# Q#R Sb
                                   T U V X Yb J K L
 VI - 0 |
                 N
                                   T Ub Vb X Y
 VI - 1 |
           L
               M# N# 0#P#Q R Sb
           L M N Ob P Qb Rb Sb
                                   T U VbXb Yb
 VI - 2 |
VII - 0 |
           L M
                     0 P Qb
                            Rb Sb
                                   T T#U
                                         V
                                              X#
                 Ν
VII - 1 |
           L M
                     0
                        P#Q Rb Sb
                                   Τ
                                     U
                                          V X Yb
                                                  J
                                                     K#L
                 N
VII - 2 |
           L M
                     0 P#
                            Q#R Sb
                                   Τ
                                       U VbXb
                                                  J
                 Ν
                                             Yb
                                                    K#L
           L M
                     0 P#Q Rb Sb
                                   T T#U
                                         V
                                              X#
                                                  J K#L
VIII - 0 |
                 Ν
VIII - 1 |
                     0 P Qb
                               Sb
                                       U VbXb Yb
           L M
                 Ν
                            Rb
                                   Т
                                                  J K#L
VIII - 2
                                          V X Yb
                                                    K#L
                      P#
           L M
                    0
                            Q#R Sb
                                   Τ
                                     U
                 Ν
 IX - 0 |
         LM
                 N N#0
                        P#
                           Q# R#
                                  S#T#U
                                          ٧
                                              Χ#
                                                   K#L
 IX - 1 |
           L M
                 N
                     0
                        P#
                           Q#R Sb
                                   T U
                                           ٧
                                              X#Y J
                                                     K#L
 IX - 2 \mid
           L M
                     0 P# Q#R Sb
                                   T T#U
                                          ٧
                                              X# J
                 Ν
                                                     K#L
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+---^/^----^/^-|
```

E F G ВС D EF G A B C Α Ε T#U Vb X Y I - 0N Ob P Q Q#R S K L M I - 1 |M Nb Ob P P#Q R S T# U#V X#Y K L M $I - 2 \dot{I}$ P# Q# R#S T#U V X#Y J K# L# L#M#N 0 II - 0 | M Nb Ob P Q R R#S T# U#V X Y K Lb M II - 1 | 0 P P# 0# R#S T#U V X# J M N K#L M K L M II - 2 | 0b P P# Q#R S T# U# V#X#Y M Nb R S III - 0 | M M# N#0 P Q T#U VX Y K L M 0 III - 1 | L#M#N P# Q# R#S T#U V X# Y#J#K# L# III - 2 | P 0 R R#S T#U Vb X Y M N Ob K L M IV - 0 | М N Ob P P#0 R S T#U Vb X Y Κ LM 0 0#R S T# U# X Yb J K L M IV - 1 | M Nb Ob Р T#U V X Yb J IV - 2 | L#M#N 0 P# Q# R#S K# L# Ub Vb X Y J K L M V - 0 | 0b P 0 Rb SbTb M Nb Р V - 1 | M Nb 0b Q R R#S T#U Vb X Y K Lb M V - 2 | N N#0 P# 0# R#S T#U V X# J K#L M VI - 0 İ Ub Vb X YbJb K Lb M M Nb Ob P O R SbTb T#U V X# J VI - 1 | P#Q Q# R#S M N OK#L M VI - 2 | M M# N#0 P#Q R S T# U#V X Υ K L M S R VII - 0 | M Nb 0b P P#Q T#U Vb X Y K L M Q Q#R S VII - 1 | M Nb 0b Р T# U# V#X#Y K L M VII - 2 | M Nb 0b Р Q R R#S T# U#V X K L M Υ Q Q#R S 0b Р T#U Vb X Υ VIII - 0 | M Nb K L M VIII - 1 | P P#Q R S T# U#V X Υ K L M M Nb 0b VIII - 2 R SbTb K L M X YbJb 0b Ρ Q Ub Vb M Nb IX - 0 | M M# N#0 P Q R S T#U Vb Χ Υ K L M P Q IX - 1 | M Nb 0b R SbTb Ub Vb Χ YJK LM 0b P T#U Vb $IX - 2 \mid$ M Nb Q R R#S Χ Υ K L M 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|. 2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|. 6M |+---^/^-----|. 7M |+----^-----|. 7 |+---^/^-----|. 8 |+----^/------|. 15 |+----^/^-----^//-----

```
E F
            F
                    Α
                        B C
                              D
                                  E F G
                                               B C
                G
                                           Α
                                                     D
  I - 0 \mid
                                      U VbXb Yb J
                N#0
                      P# Q#R Sb T
            M#
                                                     K# L#M#
                                     U VX YJ
  I - 1 |
            M#N
                  0
                      P#Q Rb Sb T
                                                     K# L#M#
  I - 2
            M#N Ob P
                      0 R S T
                                     U Vb X Y J K L
 II - 0 |
            M#N
                  0
                      P#
                          Q# R#S T
                                     U V X Yb J
                                                     K#L
 II - 1 |
                0b P P#Q
                            R S T
                                     U Vb X Y
            Nb
                                                   K
                                                       L M Nb
                                     U V X#Y J
 II - 2 |
            M#N
                  0
                      P#Q
                            R Sb T
                                                     K#
                                                         L#M#
 III - 0 |
            M#N
                  0 P Qb Rb Sb T
                                     U Vb X Yb J
                                                     K#
                                                         L#M#
 III - 1 |
            M#N Ob P
                      Q R S T
                                     U Vb X Y
                                                   J#K#L
III - 2
                      P# 0# R#S T
                                     U VbXb Yb J
            M#
                N#0
                                                     K#
                                                        L#M#
 IV - 0 |
            M#
                N#0
                      P#Q Rb Sb T
                                     U VbXb
                                             Yb J
                                                     K#
                                                         L#M#
                      P#
 IV - 1 |
            M#N
                          Q#R Sb T
                                    U V
                                             X#Y
                                                   J#K#
                  0
            M#N Ob P
                              S T
 IV - 2 |
                      Q
                          R
                                    U Vb X YbJb K L M#
                              S T
                                     U V
  V - 0 |
            M#N
                  0
                      P#
                          Q#R
                                             X# Y#J#K# L#M#
  V - 1 |
                          Q#
            M#N
                  0
                      P#
                              R#S T
                                     U VbXb Yb J
                                                     K#L
  V - 2 |
            M#
                N#0 P
                      0
                            R S T
                                     U Vb X Y
                                                   K
                                                       L M M#
                                       V X#Y J
 VI - 0
            M#N
                      P# 0#
                              R#S T
                                                     K#L M#
                  0
                                     U Vb X Y
 VI - 1 |
                0b P
                      Q Q#R S T
            Nb
                                                   K L M Nb
                      Q Rb
            M#N
                  0 P
                             Sb T
                                     U V X Yb J
 VI - 2 |
                                                     K#
                                                        L#M#
VII - 0 |
                                  T
                                                         L#M#
            M#N
                  0
                      P#Q Rb
                              Sb
                                     U VbXb Yb
                                                 J
                                                     K#
                          Q#R Sb
VII - 1 |
            M#N
                  0
                      P#
                                  Τ
                                     U
                                        V X#Y J
                                                     K#
                                                         L#M#
                                        V X Yb
VII - 2 |
            M#N
                  0
                      P#
                          Q#
                              R#S T
                                     U
                                                 J
                                                     K#
                                                         L#M#
            M#N
                  0 P#
                          Q#R Sb T
                                     U VbXb Yb
VIII - 0 |
                                                 J
                                                     K#
                                                        L#M#
                      P#Q Rb
                              Sb
                                  Τ
                                       V X Yb
VIII - 1 |
            M#N
                  0
                                    U
                                                 J
                                                     K# L#M#
                                       V
VIII - 2
                              R#S T
                                             X#Y J
            M#N
                  0
                      P#
                          Q#
                                     U
                                                     K#
                                                        L#M#
 IX - 0 |
            M#N
                  0 P Qb
                          Rb
                             Sb T
                                     U VbXb
                                             Υb
                                                     K#
                                                         L#M#
                      P#
 IX - 1 |
            M#N
                  0
                          Q#
                              R#S T
                                     U V
                                             X#
                                                Y#J#K#
                                                         L#M#
 IX - 2 \mid
            M#N
                  0
                      P# Q#
                              R#S T
                                     U VbXb
                                             Yb
                                                J
                                                     K#
                                                        L#M#
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+---^/^----^/^-|
```

