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Ostomachion

Wind Chimes from Archimedes' Box

for 12 MIDI instruments

[Catalog]

2013

Edition Ottaviano Petrucci

NOTES for Catalog

Ostomachion ("Bone Fight") is an ancient fit-the-pieces-back-into-their-box puzzle and the subject of Archimedes' monograph of this name, history's earliest treatise on combinatorics.

The puzzle consists of fourteen 3-to-5-sided flat pieces, which can without gaps or overlaps fill their square box in, all told, 17152 ways, reducing – if we discount rotations, reflections and a few duplicating anomalies – to 268. These, taken as the fixed content of four "core triangles" subdividing the square, group finally into 24 "tessellation families", whose lead-items comprise the puzzle's "core squares". (See references below.)

All the tessellations are plotted on a 12-by-12 grid of subsquares via points forming the inner-square corners. Thus, horizontally and vertically, points are disbursed along 13 parallel equidistant levels.

As 13 levels apply as well to inclusive chromatic octave subdivision, the tessellations seemed to me to invite musical realization of some sort. Taking the "cores" as my subject matter, I first converted their X/Y specs to LilyPond score files, separately for each of: the individual pieces; their intermediate triangular groupings; the full (triangles combined) squares. Each file of the first two types details all forms (rotations/reflections) and positions that its object assumes throughout the 24 square tessellations.

With these files I assembled – to aid me in the composition process, whatever that might consist of – a Catalog, here offered for anyone interested in the analysis.

A word about "Odd Man Out!" on page 43. This tessellation, Cutler series #164 and my favorite, is not among "the 24". It is, however, unique, in containing *none* of the core triangles AND *not* honoring the line that bisects nearly all of the original 268 squares. It is also, finally, not to be found in my composition (see Score) – being, as I said, "out".

For anything I have gleaned of Ostomachion history and theory as well as its specifications, I am indebted principally to three sources: Netz, R., Noel, W. (2007) *The Archimedes Codex*, Da Capo Press; <http://math.ucsd.edu/~fan/stomach>; <http://4umi.com/play/stomachion>.

14 Pieces

Distribution of Pieces: Summary

by

Core Triangle, Orientation, Square Assignment

A
[Tri-1]

X/Y Y/X

O S: 01 02 07 08 09 10 15 16 17 18 23 24

RI S: 03 04 05 06 11 12 13 14 19 20 21 22

B
[Tri-1]

X/Y Y/X

O S: 01 02 07 08 09 10 15 16 17 18 23 24

RI S: 03 04 05 06 11 12 13 14 19 20 21 22

C
[Tri-1]

X/Y Y/X

O S: 01 02 07 08 09 10 15 16 17 18 23 24

RI S: 03 04 05 06 11 12 13 14 19 20 21 22

D

[Tri-2]

X/Y

Y/X

1 O S: 01 02 07 08

2 O S: 13 16 17 20

R S: 10 11 22 23

1 RI S: 03 04 05 06

2 RI S: 09 12 21 24

I S: 14 15 18 19

E

[Tri-2]

X/Y

Y/X

1 O S: 01 02 07 08

2 O S: 13 16 17 20

R S: 10 11 22 23

1 RI S: 03 04 05 06

2 RI S: 09 12 21 24

I S: 14 15 18 19

F

[Tri-2]

X/Y

Y/X

O

1 S: 01 02 07 08

2 S: 13 16 17 20

R

1 S: 10 11 22 23

2 S: 03 04 05 06

RI

1 S: 09 12 21 24

2 S: 14 15 18 19

I

G

[Tri-3]

X/Y

Y/X

O

1 S: 01 04 13 16

2 S: 19 20 21 22

R

1 S: 06 07 10 11

2 S: 05 08 09 12

RI

1 S: 17 18 23 24

2 S: 02 03 14 15

I

H
[Tri-3]