```
G
                 Α
                     ВС
                          D E F
                                          B C D
                                   G A
                                   U#V X Y K
  I - 0
           N 0 P
                     Q R R#S
                                T#
                                                     M#N
           N Ob P
                     Q Q#R S T#
                                   U# X Yb J K L
  I - 1 |
  I - 2
           N ObPb Ob Rb Sb T Ub
                                   VbXb Yb J K Lb M N
 II - 0 |
                   0 R S T Ub
           N Ob P
                                   Vb X YbJb K L M N
 II - 1 İ
                   P#Q Rb Sb T Ub
                                   VbXb Yb J
                                                K# L#M#N
           N 0
 II - 2 İ
                                   Vb X YJK L
           N Ob P Q Rb SbTb Ub
           N Ob P P#Q R
                                         X#Y
 III - 0 |
                            S
                                T#
                                   U#V
                                              K L
           N ObPb
 III - 1 |
                   Qb Rb Sb T Ub
                                   VbXb Yb J K#L M N
III - 2 |
                    0 R S T T#
                                   U#V X
                                         Y K
              0 P
                                                L
           Ν
                                                     M#N
 IV - 0 |
           Ν
               0 P
                     Q Q#R
                          S
                               T#
                                   U#V X
                                          Υ
                                              K
                                                L
                                   Vb X Y J
                     Q R SbTb Ub
 IV - 1 |
           N Ob P
                                                K#L
 IV - 2 |
           N ObPb Qb Rb Sb T Ub
                                   VbXb YbJbKb Lb M N
                   Q R Sb T Ub
  V - 0 |
           N Ob P
                                   Vb X
                                         Υ
                                              J#K#L
                                   U#V X
           N Ob P
                            S T T#
  V - 1 |
                     Q R
                                          Υ
                                              K L M N
  V - 2 |
               0 P Ob Rb Sb T Ub
                                   VbXb Yb J K# L#M#N
                   Q R S T Ub
                                   Vb X YJK LM N
 VI - 0 |
           N Ob P
                                   VbXb Yb J
                   P# Q#R Sb T Ub
 VI - 1 |
           N 0
                                                K# L#M#N
 VI - 2 |
           N Ob P P# Q#R
                            S
                               T#
                                   U# V#X#Y
                                              K
                            S
           N Ob P
VII - 0 |
                   Q Q#R
                               T#
                                   U#V X
                                         Υ
                                              K
                                   Vb \quad X \quad Y \ J \ K
VII - 1 |
           N Ob
                 Р
                   Q R SbTb Ub
                                   Vb X YbJb K
VII - 2 |
           N Ob P
                   Q R S T Ub
                                                  L
           N Ob P
                    Q R R#S T#
VIII - 0 |
                                   U#V X
                                         Υ
                                              Κ
VIII - 1 |
           N Ob P
                     Q Q#R S
                               T#
                                   U# V#X#Y
                                              K
                                                  L M#N
VIII – 2 |
                            S T Ub
                                          YJK
                 Ρ
                   Q R
                                   Vb X
           N Ob
                                                     M#N
                                   U#V X
 IX - 0 |
           N Ob
                 P P#Q
                      R
                          S T#
                                          Υ
                                              K
                                                  L
                                                     M#N
                            S T Ub
                 Ρ
                    Q R
 IX - 1 |
           N Ob
                                   Vb X
                                          Υ
                                              J#K#L
                                                     M#N
 IX - 2 |
                 Р
                   Q R
                            S T T#
                                   U#V X
           N Ob
                                           Υ
                                              K
                                                     M#N
                                                  L
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|
```

Scate/riodes chart for Noot Fitch

```
B C
                               E F G A
                                                       ΕF
             G
                 Α
                           D
                                             B C
                                                   D
             0b P P# Q# R#S T
                                       V X Yb J K#
   I - 0
                                   U
                                                       Μ
                                                           N Ob
                   P# Q#R Sb T U
   I - 1 |
            N#0
                                       V X#Y
                                                 K Lb
                                                       М
                                                           N N#
  I - 2
                  0 R S
                                T#U
                                       V X Y
            N#0 P
                                                 J#K#L
                                                         M# N#
 II - 0 |
                   P# Q# R# S#T#U
                                       V X#Y J
            N#0
                                                   K#
                                                       L#M#
 II - 1 |
                 Р
                     Q Q#R
                             S
                                 T#U
                                       V X Y
                                                 K L
             0b
                                                         M#N Ob
                                       V X# J K Lb M
                           ST
 II - 2 |
            N#0
                   P# Q#R
                                   U
                                                           N N#
 III - 0 |
            N#0
                   P#Q Rb Sb T
                                   U
                                       V X Y J
                                                   K# M
 III - 1 |
            N#0 P
                   Q R S
                                 T#U
                                       VXYKLMM#N#
                P Ob Rb Sb T T#U
                                       V X Yb J
 III - 2
            0b
                                                   K# M
                                                           N Ob
 IV - 0 |
            0b
                P P#
                       Q#R Sb T
                                   U
                                      V X Yb J
                                                   K# M
                                                           N<sub>0</sub>b
                   P#
                       0#
                           R#S T
 IV - 1 |
            N#0
                                 U
                                       V X# JK LM
                                       VX YJK L
 IV - 2 |
            N#0 P
                   0
                      R S
                                 T#U
                                                         M# N#
                                       V X# J
  V - 0 |
                   P#
            N#0
                       0#
                           R#S
                                 T#U
                                                   K#L M
                                                           N N#
  V - 1 |
            N#0
                   P#
                       Q# R#
                               S#T#U
                                       V X Yb J
                                                   K# L#M# N#
  V - 2 |
            0b
                 P P#0
                       R S
                                 T#U
                                       VX Y K L
                                       V X# Y#J#K# L#M#
 VI - 0 |
            N#0
                   P#
                      Q# R#
                               S#T#U
                                       V X Y K L
 VI - 1 |
                 Ρ
                       R R#S
            0b
                  0
                               T#U
                                                         M#N 0b
                   P#Q
                        R Sb
                              Τ
                                       V X#Y J
                                                   K# M
 VI - 2 |
            N#0
                                 U
                                                           N N#
VII - 0 |
                               Τ
                                       V X Yb
                                                           N N#
            N#0
                   P#
                      Q#R Sb
                                   U
                                              J
                                                   K#
                                                       М
                                 U
                           R#S T
                                         X# JKLb
VII - 1 |
            N#0
                   P#
                       Q#
                                       ٧
                                                       Μ
                                                           N N#
                                       V X#Y J
VII - 2 |
            N#0
                   P#
                       Q#
                           R# S#T#U
                                                   K#
                                                       Μ
                                                           N N#
                                       V X Yb J
                           R#S T
                                   U
VIII - 0 |
            N#0
                   P#
                       Q#
                                                   K#
                                                           N N#
                       Q#R Sb
                               Т
                                         X#Y J
VIII - 1 |
            N#0
                   P#
                                   U
                                       ٧
                                                   K#
                                                       М
                                                           N N#
VIII - 2
                               S#T#U
                                           Χ#
                                               J K Lb
            N#0
                   P#
                       Q#
                           R#
                                       V
                                                       М
                                                           N N#
 IX - 0 |
            N#0
                   P#Q Rb
                           Sb
                              T U
                                       V X Yb J
                                                   K#
                                                       М
                                                           N N#
                                              J
 IX - 1 |
            N#0
                   P# Q#
                           R#
                               S#T#U
                                       V X#
                                                   K#L M
                                                           N N#
                                       V X Yb
 IX - 2 \mid
            N#0
                   P# Q# R#
                              S#T#U
                                              J
                                                   K# M
                                                           N N#
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^-----|.

7 |+---^/^-----|. 8 |+---^/^------|.

15 |+---^/^----^-/^-|.
```

D E F ВС D E F G A B C Α P#Q R S T Ub Vb X YbJb K L I - 0M# N#0 Q R SbTb Ub Vb I - 1 |0 P X YJ K#L M# N#0 O P Ob Rb Sb T U Vb X Yb J I - 2 |K#L M N X YJK L II - 0 | 0 P Q R S T#U Vb M#N II - 1 | 0 P# Q#R Sb T U Vb X Yb J K# M N N#0 OPQRSbTUbVb X Y J#K#L II - 2 | M# 0 P III - 0 | Q Q#R S T# U# X Yb J K L M# III - 1 | O P Qb Rb Sb T U Vb X Yb J K# L#M#N III – 2 | R S T#U Vb X YbJb K L 0 P#0 M# N#0 IV - 0 | 0 P#0 R SbTb Ub Vb X YbJb K L M# IV - 1 | OP OR STUB Vb X Y J#K# L#M# X Yb J K Lb M N IV - 2 | O P Qb Rb Sb T U Vb 0 P Q R S T X Y K L M M# U Vb V - 0 | 0 P V - 1 | Q R S T#U Vb X YbJb K L M#N 0 V - 2 | 0 P#0 Rb Sb T U Vb X Yb J K# M Q R S T#U Vb VI - 0 | 0 P X Y J#K#L M#N 0 X Yb J K# M N N#0 0 P# Q# R#S T U Vb VI - 1 | VI - 2 | 0 P Q Rb SbTb Ub Vb X Y J K L M# N#0 0 P VII - 0 | X YbJb K L Q R SbTb Ub Vb M# N#0 VII - 1 | 0 P Q R STUb Vb Χ Υ J#K#L M# N#0 Q R S ΥJΚ VII - 2 | 0 P T#U Vb Χ L M# N#0 0 P Q R STUb Vb VIII - 0 | X YbJb K M# N#0 VIII - 1 | 0 P Q R SbTb Ub Vb X Y J K L M# N#0 Q R S X Y VIII - 2 0 P T#U Vb J#K#L M# N#0 0 P S IX - 0 | Q Q#R T# U# V#X#Y Κ L M# N#0 0 P Q R S IX - 1 | T#U Vb X Y L M M# N#0 IX - 2 | Q R S T#U Vb X YbJb 0 P K L M# N#0 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|. 2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|. 6M |+---^/^-----|. 7M |+----^----|. 7 |+---^/^-----|. 8 |+---^/^------|.

15 |+---^/^----^/^-|

B C EF G A B C D E F G Α D Α Q Rb Sb T T#U V X#Y J I - 0K# M 0 P N I - 1 |P P# Q# R#S T U V X# J K LM $I - 2 \dot{I}$ P P#0 R S T# U#V X#Y L M Nb Ob P K II - 0 | P Qb Rb Sb T U VbXb Yb J K Lb M N Ob II – 1 İ Р R SbTb Ub VbXb M# N#0 P YbJb K L 0 X# J II - 2 | P P# Q# R#S T#U V K#L M 0 P Ν 0 P III - 0 | P P# Q#R Sb T U V X#Y K Lb M III - 1 | P P#0 R S T# U#V X#Y K L M#N Ob P III - 2 0 Rb Sb T U VbXb 0 P Р YbJbKb Lb M Ν Р R#S T IV - 0 | 0 0# U V X#Y J K# М Ν 0 P IV - 1 | P Ob Rb Sb T T#U X# J K#L M#N 0 P X#Y 0#P#Q R S M# $IV - 2 \mid$ T# U#V J#K#L N# 0# Yb J V - 0 | P Qb Rb Sb T Ub VbXb K# L#M#N 0 P V - 1 | P Qb Rb Sb T U VbXb YbJbKb Lb M N Ob P V - 2 | 0 0#R S T# U#V X#Y K L M# N#0 P Rb Sb T U VbXb Yb J K#L M VI - 0 P Qb N Ob P P Q R S T Ub VbXb VI - 1 YbJb K L M# N#0 P VI - 2 | P P# Q#R ST U X# J K Lb M Ν Q# R#S T VII - 0 | P P# U X#Y J K# Μ Ν VII - 1 | T T#U V P Qb Rb Sb X# J K#L M Ν VII - 2 | P Qb Rb Sb Τ U VbXb Yb J K Lb 0 P Μ Ν P Qb Sb T T#U V X#Y J VIII - 0 | Rb K# VIII - 1 | P P# Q# R#S T U V X# J K Lb М VIII - 2 U VbXb Yb J P Qb Rb Sb Τ K#L M 0 P Ν IX - 0P P# Q#R Sb Т U V X#Y J K# Ν 0 P P Qb U VbXb IX - 1 | Rb Sb Τ Yb J K# 0 P $IX - 2 \mid$ P Qb Rb Sb T U VbXb YbJbKb Lb M 0 P Ν 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|. 2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|. 6M |+---^/^-----|. 7M |+----^----|. 7 |+---^/^-----|. 8 |+----^/------|.

15 |+----^/^-----^//-----

```
B C
                   D
                      E F G
                                Α
                                    ВС
                                             E F
                                         D
                                                   G
                   S T#U Vb X
                                    Y J K L
  I - 0
               Q#R
                                               M#
                                                      0#P#
            P#
                                                   N#
                 R STUb Vb X
                                  Υ
  I - 1 |
            P#0
                                       J#K# L#M#
                                                   N#
                                                      0#P#
  I - 2
            P#0 Rb Sb T U V X
                                  ΥJ
                                                     0
                                         K#
                                             L#M#N
 II - 0 |
                 R S T# U#V X
            P#0
                                  Υ
                                       J#K#L
                                               M#
                                                   N#0
                                   ΥJ
 II - 1 |
           P#
               Q# R#S T U V X
                                         K# M
                                                     0 P P#
                                                 Ν
 II - 2 |
                                  Y K L M Nb
                 R S T
                         U Vb X
           P#0
                                                   0b
                                                      P P#
III - 0 |
           P#Q
                 R SbTb Ub Vb X
                                  ΥJ
                                         K#L
                                               M#
                                                   N#
                                                       0#P#
III - 1 |
           P#Q Rb Sb T U V X
                                  ΥJ
                                         K# M
                                                 N N#0
III - 2
                   S T# U#V X
                                  ΥJΚ
           P#
               0#R
                                         L
                                                   N#
                                               M#
                                                      0#P#
 IV - 0 |
           P#
               0#R
                     S T Ub Vb X
                                   ΥJΚ
                                         L
                                               M#
                                                   N#
                                                       0#P#
                     S T#U Vb X
 IV - 1 |
            P#0
               R
                                   Y K L M
                                                 N Ob
                                  YJ K#L M
           P#Q Rb Sb T U
                             VX
 IV - 2 |
                                                 Ν
                                                     0
                             VX
                   S
                                   Y K L
  V - 0 |
                R
                        T#U
           P#0
                                               M#N Ob
                                  YJK L
                     S T# U#V X
  V - 1 |
           P#Q
                 R
                                               M#
                                                  N#0
  V - 2 |
           P#
               O#R Sb T U V X
                                   YJ K# M
                                                 N
                                                     0 P P#
                     S T# U#V X
                                  Y K LMM#
 VI - 0
           P#Q
               R
                                                  N#0
                                  YJ K# M
               Rb Sb T T#U V X
 VI - 1 |
           Qb
                                                 N
                                                     0 P 0b
                                  Y J#K#L
                R Sb T Ub
                            Vb X
                                                   N#
 VI - 2 |
           P#Q
                                               M#
                                                      0#P#
                                  Y J K L
VII - 0 |
                     S T Ub
                            Vb X
           P#Q
                 R
                                               M#
                                                   N#
                                                       0#P#
VII - 1 |
                         T#U Vb X
                                  Y K L M Nb
           P#Q
                 R
                     S
                                                   0b
                                                      P P#
                                  Y J#K#L
Y J K L
                     S
VII - 2 |
           P#Q
                 R
                        T#
                            U#V X
                                               M#
                                                   N#
                                                      0#P#
                     S T#U Vb X
           P#Q
                 R
VIII - 0 |
                                               M#
                                                   N#
                                                      0#P#
VIII - 1 |
                 R
                     S T Ub
                            Vb X
                                  Y J#K#L
                                               M#
           P#Q
                                                   N#
                                                      0#P#
                                  Υ
                                     K
VIII - 2
                   S
                         T#
                            U#V X
           P#Q
                 R
                                           L M Nb
                                                      P P#
                                                   0b
                                  ΥJΚ
 IX - 0 |
           P#Q
                 R SbTb Ub
                            Vb X
                                           L
                                               M#
                                                   N#
                                                      0#P#
                 R S T#
 IX - 1 |
            P#0
                           U#V X
                                   Y K
                                           L
                                               M#N Ob
                                                      P P#
 IX - 2
                 R
                     S T#
                           U#V X
                                    YJK
           P#Q
                                           L
                                               M#
                                                   N#
                                                      0#P#
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+---^/^----^/^-|
```