X/Y Y/X

S: 01 04 13 16

1 O

S: 19 20 21 22

2 O

S: 06 07 10 11

R

S: 05 08 09 12

1 RI

S: 17 18 23 24

2 RI

S: 02 03 14 15

I

I
[Tri-3]

X/Y Y/X

S: 01 04 13 16

1 O

S: 19 20 21 22

2 O

S: 06 07 10 11

R

S: 05 08 09 12

1 RI

S: 17 18 23 24

2 RI

S: 02 03 14 15

I

J

[Tri-3]

X/Y

Y/X

Musical score for chord J [Tri-3]. The score is divided into two sections: X/Y and Y/X. The parts are labeled O, R, RI, and I. Each part has two staves (1 and 2) and a sequence of notes (S:).

X/Y Section:

- O:** S: 01 04 13 16
- R:** S: 06 07 10 11
- RI:** S: 05 08 09 12
- I:** S: 02 03 14 15

Y/X Section:

- O:** S: 19 20 21 22
- R:** S: 06 07 10 11
- RI:** S: 17 18 23 24
- I:** S: 02 03 14 15

K

[Tri-4]

X/Y

Y/X

Musical score for chord K [Tri-4]. The score is divided into two sections: X/Y and Y/X. The parts are labeled O, R, RI, and I. Each part has two staves (1 and 2) and a sequence of notes (S:).

X/Y Section:

- O:** S: 01 04 21 24
- R:** S: 06 07 18 19
- RI:** S: 05 08 17 20
- I:** S: 02 03 22 23

Y/X Section:

- O:** S: 09 10 15 16
- R:** S: 06 07 18 19
- RI:** S: 11 12 13 14
- I:** S: 02 03 22 23

L
[Tri-4]

X/Y Y/X

S: 01 04 21 24

S: 09 10 15 16

S: 06 07 18 19

S: 05 08 17 20

S: 11 12 13 14

S: 02 03 22 23

M
[Tri-4]

X/Y Y/X

S: 01 04 21 24

S: 09 10 15 16

S: 06 07 18 19

S: 05 08 17 20

S: 11 12 13 14

S: 02 03 22 23

N

[Tri-4]

X/Y

Y/X

The musical score consists of six staves, each with a treble clef and a key signature of one sharp (F#). The staves are labeled on the left as O, R, RI, and I, with sub-labels 1 and 2. Each staff contains a sequence of notes with stems and flags, indicating a specific fingering and fretting pattern. A vertical bar line is placed between the first and second measures of the score.

O
1 S: 01 04 21 24
2 S: 09 10 15 16

R
S: 06 07 18 19
S: 05 08 17 20

RI
1 S: 11 12 13 14
2 S: 02 03 22 23

I
S: 02 03 22 23

4 Core Triangles

Tri-1

[A B C]

X/Y

Y/X

S: 01 02 07 08 09 10 15 16 17 18 23 24

A
O
B
C

S: 03 04 05 06 11 12 13 14 19 20 21 22

C
RI
B
A

Tri-2

[D E F]

X/Y

Y/X

S: 01 02 07 08

D
O 1 E
F

S: 13 16 17 20

O 2
D
E
F

Detailed description: This system contains three staves labeled D, E, and F. The top staff (D) has a treble clef and a key signature of one flat. It contains two measures of music with notes G4, A4, Bb4, and C5. The middle staff (E) has a treble clef and a key signature of one flat. It contains two measures of music with notes Bb4, C5, D5, and Eb5. The bottom staff (F) has a treble clef and a key signature of one flat. It contains two measures of music with notes C5, D5, Eb5, and F5. The system is divided into two measures by a double bar line.

S: 10 11 22 23

R
D
E
F

Detailed description: This system contains three staves labeled D, E, and F. The top staff (D) has a treble clef and a key signature of one flat. It contains two measures of music with notes G4, A4, Bb4, and C5. The middle staff (E) has a treble clef and a key signature of one flat. It contains two measures of music with notes Bb4, C5, D5, and Eb5. The bottom staff (F) has a treble clef and a key signature of one flat. It contains two measures of music with notes C5, D5, Eb5, and F5. The system is divided into two measures by a double bar line.