```
B C
                 D
                     E F
                          G A B C
                                     D EF G A
            Q R Sb T U VbXb Yb
                                    J K Lb M
  I - 0
                                                      P#0
                                                   0
            Q Rb
  I - 1 |
                 Sb T T#U V X#
                                    J K#L
                                             M#N
                                                   0
            0 0#R S
                       T# U# X Yb
                                             M#N Ob P
  I - 2 |
                                    J K L
                                                        0
 II - 0 |
            Q Rb
                 Sb T U V X Yb
                                    J K#L M
                                                   0 P
                                               Ν
 II - 1 İ
           Q R S T Ub Vb X Yb
                                    J K L
                                             M# N#
                                                    0#P#Q
 II - 2 |
            Q Rb Sb T Ub VbXb Yb
                                    J K# L#M#N
III - 0 |
           Q Q#
                 R#S T U V
                                Χ#
                                    JK LM
III - 1 |
            Q Q#R
                   S
                       T# U# X Yb
                                    J K L
                                             M# N#0 P Q
             R Sb T U V X Yb
III - 2
                                    J K Lb M
                                                      P#0
            0
                                               N
 IV - 0 |
           0
               R Sb
                    T T#U V
                                X#
                                    J K Lb M
                                               Ν
                                                   0
 IV - 1 |
           0 Rb Sb T U VbXb Yb
                                    J K# L#M# N#0
                 S
                       T# U# X Yb
 IV - 2 |
           Q Q#R
                                    J K L M Nb
                                                 0b
                 Sb T
                       U Vb X Yb
  V - 0 |
                                    J K# M
           0 Rb
                                               N N#0
                 Sb T
                        U V X Yb
  V - 1 |
           Q Rb
                                    J K Lb M
                                               Ν
                                                   0 P Q
           Q R SbTb Ub Vb X Yb
  V - 2 |
                                    J K L
                                             M#
                                                N#
                 Sb T U V X Yb
                                                  0 P
 VI - 0
                                    J K# L#M#N
           Q Rb
                                    JK L M#
           0 R S
                       T#U Vb X Yb
 VI - 1 |
                                                N#
           Q Q# R#S
                            V X#
                                    J K#L M
 VI - 2 |
                       T#U
                                               Ν
                                                   0
VII - 0 |
           Q Rb
                 Sb T T#U
                           V X#
                                    J K Lb M
                                               Ν
                                                      P#Q
VII - 1 |
           Q Rb
                 Sb
                     Τ
                        U VbXb Yb
                                    J
                                       K# L#M#N
                                                      P#Q
                            V X Yb
VII - 2 |
           Q Rb
                 Sb
                    Τ
                        U
                                    J
                                       K#L M
                                                      P#Q
                 Sb
                    Τ
                        U VbXb Yb
VIII - 0 |
           Q Rb
                                    J K Lb M
                                                    P#0
VIII - 1 |
                 Sb
                     T T#U
                            V X#
           Q Rb
                                    J
                                       K#L M
                                               Ν
                                                   0 P#Q
VIII - 2
                            V X Yb
                                                     P#Q
                    Τ
           Q Rb
                 Sb
                       U
                                    J
                                       K#
                                           L#M#N
                                                   0
                 R#S T
 IX - 0 |
           Q Q#
                       U
                           V X# JKLb
                                               N
                                                   0
                                                    P#Q
                          V X Yb
 IX - 1 |
           Q Rb
                 Sb T
                        U
                                    J
                                       K#
                                                      P#Q
                          V X Yb J K Lb
 IX - 2 \mid
           Q Rb
                 Sb T
                       U
                                          Μ
                                                   0
                                                      P#0
                                               Ν
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+----^/^-----^//-----
```

Α C D ΕF Α B C D ΕF B C G G T# U#V X Y J#K#L I - 0Q# R#S Q Q# M# N# T#U Vb X Y I - 1 |Q#R S K L M N Ob Q Q# I - 2Q#R Sb T U V X#Y K Lb M N N#0 P# Q# II - 0 | S T# U# V#X#Y 0#R K L M Nb 0b II - 1 | V Rb Sb T T#U X#Y K Lb M P#0 Rb Ν 0 T#U V X Y II - 2 | Q#R S K L M#N Ob P 0 0# III - 0 | Q#R S T Ub Vb X Y K Lb M Nb 0b Р 0 0# III - 1 | Q#R Sb T U V X#Y K Lb M Ν 0 P P# Q# SbTb Ub Vb X YbJb III - 2 0 Rb K LbMb Nb Ob P Rb IV - 0 | Q# R#S T#U Vb X Y J#K#L M# N# P 0 0# T# U#V X Y M#N 0 P IV - 1 | Q#R S K L 0 0# Q#R Sb T U V $IV - 2 \mid$ X#Y J#K# L#M#N 0 S K L V - 0 | T# U#V X#Y N#0 P Q#R M# V - 1 | Q#R S T# U# V#X#Y J#K#L M# N# 0#P# V - 2 | Q# R#S T U V X#Y K Lb M Ν 0 P#0 0# VI - 0 T# U# V#X#Y K L P P# Q#R S M#N Ob 0# Rb Sb T VI - 1 | U VbXb YbJb P#0 Rb K Lb M Ν U Vb X VI - 2 | S T K L M Nb Ρ Q#R Υ 0b Q Q# S VII - 0 | Q#R T#U Vb X Υ J#K#L N# M# Q Q# VII - 1 | U#V X Y Q#R S T# K L M#N Ob Q Q# S VII - 2 | Q#R T# U# V#X#Y L M Nb Ρ Κ 0b Q Q# S Q#R T# U#V X Y J#K#L VIII - 0 | M# N# VIII - 1 | Q#R S T#U Vb X Y K L M Nb 0b Q Q# S K L VIII - 2 | T# V#X#Y Q#R U# M#N Ob Q Q# J#K#L IX - 0 | Q#R S T Ub ۷b X Y M# N# Ρ Q Q# S IX - 1 | Q#R T# U# V#X#Y K L M# N#0 P Q Q# IX - 2S V#X#Y Q#R T# U# J#K#L M# N# Q Q# 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|. 2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|. 6M |+---^/^-----|. 7M |+----^----|. 7 |+---^/^-----|. 8 |+----^/------|.

15 |+---^/^----^/^-|

```
E F G
                               B C
                                     D E F G A
                           Α
            R ST U VXYb J
  I - 0
                                     K#L M
                                                     P# Q#R
                                             N 0
            R Sb T U VbXb Yb J
  I - 1 |
                                     K# L#M# N#0
                                                     P# 0#R
            R SbTb Ub Vb X Y J
                                               N#0 P
  I - 2 |
                                     K#L
                                           M#
                                                     0
 II - 0 |
            R Sb T U V X#Y J
                                     K# L#M#N
                                                 0
                                                     P#0
 II - 1 İ
            R S
                    T#U Vb X Y J
                                           M# N#
                                                       0 Q#R
                                     K#L
            R Sb T U Vb X Yb J
 II - 2 |
                                     K# M
                                           N N#0
                                                     P#
                                                         0#R
                                           M#N
 III - 0 |
            R Sb T T#U V X# J
                                     K#L
                                                     P#
                                                         0#R
                                                 0
                                                   0#P#Q R
 III - 1 |
            R SbTb Ub Vb X Y J
                                     K#L
                                           M# N#
 III - 2 |
                    U V X#Y J
              ST
                                     K#L M
                                                 0
                                                     P#
                                                         0#R
            R
                                             N
 IV - 0 |
            R S T
                      U VbXb Yb J
                                     K#L M
                                             Ν
                                                 0
                                                     P#
                                                         0#R
 IV - 1 |
            R Sb T
                      U V X Yb J
                                             N Ob P P#
                                     K# M
                                                         0#R
 IV - 2 |
            R SbTb Ub Vb X Y J
                                     K#L
                                           M#N Ob P
                                                     0 R
                    U V X Y J
U V X#Y J
  V - 0 |
                                     K# M
                                                 0 P P#
            R Sb T
                                             N
                                                         0#R
  V - 1 |
            R Sb T
                                     K#L M
                                             Ν
                                                 0
                                                     P#0
  V - 2 |
            R STUb Vb X YJ
                                     K#L
                                           M# N#
                                                    0 Q#R
            R Sb T U V X#Y J
 VI - 0 |
                                                     P#Q R
                                     K# M
                                             N N#0
                    T# U#V X Y J
 VI - 1 |
            R S
                                                    Q Q#R
                                     K#L
                                           M# N#
            R Sb T Ub VbXb Yb J
                                     K# L#M#N
                                                 0
                                                     P# Q#R
 VI - 2 |
VII - 0 |
                                             Ν
            R Sb
                 Τ
                      U VbXb Yb J
                                     K#L M
                                                 0
                                                         Q#R
VII - 1 |
            R Sb
                  Τ
                      U V X Yb J
                                     K#
                                         М
                                             N N#0
                                                     P#
                                                         Q#R
VII - 2 |
            R Sb
                 Τ
                      U
                         ٧
                            X#Y J
                                     K# L#M#N
                                                 0
                                                     P#
                                                         Q#R
                      U V X Yb J
            R Sb
                 Т
VIII - 0 |
                                     K#L M
                                                     P# Q#R
VIII - 1 |
            R Sb
                 Т
                      U VbXb Yb
                                 J
                                     K# L#M#N
                                                 0
                                                     P# Q#R
VIII - 2
                             X#Y J
            R Sb
                  Τ
                     U
                        V
                                     K# M
                                             N N#0
                                                     P#
                                                         Q#R
                             X# J
 IX - 0 |
            R Sb
                 T T#U
                        ٧
                                     K#L M
                                             Ν
                                                 0
                                                     P#
                                                        Q#R
 IX - 1 |
            R Sb
                 Τ
                      U
                        V
                             X#Y J
                                     K# M
                                                 0 P P#
                                                         Q#R
                             X#Y J
 IX - 2
            R Sb
                 Т
                      U
                        V
                                     K#L M
                                                 0
                                                     P#
                                                         Q#R
                                             Ν
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^-----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^//-----
```

```
E F
                             BC D E F
                                            G
            D
                     G
                         Α
                                               Α
                                                   B C
                                                         D
            Sb T Ub Vb X YbJb K
  I - 0
                                    L M Nb Ob P
                                                   Q
                                                       R Sb
                 T# U#V X Y
                                            0 P
  I - 1 |
            R#S
                                Κ
                                    L M#N
                                                   Q
                                                       R R#
  I - 2
            R#S T U V
                           X# J K
                                   L M N
                                              0 P P# 0# R#
 II - 0 |
            SbTb Ub Vb X Y J K
                                   L
                                        M#N Ob P
                                                   0 Rb
 II - 1 İ
            Sb T U VbXb Yb J K
                                    L M N
                                            0
                                                 P#
                                                     Q#R Sb
 II - 2 |
            SbTb Ub VbXb YbJb K
                                   L M# N#0 P
                                                       R Sb
                                                   0
III - 0 |
            R#S
                 T#U Vb X Y
                                    L M
                                          N Ob P
                                                   0
                           X# J K
                                    L M
                                                 P#Q Q# R#
III - 1 |
            R#S T U V
                                          N 0
            Sb T Ub Vb X Y J K
III - 2
                                    L M Nb
                                            0b P
                                                     R Sb
                                                   0
                           Υ
 IV - 0 |
            Sb T T# U#V X
                                K
                                    L M Nb
                                            0b
                                               Р
                                                   0
                                                       R Sb
 IV - 1 |
            SbTb Ub
                     Vb X YbJb K
                                    L
                                        M#
                                            N#0
                                                 P#0
                                                       R Sb
 IV - 2 |
            R#S T U V
                           X# J K
                                    L M N N#0
                                                 P#
                                                     Q#
            SbTb Ub Vb X Yb J K
  V - 0 |
                                    L M#
                                            N#
                                               0#P#0
                                                       R Sb
  V - 1 |
            SbTb Ub Vb X Y J K
                                    L M Nb
                                            0b
                                                Ρ
                                                   Q Rb Sb
  V - 2 |
            Sb T T#U V X# J K
                                    LM N O
                                                 P#
                                                     Q#R Sb
            SbTb Ub Vb X Y J K
 VI - 0
                                    L M# N#0 P
                                                   Q Rb Sb
                 U V X Yb J K
 VI - 1 |
                                                 P#
            Sb T
                                    LM N O
                                                     Q#R Sb
 VI - 2 |
            R#S
                 T#U
                     VX
                           Υ
                                K
                                    L M#N Ob P
                                                   Q
                                                      R R#
                     U#V X
VII - 0 |
            R#S
                 T#
                           Υ
                                K
                                    L M Nb
                                            0b
                                                   Q
                                                       R R#
VII - 1 |
            SbTb
                 Ub
                     Vb
                         X YbJb K
                                    L
                                        M#
                                            N#0 P
                                                       R Sb
VII - 2 |
                     Vb X
                           ΥJΚ
                                   L M#N Ob
                                               Ρ
            SbTb
                 Ub
                                                     R Sb
                     Vb X YbJb K
VIII - 0 |
            SbTb
                 Ub
                                   L M Nb
                                            0b
                                                   Q R Sb
VIII - 1 |
                     U#V X
                            Υ
                                K
                                                   Q R R#
            R#S
                 T#
                                    L M#N Ob
                            ΥJΚ
                                                   Q R Sb
VIII - 2 |
                 Ub Vb X
                                        M#
                                            N#0 P
            SbTb
                                    L
 IX - 0 |
            R#S
                 T#U Vb X
                           ΥK
                                    L M Nb
                                            0b
                                               Ρ
                                                   Q
                                                       R R#
                            ΥJΚ
 IX - 1 |
            SbTb
                 Ub Vb X
                                    L
                                        M#
                                            N#
                                                0#P#Q
                                                       R Sb
                 Ub Vb X
                            YJK
 IX - 2 \mid
            SbTb
                                    L M Nb
                                            0b
                                               Ρ
                                                       R Sb
                                                   Q
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^-----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|.
```

```
EF G A B C
                                   E F G A
                                               ВС
                               D
               T#U V X#Y J
  I - 0
                               K#
                                   L#M#N
                                          0
                                              P#
                                                 Q# R#S
           ST U VXYb J K#
  I - 1 |
                                   M N Ob
                                            P P#
                                                 Q# R#S
  I - 2 \dot{I}
           S T Ub Vb X Y J#K#
                                   L#M# N#
                                            0#P#0 R S
 II - 0 |
           ST U V X# JKLb
                                   M N N#0
                                              P# 0#R
           II - 1 İ
                                   M Nb
                                        0b
                                            Р
                                               0
                                                 R R#S
 II - 2 İ
                                   M N 0 P P#
                                                 0# R#S
           ST
 III - 0 |
                 U VbXb Yb J
                               K#
                                   L#M# N#0
                                              P#
                                                0#
           S T Ub Vb X Y K Lb
                                               Q Q#R S
 III - 1 |
                                   M Nb
                                        0b P
III - 2 |
                   V X# Y#J#K#
V X Yb J K#
                                   L#M#N
           S
               T#U
                                          0
                                              P# Q#
                                                     R#S
 IV - 0 |
           S
               T#U
                                   L#M#N
                                          0
                                              P# Q#
                                                     R#S
           S T U
                    V X#Y J K#
                                               0 0#
 IV - 1 |
                                   M
                                          0 P
           S T Ub Vb X Y
                                              Q R S
 IV - 2 |
                             J#K#
                                   L#M# N#0 P
           ST U V
                        X#Y
  V - 0 |
                             K Lb
                                   M
                                              P#Q Q# R#S
                                          0
           S T U V X# Y#J#K#
  V - 1 |
                                   L#M#N
                                          0
                                              P# Q#R S
  V - 2 |
               T#U Vb X Y K Lb
                                   M Nb Ob P
                                               0 R R#S
           ST U V X# JKLb
 VI - 0 |
                                   M N 0 P P# Q#R S
           Tb Ub Vb X YbJb K Lb
                                               Q R SbTb
 VI - 1 |
                                   M Nb Ob P
               U Vb X Yb J
                                   M N N#0
                                              P# Q# R#S
 VI - 2 |
           S T
                               K#
VII - 0 |
           S T
                   V X Yb J
                 U
                               K#
                                   L#M#N
                                          0
                                              P#
                                                 Q#
                                                     R#S
VII - 1 |
                    V X#Y J
           S T
                 U
                               K#
                                   M
                                          0 P P#
                                                 Q#
                                                     R#S
                    V X# J K Lb
           S T
VII - 2 |
                U
                                   М
                                      N N#0
                                              P#
                                                 Q#
                                                     R#S
                U V X#YJ K#
           S T
VIII - 0 |
                                  L#M#N
                                          0
                                              P#
                                                 0# R#S
VIII - 1 |
           S T
               U
                    V X Yb J
                               K# M N N#0
                                              P#
                                                 0# R#S
VIII - 2 |
           S T
                U V X# JKLb
                                  M
                                          0 P P#
                                                 Q#
                                                     R#S
           S T
                U VbXb Yb
 IX - 0 |
                          J K#
                                  L#M#N
                                          0
                                              P#
                                                 Q#
                                                     R#S
           S T
 IX - 1 |
                 U V X#
                          J K Lb
                                   M
                                          0
                                              P#Q Q#
                                                     R#S
 IX - 2 |
           S T
                 U
                   V X# Y#J#K#
                                  L#M#N
                                          0
                                              P# Q#
                                                     R#S
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|
```