S: 03 04 05 06

RI 1
F
E
D

Detailed description: This system contains three staves labeled F, E, and D. The top staff (F) has a treble clef and a key signature of one flat. It contains two measures of music with notes G4, A4, Bb4, and C5. The middle staff (E) has a treble clef and a key signature of one flat. It contains two measures of music with notes Bb4, C5, D5, and Eb5. The bottom staff (D) has a treble clef and a key signature of one flat. It contains two measures of music with notes C5, D5, Eb5, and F5. The system is divided into two measures by a double bar line.

S: 09 12 21 24

RI 2
F
E
D

Detailed description: This system contains three staves labeled F, E, and D. The top staff (F) has a treble clef and a key signature of one flat. It contains two measures of music with notes G4, A4, Bb4, and C5. The middle staff (E) has a treble clef and a key signature of one flat. It contains two measures of music with notes Bb4, C5, D5, and Eb5. The bottom staff (D) has a treble clef and a key signature of one flat. It contains two measures of music with notes C5, D5, Eb5, and F5. The system is divided into two measures by a double bar line.

S: 14 15 18 19

I
F
E
D

Detailed description: This system contains three staves labeled F, E, and D. The top staff (F) has a treble clef and a key signature of one flat. It contains two measures of music with notes G4, A4, Bb4, and C5. The middle staff (E) has a treble clef and a key signature of one flat. It contains two measures of music with notes Bb4, C5, D5, and Eb5. The bottom staff (D) has a treble clef and a key signature of one flat. It contains two measures of music with notes C5, D5, Eb5, and F5. The system is divided into two measures by a double bar line.

Tri-3 [G H I J]

X/Y

Y/X

S: 01 04 13 16

O 1

S: 19 20 21 22

O 2

S: 06 07 10 11

R

S: 05 08 09 12

RI 1

J
I
H
G

S: 17 18 23 24

RI 2

J
I
H
G

S: 02 03 14 15

I

J
I
H
G

Tri-4

[K L M N]

X/Y

Y/X

S: 01 04 21 24

O 1

K

L

M

N

S: 09 10 15 16

O 2

K

L

M

N

S: 06 07 18 19

R

K

L

M

N

S: 05 08 17 20

RI 1

Musical score for RI 1. It consists of four staves labeled N, M, L, and K. The score is divided into two measures by a vertical bar line. The first measure contains notes for each staff: N (G4, A4, B4), M (F4, G4, A4), L (E4, F4, G4), and K (D4, E4, F4). The second measure contains notes: N (B4, C5), M (G4, A4, B4), L (F4, G4, A4), and K (G4, A4, B4). The key signature has one flat (Bb).

S: 11 12 13 14

RI 2

Musical score for RI 2. It consists of four staves labeled N, M, L, and K. The score is divided into two measures by a vertical bar line. The first measure contains notes for each staff: N (G4, A4, B4), M (F4, G4, A4), L (E4, F4, G4), and K (D4, E4, F4). The second measure contains notes: N (B4, C5), M (G4, A4, B4), L (F4, G4, A4), and K (G4, A4, B4). The key signature has one flat (Bb).

S: 02 03 22 23

I

Musical score for I. It consists of four staves labeled N, M, L, and K. The score is divided into two measures by a vertical bar line. The first measure contains notes for each staff: N (G4, A4, B4), M (F4, G4, A4), L (E4, F4, G4), and K (D4, E4, F4). The second measure contains notes: N (B4, C5), M (G4, A4, B4), L (F4, G4, A4), and K (G4, A4, B4). The key signature has one flat (Bb).