```
E F G
                        ВС
                             D EF G A
                                             B C D
                    Α
                                                      Ε
           T UVb X YJK L
  I - 0
                                  M#N Ob P Q
                                                 R
  I - 1 |
           T Ub Vb X YbJb K L
                                  M# N#0
                                           P#0
                                                 R
  I - 2
           T T#U V X# J K#L
                                  M#N
                                           P#Q Rb Sb T
                                        0
 II - 0 |
           T Ub Vb X Y
                           J#K#L
                                  M# N#0 P
                                            0
                                                 R Sb
 II - 1 İ
           T U V X Yb J K#L
                                  M#N
                                        0
                                           P# 0# R#S T
 II - 2 |
           T Ub Vb X Yb J K L
                                  M# N# 0#P#Q
                                               R
                                                    ST
III - 0 |
           T T# U#V X Y
                           K L
                                  M#N
                                        0 P
                                             Q
                                                R
                                                    S T
                                        0
                                           P# Q#R Sb T
III - 1 |
           T T#U V X# J K#L
                                  M#N
III - 2 |
                                                  ST
             U Vb X Y
                                  M#N 0b P 0 R
           Τ
                           J#K#L
           T U Vb X YbJb K L
                                         P Q
 IV - 0 |
                                  M#N Ob
                                                R
                                                    S T
           T Ub Vb X Y J K L
                                          0#P# Q#R
 IV - 1 |
                                  M#
                                      N#
 IV - 2 |
           T T#U V X# J
                             K#L
                                  M#N
                                        0 P Qb Rb
                                                  Sb T
           M# N# P Q Q#R
  V - 0 |
                            K#L
                                  M#N Ob P
  V - 1 |
                           J#K#L
                                             Q
                                                 R Sb T
           T U VbXb Yb J
  V - 2 |
                             K#L
                                  M#N
                                        0
                                           P#
                                               Q# R#S T
           T Ub Vb X Y
 VI - 0 |
                           J#K#L
                                  M# N# 0#P#Q
                                               R Sb
           T U V X#Y J K#L
 VI - 1 |
                                           P# 0#
                                                  R#S T
                                  M#N 0
 VI - 2 |
           T Ub VbXb YbJb K L
                                  M# N#0 P
                                                    S T
                                            Q
                                                R
                Vb X YbJb K L
VII - 0 |
                                                    S T
           T Ub
                                  M#N Ob
                                            Q
                                                 R
VII - 1 |
                Vb X YJK L
           T Ub
                                  M# N#
                                         0#P#Q
                                                 R
                                                    S T
                                                    S T
VII - 2 |
           T Ub
                Vb X
                       Υ
                           J#K#L
                                  M# N#0 P
                                             0
                                                R
                Vb X YJK L
                                                    S T
           T Ub
VIII - 0 |
                                  M#N Ob
VIII - 1 |
           T Ub
                Vb X YbJb K L
                                      N#0 P
                                                    S T
                                  M#
                                             0
VIII - 2
           T Ub
                Vb X
                           J#K#L
                                          0#P#0
                                                    S T
                      Υ
                                                R
                                  M#
                                      N#
 IX - 0 |
           T T#
               U#V X Y
                          K L
                                  M#N Ob
                                             0
                                               R
                                                    S T
                                          Р
                                                    ST
 IX - 1 |
           T Ub
                Vb X Y J#K#L
                                  M# N#
                                             Q Q#R
                Vb X Y
 IX - 2 \mid
           T Ub
                           J#K#L
                                  M#N Ob
                                         Ρ
                                             Q
                                                 R
                                                    ST
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^-----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^//-----
```

```
F
                       B C
                             D
                                 E F G
                                              B C
                                                        E F
                G
                   Α
                                          Α
                                                    D
            Ub VbXb Yb J K Lb M
                                    N ObPb Qb Rb
  I - 0
                                                    Sb T Ub
                 V X#Y J K# M
  I - 1 |
            T#U
                                    N O P Q Rb
                                                    Sb T T#
  I - 2
            T#U Vb X Y
                           K L M
                                    N Ob P
                                                    S
                                              0 Q#R
                     X# J
 II - 0 |
            T#U
                V
                             K#L M
                                      0 P P# Q#
                                                    R#S
                                    N
 II - 1 |
            Ub Vb X YbJb K L M
                                    N Ob P
                                            0 R
                                                      S T Ub
                V X#Y
                                      0
 II - 2 |
            T#U
                           K Lb M
                                            P#Q Rb
                                                    Sb
                                                       T T#
                                    Ν
III - 0 |
            T#U
                V X Yb J
                             K# M
                                    N Ob P Qb Rb
                                                    Sb
                                                        T T#
III - 1 |
            T#U Vb X Y
                           K L M
                                    N Ob P Q
                                                  R R#S
            Ub VbXb Yb J K#L M
III - 2
                                    N ObPb Ob Rb Sb
                                                       T Ub
               VbXb YbJbKb Lb M
                                    N ObPb
 IV - 0 |
            Ub
                                            Qb Rb Sb
                                                       T Ub
                     X# J K Lb M
 IV - 1 |
                                    N 0
                                            P#Q
                                                  R Sb
                                                       T T#
            T#U
                V
            T#U Vb X Y K L M
                                                  R S
 IV - 2 |
                                    N 0b P P#Q
                     X# JK LM
  V - 0 |
                                                Q#R Sb
            T#U
                V
                                    N 0
                                            P#
  V - 1 |
            T#U
                V
                     X# J
                             K#L M
                                    N N#0
                                            P#
                                                Q# R#S
  V - 2 |
            T#
               U#V X Y
                           K L M
                                    N Ob P O
                                                  R
                 V X# J K#L M
 VI - 0
            T#U
                                      0
                                            P#Q Q# R#S
                                    Ν
               Vb X YJK LM
                                                      S T Ub
 VI - 1
                                    N Ob P
            Ub
                                              Q
                                                  R
                 VX YJ
                             K# M
                                      0 P Qb
 VI - 2 |
            T#U
                                    Ν
                                                Rb
                                                    Sb
                                                       T T#
VII - 0 |
                    X#Y J
            T#U
                 ٧
                             K# M
                                    N N#0
                                            P#
                                                Q#
                                                    R#
                                                       S#T#
VII - 1 |
            T#U
                 ٧
                     X# J K Lb M
                                    Ν
                                        0
                                            P#Q Rb
                                                    Sb
                                                       T T#
                           K#L M
VII - 2 |
            T#U
                 ٧
                     X#
                         J
                                    N
                                        0 P Qb
                                                       T T#
                                                Rb
                                                    Sb
            T#U
                 V X# JKLb M
                                    N N#0
VIII - 0 |
                                            P#
                                                Q#
                                                    R#
                                                       S#T#
            T#U
                 V
                     X#Y J
                                        O P Qb
                                                       T T#
VIII - 1 |
                            K# M
                                    N
                                                Rb
                                                    Sb
                                                       T T#
VIII - 2
                 V X#
                         J
                             K#L M
            T#U
                                        0
                                            P#Q Rb
                                                    Sb
                                    N
                 V X Yb J
 IX - 0 |
            T#U
                           K# M
                                    N N#0
                                            P#
                                                Q#
                                                    R#
                                                       S#T#
                     X# J
 IX - 1 |
            T#U
                 V
                             K#L M
                                    Ν
                                      0
                                            P#
                                                Q#R Sb
                                                       T T#
                     X# J
 IX - 2 \mid
            T#U
                 ٧
                             K#L M
                                    N N#0
                                            P# Q# R#
                                                       S#T#
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+----^/^-----^//-----
```