24 Core Squares

Sqr-01

[1 2 3 4]

X/Y

Y/X

The musical score for Sqr-01 is presented in two systems. The first system, labeled T1 O, contains staves A, B, C, D, E, and F. The second system, labeled T3 O, contains staves G, H, I, and J. The third system, labeled T4 O, contains staves K, L, M, and N. Each staff is written in treble clef. The score is divided into two measures: the first measure is labeled 'X/Y' and the second measure is labeled 'Y/X'. The notation includes various notes, rests, and accidentals (sharps and flats) across the staves.

Sqr-02

[1 2 3 4]

X/Y

Y/X

The musical score for Sqr-02 is presented in two systems, each with four staves. The first system is labeled T1 O and the second system is labeled T3 I and T4 I. The score is divided into two measures: X/Y and Y/X. The notation includes treble clefs, notes, and various accidentals (sharps, flats, and naturals).

System 1 (T1 O):

- Staff A:** Measure 1: G4, A4, Bb4, C5. Measure 2: D#4, E#4, F#4, G#4.
- Staff B:** Measure 1: G4, A4. Measure 2: G4, A4, B4, C5.
- Staff C:** Measure 1: G4, A4, Bb4. Measure 2: G4, A4, Bb4, C5.

System 2 (T3 I, T4 I):

- Staff J:** Measure 1: Bb4, C5, D5. Measure 2: Bb4, C5, D5.
- Staff I:** Measure 1: Bb4, C5, D5. Measure 2: E#4, F#4, G#4, A#4.
- Staff H:** Measure 1: G4, A4, Bb4. Measure 2: G4, A4, B4, C5.
- Staff G:** Measure 1: G4, A4, Bb4. Measure 2: G4, A4, B4, C5.
- Staff N:** Measure 1: G4, A4, Bb4, C5. Measure 2: G4, A4, Bb4, C5.
- Staff M:** Measure 1: G4, A4, Bb4, C5. Measure 2: G4, A4, Bb4, C5.
- Staff L:** Measure 1: G4, A4, Bb4, C5. Measure 2: G4, A4, Bb4, C5.
- Staff K:** Measure 1: G4, A4, Bb4, C5. Measure 2: G4, A4, Bb4, C5.

Sqr-03

[2 1 3 4]

X/Y

Y/X

The musical score for Sqr-03 is presented in two measures: X/Y and Y/X. The notation is organized into four groups of staves, each with a vertical label on the left:

- T2 RI**: Staves F, E, and D.
- T1 RI**: Staves C, B, and A.
- T3 I**: Staves J, I, H, and G.
- T4 I**: Staves N, M, L, and K.

Each staff contains musical notation with notes, stems, and accidentals (sharps, flats, and double flats) across the two measures. The notation is written in a style typical of guitar tablature or fretboard notation, where the staff lines represent frets and the notes represent fingerings.

Sqr-04

[2 1 3 4]

X/Y

Y/X

The musical score for Sqr-04, page 21, is divided into two sections: X/Y and Y/X. The score consists of 14 staves, labeled F through N. The notation is as follows:

- Staff F:** Treble clef. X/Y: \flat quarter, quarter, quarter. Y/X: quarter, quarter, quarter, \flat quarter.
- Staff E:** Treble clef. X/Y: $\flat\flat$ quarter, quarter, quarter. Y/X: quarter, quarter.
- Staff D:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter.
- Staff C:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff B:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff A:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff G:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff H:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff I:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff J:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff K:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff L:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff M:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.
- Staff N:** Treble clef. X/Y: quarter, quarter, quarter. Y/X: quarter, quarter, quarter.

Sqr-05

[2 1 4 3]

X/Y

Y/X

The musical score is organized into two systems: X/Y and Y/X. Each system contains 12 staves, labeled F through G. The staves are grouped into four sets of three, labeled T2 RI, T1 RI, T4 RI, and T3 RI. The notation includes treble clefs, key signatures (one flat and one sharp), and various note values and accidentals. The X/Y system is on the left, and the Y/X system is on the right, separated by a double bar line. The notes are arranged in a way that suggests a specific harmonic or melodic progression across the strings.