```
Α
                     B C
                          D E F
                                           B C D
             G
                                   G
                                       Α
                                                    E F
            U V X Y
                                           Q R
  I - 0
                        J#K#L
                                M#
                                   N#0 P
                                                  S
                                                      T#U
           U Vb X Y J K L
  I - 1 |
                               M#
                                   N# 0#P# Q#R
                                                  S
                                                      T#U
           U VbXb Yb J
                          K# L#M#
                                   N#0
                                             Q#R Sb T
  I - 2 |
                                         P#
                                                      U
 II - 0 |
                                                  ST
           U Vb X Y K L M Nb
                                   0b P P#0
                                             R
 II - 1 İ
                   X#Y J
                                         P# Q# R# S#T#U
           U V
                          K# L#M#
                                   N#0
           U Vb X Y J
 II - 2 |
                          K#L
                                M#
                                   N# P Q Q#R
                                                  S
 III - 0 |
           U Vb X YbJb K L
                                M#
                                   N#0
                                         P#0
                                              R
                                                  S
 III - 1 |
           U VbXb Yb J K# L#M#
                                   N#0
                                         P# Q# R#S T U
                   Y K L M M#
III - 2
                                                  S T#U
              VX
                                   N#0 P
                                           0 R
                    ΥJΚ
 IV - 0 |
           U V X
                          L M#
                                   N#0 P
                                           0 R
                                                  S
                                                      T#U
                                   N# P
                                                R#S
 IV - 1 |
           U Vb X Y
                        J#K#L
                                M#
                                           0 0#
 IV - 2 |
           U VbXb Yb J K# L#M#
                                   N#0
                                         P#Q Rb
                                                Sb T U
                   Y K Lb M Nb
  V - 0 |
                                   0b P
                                           0 R R#S
           U Vb X
  V - 1 |
           U Vb X
                   Υ
                        K L M M#
                                   N#0 P
                                           Q
                                              R
                                                  S T U
  V - 2 |
             V X Yb J K# L#M#
                                   N#0
                                         P# Q#
                                                R#
 VI - 0
           U Vb X Y K L M Nb
                                   0b P
                                         Q Q#R S T U
                   X# Y#J#K# L#M#
                                   N#0 P# Q# R# S#T#U
 VI - 1
           U V
           U Vb X Yb J K
                          L M#
                                   N# 0#P#Q
                                                  S
 VI - 2 |
                                              R
VII - 0 |
                   ΥJΚ
                          L
           U Vb
                Χ
                               M#
                                   N#0 P
                                           Q
                                              R
                                                      T#U
VII - 1 |
           U Vb
                Χ
                     Υ
                        J#K#L M#
                                   N#
                                       Р
                                           Q Q#R
                                                      T#U
                    Υ
VII - 2 |
           U Vb X
                        K L M Nb
                                   0b
                                       P P#Q
                                             R
                                                  S
                                                      T#U
                    Υ
                                              R
                                                  S
           U Vb X
                        J#K#L M#
                                   N#0 P
                                           0
VIII - 0 |
                                                      T#U
                     ΥJΚ
VIII - 1 |
           U Vb
                Χ
                                       0#P#0
                                            R
                                                  S T#U
                          L M#
                                   N#
VIII - 2
                                                  S
           U Vb
                   Y K
                                           Q Q#R
                 Χ
                            L M Nb
                                       Ρ
                                                      T#U
                                   0b
 IX - 0 |
           U Vb
                X YbJb K
                           L M#
                                   N#0 P
                                           0
                                            R
                                                  S
                                                      T#U
                          L M Nb
                                   0b P
                                              R R#S
 IX - 1 |
           U Vb
                Χ
                   Y K
                                           Q
                                                      T#U
 IX - 2 |
                Χ
                    Y K
           U Vb
                          L M M#
                                   N#0 P
                                           Q
                                              R
                                                  S
                                                      T#U
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+---^/^------|.
         15 |+---^/^----^/^-|
```

```
B C
                            E F G A
                                                  ΕF
            G
               Α
                        D
                                         ВС
                                               D
                                   0 P Qb Rb Sb
  I - 0
           Vb X Yb J K#L M N
                                                  Т
                                                      U Vb
  I - 1 |
           VbXb Yb J K Lb M N
                                   0 P#Q R Sb
                                                  Т
  I - 2
           U#V X Y K L
                              M#N
                                   0 P Q
                                             R R#S
                                                  T# U#
                                   0
 II - 0
           VbXb Yb J K# L#M#N
                                       P#Q Rb Sb
                                                  T Ub Vb
 II - 1 İ
           Vb X YJK L
                              M#N
                                   0 P 0 R S
                                                    T#U Vb
                                   0
 II - 2 |
           VbXb Yb J K L M N
                                       P# Q#R Sb T
                                                      U Vb
III - 0 |
           VbXb YbJbKb Lb M
                              N
                                   OP QRb Sb T
                                                      U Vb
                                   OP Q R
III - 1 |
           U#V X Y K L M#N
                                                S T T# U#
           Vb X Yb J K# L#M#N
III - 2
                                   0 P Ob Rb Sb T
                                                      U Vb
                                   0 P Qb
 IV - 0 |
           Vb X Yb J K Lb M N
                                           Rb Sb T
                                                      U Vb
                                                S T
 IV - 1 |
           VbXb Yb J
                        K#L M
                              N
                                   0 P#
                                           Q#R
                                   0 P Q Q#R
 IV - 2 |
           U#V X Y K L
                              M#N
                                                S
                                                    T# U#
           VbXb Yb J
                                   0
                                       P# 0# R#S T
  V - 0 |
                        K#L
                              M#N
  V - 1 |
           VbXb Yb J
                        K# L#M#N
                                   O P Qb Rb Sb T Ub Vb
  V - 2 |
           Vb X YbJb K L
                              M#N
                                   0 P Q R
                                                S
                                                    T#U Vb
                                                  T Ub Vb
 VI - 0
           VbXb Yb J K# L#M#N
                                   0 P# Q#R Sb
           Vb X Y
                                                S
 VI - 1 |
                                   0 P Q R
                                                    T#U Vb
                      J#K#L
                              M#N
 VI - 2 |
           VbXb YbJb K Lb M
                                   0 P#Q Rb Sb
                              N
                                                  Т
                                                     U Vb
VII - 0 |
           VbXb
                 Yb JKLb M
                                Ν
                                   0 P Qb
                                           Rb
                                               Sb
                                                  Τ
                                                      U Vb
VII - 1 |
           VbXb
                Yb
                     J
                        K#L M
                              Ν
                                   0
                                       P#
                                           Q#R Sb
                                                  Τ
                                                      U Vb
VII - 2 |
           VbXb
                Yb J
                        K# L#M#N
                                   0 P#Q Rb
                                              Sb
                                                  Т
                                                      U Vb
                Yb J
                                   0 P Qb
                                           Rb
                                              Sb
                                                  Т
VIII - 0 |
           VbXb
                        K#L M
                                Ν
                                                      U Vb
VIII - 1 |
                Yb J K Lb M
                                   0 P#Q Rb
           VbXb
                                Ν
                                               Sb
                                                  Τ
                                                    U Vb
VIII - 2
                 Yb J
                                   0 P#
                                                    U Vb
                        K#
                           L#M#N
                                           Q#R Sb
                                                  Τ
           VbXb
 IX - 0 |
           VbXb
                YbJbKb Lb
                           M N
                                   0 P Qb
                                           Rb
                                             Sb
                                                  Τ
                                                      U Vb
 IX - 1 |
           VbXb
                 Yb J
                        K#
                           L#M#N
                                   0 P#
                                           Q#
                                               R#S T
                                                      U Vb
 IX - 2 \mid
           VbXb
                Yb J
                       K# L#M#N
                                   0 P Qb Rb Sb
                                                  Τ
                                                      U Vb
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|.
```

```
ВС
                    D EF G
                                   A BC D EF
                     K L M Nb Ob
  I - 0
               X#Y
                                   PP#Q R S
                                                  T# U#V
  I - 1 |
           V X Y
                     J#K#L M# N#
                                   P Q Q# R#S
                                                  T# U#V
           VXYbJK#MN0b
                                   P P# Q# R#S T U V
  I - 2 |
 II - 0 |
                                   P Q Q#R
           VX Y K L
                            M#N Ob
                                              S
                                                  T#U V
 II - 1 İ
           Xb Yb J K Lb M
                             N Ob
                                   P Qb Rb Sb T
                                                  U VbXb
           V X Y K Lb M Nb Ob P Q R R#S V X Y J K L M# N# O\#P\# Q#R S
 II - 2 |
                                                  T# U#V
 III - 0 |
                                                  T# U#V
           VXYbJK#MN0b
                                         Rb Sb T T#U V
 III - 1 |
                                   P Qb
 III - 2
               X#Y
                     K L
                                         R S
                                                  T# U#V
                            M#N Ob
                                   P P#0
               X#Y
 IV - 0 |
           V
                     J#K#L
                            M# N#
                                   0#P#Q
                                          R
                                            S
                                                  T#
                                                    U#V
 IV - 1 |
           V X Y
                     K L M Nb Ob
                                   P 0
                                          R Sb T T# U#V
           V X Yb J K# M
 IV - 2 |
                             N Ob
                                   P P# Q#R Sb T U V
                                   P Q R S T T# U#V
           V X Y
V X Y
                    K L M
  V - 0 |
                             N Ob
  V - 1 |
                     K L
                            M#N Ob
                                   PP#Q R S
                                                  T#U V
  V - 2 |
           Xb YbJbKb Lb M
                             N Ob
                                   P Qb Rb Sb T U VbXb
           V X Y K L
 VI - 0
                            M#N Ob
                                   P Q R R#S
                                                 T#U V
           Xb Yb J K#L M N Ob
                                                 U VbXb
 VI - 1 |
                                   P Qb Rb Sb T
           VX YJ K#L
                            M# N#
                                   P Q Q#R
                                             S
                                                  T# U#V
 VI - 2 |
                                              S
VII - 0 |
           V X
               Υ
                    J#K#L
                            M# N#
                                   0#P#Q R
                                                  T# U#V
               Υ
VII - 1 |
           V X
                    K L M Nb
                               0b
                                   P Q R R#S
                                                  T# U#V
           V X Y K L M#N
V X Y K L M Nb
                                   P Q Q#R
VII - 2 |
                            M#N Ob
                                              S
                                                  T# U#V
                                              S
VIII - 0 |
                                   P P#0 R
                               0b
                                                  T# U#V
           V X Y
VIII - 1 |
                    J#K#L
                            M# N# P Q Q#R S
                                                  T# U#V
VIII - 2
                Y K L
                                   P 0
           V X
                                                  T# U#V
                                        R R#S
                            M#N Ob
                ΥJΚ
           V X
                                   0#P#0
 IX - 0 |
                      L
                          M# N#
                                          R
                                            S
                                                  T# U#V
                                   P Q
           V X
                Y K L
                                              S T T# U#V
 IX - 1 |
                            M#N Ob
 IX - 2 |
           V X
                 Y K L
                            M#N Ob
                                   P P#Q
                                          R
                                              S
                                                  T#
                                                    U#V
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|
```

B C EF G A B C D E F G Α D Α X Y J U V X I - 00 P#Q Rb Sb T K# L#M#N P# Q#R S T I - 1 |X Yb J K#L M N 0 U V X $I - 2 \dot{I}$ P#0 S T Ub Vb X X YbJb K L M# N#0 R II - 0 | X Yb J K# M N N#0 P# Q#R Sb T U Vb X II - 1 İ X Y M# N#0 P#0 R S T# U#V X J#K#L X Yb J P# 0# R#S T II - 2 | K#L M#N U V X 0 III - 0 | X Yb J K Lb M N 0 P#Q R Sb T U V X III - 1 | X YbJb K L M# N#0 P#Q R S T#U Vb X ΥJ III - 2 K# M P#Q Rb Sb T VX N N#0 Χ U X YJ IV - 0 | K#L M Ν 0 P#0 Rb Sb T U V X K# L#M#N VX IV - 1 | X Yb J 0 P# Q# R#S T#U IV - 2 | X YbJb K L M# N#0 P#Q R SbTb Ub V - 0 | X Yb J K# L#M# P# Q# R# S#T#U N#0 V - 1 | X Yb J K# M N N#0 P#Q Rb Sb T U Vb X V - 2 | X YJK L M# N#0 P#0 R S T# P# Q# R#S T VI - 0 | X Yb J K# M U Vb N N#0 L M M# N#0 VI - 1 | X Y S T# K P#Q R U#V X X Yb J K LM P# Q#R Sb T VI - 2 | N 0 VX U VII - 0 | X Yb J K#L M N 0 P#Q Rb Sb Τ U VII - 1 | X Yb J K# L#M#N 0 P# Q# R#S T V X U X Yb VII - 2 | J K# M N N#0 P# Q#R Sb V X Τ U X Yb J K# L#M#N 0 Sb U V X VIII - 0 | P#0 Rb Т VIII - 1 | X Yb J K#L M U V X N 0 P# Q#R Sb Τ R#S T VIII - 2 X Yb K# M U V X J P# Q# N N#0 P#Q Rb IX - 0 | X Yb J K Lb M N 0 Sb Τ U VX IX - 1 | X Yb J K# M N N#0 P# Q# R# S#T#U V X K# M X Yb J $IX - 2 \mid$ N N#0 P#Q Rb Sb T U V X 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|. 2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|. 6M |+---^/^-----|. 7M |+----^-----|. 7 |+---^/^-----|. 8 |+----^/------|.

15 |+----^/^-----^//-----

```
B C
                   D E F
                             G
                                    B C
                                              E F
                                 Α
                                          D
                                                    G
            Yb J K L M#N Ob P
                                    Q Q#R S
                                                T# U# X Yb
  I - 0
  I - 1 |
            YbJb K L M Nb Ob P
                                     Q R Sb T Ub Vb X Yb
            X#Y J K# M
                         N 0 P
                                    Q Rb Sb T T#U V X#
  I - 2 |
 II - 0 |
                         M# N#0 P
            YbJb K L
                                    Q R SbTb Ub VbXb Yb
 II - 1 |
                                     Q Rb Sb T U V X Yb
            Yb J
                   K#L M
                           N 0 P
                                    Q R S T Ub Vb X Yb
                           N Ob P
 II - 2 |
            YbJb K L M
III - 0 |
            YbJb K LbMb Nb Ob
                                    Q Rb SbTb Ub Vb X Yb
            YbJbKb Lb M
III - 1 |
                           N 0 P
                                    Q Rb
                                          Sb T U VbXb Yb
                                                T# U# X Yb
T# U# X Yb
III - 2
            Yb J K
                                          S
                    L
                         M# N#0 P
                                    0 0#R
 IV - 0 |
            Yb J K
                    L M Nb Ob
                                 Р
                                    0 0#R
                                            S
                                    Q R S T U Vb X Yb
 IV - 1 |
            YbJb K L
                         M#N Ob P
                                    Q Q# R#S T U V
 IV - 2 |
            X#Y J K# M N
                               0 P
                                    Q R S
  V - 0 |
            YbJb K L
                                                T#U Vb X Yb
                         M#N
                               0 P
                                    Q Q#R S
  V - 1 |
            X#Y
                 K
                     L
                         M# N#0 P
                                                T# U#V X#
  V - 2 |
            Yb J K Lb M
                           Ν
                               0 P
                                    Q Rb Sb T U V X Yb
                                    Q R S T Ub VbXb Yb
 VI - 0
            YbJb K L M#
                             N#0 P
                                                     V X Yb
                                    Q Rb Sb T U
 VI - 1 |
                   K# L#M#N 0 P
            Yb J
            YbJb K Lb M Nb
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                                    Q R SbTb Ub
 VI - 2 |
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VII - 0 |
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VII - 1 |
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                         M#N Ob
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VIII - 0 |
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                                   Q R SbTb Ub
VIII - 1 |
            YbJb K
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                                    Q R
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VIII - 2 |
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 IX - 1 |
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                                                T#U Vb
                                                       X Yb
                                            S
 IX - 2 \mid
            X#Y
                 K
                     L
                       M#
                             N#0 P
                                    Q Q#R
                                                T# U#
                                                      V#X#
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+----^/^-----^/^-|.
```

```
B C
                 D
                     EF G A B C D EF G A
  I - 0
           Y K Lb M N N#0
                                P#
                                    Q#R Sb T U
                                                  ٧
                                                      X#Y
           Y J K# L#M#N
  I - 1 |
                            0
                                P#
                                    Q# R#S
                                            T#U
                                                  V
                                                      X#Y
           Y J K L
                      M#
                          N# 0#P#
                                    0#R S
                                            T#U Vb X
  I - 2 |
 II - 0 |
           ΥJ
                 K# M
                        N
                            0 P P#
                                    Q# R#S T U V X Y
 II - 1 İ
                                    Q#R S T# U# V#X#Y
           Y K L M Nb
                          0b P P#
           Y J K# L#M#
                                    Q# R# S#T#U
 II - 2 |
                          N#0
                                P#
                                                 V
III - 0 |
           ΥJ
                 K#L M
                            0
                                P#
                                    Q#R ST U V
                        N
III - 1 |
           Y J K L
                      M# N# 0#P#
                                    Q#R
                                         S T# U#V X Y
III - 2 |
                                    Q#R Sb T U V X#Y
               K Lb M N
                            0 P P#
           Υ
                                          T U V
 IV - 0 |
           Υ
               J#K# L#M#N
                            0
                                P#
                                    Q#R Sb
 IV - 1 |
                        N ObPb Ob
                                    Rb Sb T Ub VbXb YbJb
           JbKb Lb M
                                    Q#R S T Ub Vb X Y
 IV - 2 |
           Y J K L
                      M# N# 0#P#
                                   Rb Sb T U VbXb YbJb
  V - 0 |
           JbKb Lb M
                        N Ob P Qb
  V - 1 |
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                                    0#R
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           ΥJ
                                   Rb Sb T T#U V X Y
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VIII - 1 |
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                 K# M
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                                   Rb Sb
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                           0 P#
 IX - 0 |
           ΥJ
                 K#L M
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                                   Q#R Sb
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 IX - 1 |
           JbKb
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                                                     YbJb
 IX - 2 |
                                   Q#R Sb
           ΥJ
                 K# M
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                            0 P P#
                                           Τ
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                                                  ٧
                                                      X#Y
 2m |+|. 3M |+----|. 4 |+-----|. 6m |+---^/^-----|.

2M |+--|. 3m |+----|. 5 |+------|. b5 |+-----|.

6M |+---^/^-----|. 7M |+----^----|.

7 |+---^/^-----|. 8 |+----^/------|.
         15 |+---^/^----^/^-|
```