Sqr-06

[2 1 4 3]

X/Y

Y/X

F
T2 RI E
D

C
T1 RI B
A

K
T4 R L
M
N

G
T3 R H
I
J

Sqr-07

[1 2 4 3]

X/Y

Y/X

The musical score for Sqr-07 is presented in two measures: X/Y and Y/X. The score is organized into four groups of staves, each with a group label on the left:

- T1 O:** Staves A, B, and C.
- T2 O:** Staves D, E, and F.
- T4 R:** Staves K, L, M, and N.
- T3 R:** Staves G, H, I, and J.

Each staff contains musical notation in treble clef, showing various notes, rests, and accidentals (sharps and flats) across the two measures. The notation is dense and complex, typical of a square dance tune.

Sqr-08

[1 2 4 3]

X/Y

Y/X

The musical score for Sqr-08 is presented in two systems, X/Y and Y/X, across 14 staves labeled A through G. The notation is in treble clef and includes various rhythmic values and accidentals.

System X/Y:

- Staff A:** Quarter note G4, quarter note F4, quarter note E4.
- Staff B:** Quarter note G4, quarter note F4.
- Staff C:** Quarter note G4, quarter note F4, quarter note E4.
- Staff D:** Quarter note G4, quarter note F4, quarter note E4.
- Staff E:** Quarter note G4, quarter note F4, quarter note E4.
- Staff F:** Quarter note G4, quarter note F4, quarter note E4.
- Staff N:** Quarter note G4, quarter note F4, quarter note E4.
- Staff M:** Quarter note G4, quarter note F4, quarter note E4.
- Staff L:** Quarter note G4, quarter note F4, quarter note E4.
- Staff K:** Quarter note G4, quarter note F4, quarter note E4.
- Staff J:** Quarter note G4, quarter note F4, quarter note E4.
- Staff I:** Quarter note G4, quarter note F4, quarter note E4.
- Staff H:** Quarter note G4, quarter note F4, quarter note E4.
- Staff G:** Quarter note G4, quarter note F4, quarter note E4.

System Y/X:

- Staff A:** Quarter note G4, quarter note F4, quarter note E4.
- Staff B:** Quarter note G4, quarter note F4, quarter note E4.
- Staff C:** Quarter note G4, quarter note F4, quarter note E4.
- Staff D:** Quarter note G4, quarter note F4, quarter note E4.
- Staff E:** Quarter note G4, quarter note F4, quarter note E4.
- Staff F:** Quarter note G4, quarter note F4, quarter note E4.
- Staff N:** Quarter note G4, quarter note F4, quarter note E4.
- Staff M:** Quarter note G4, quarter note F4, quarter note E4.
- Staff L:** Quarter note G4, quarter note F4, quarter note E4.
- Staff K:** Quarter note G4, quarter note F4, quarter note E4.
- Staff J:** Quarter note G4, quarter note F4, quarter note E4.
- Staff I:** Quarter note G4, quarter note F4, quarter note E4.
- Staff H:** Quarter note G4, quarter note F4, quarter note E4.
- Staff G:** Quarter note G4, quarter note F4, quarter note E4.

Sqr-09

[1 4 2 3]

X/Y

Y/X

The musical score is organized into two main sections: X/Y and Y/X. Each section contains 12 staves, labeled A through G, with some staves grouped by a brace and a label to their left. The staves are: A, B, C (grouped as T1 O); K, L, M, N (grouped as T4 O); F, E, D (grouped as T2 RI); and J, I, H, G (grouped as T3 RI). The notation includes treble clefs, notes, accidentals (sharps, flats, double flats), and slurs. The X/Y section is on the left, and the Y/X section is on the right, separated by a double bar line. The score is written in a standard musical notation style for guitar.

Sqr-10

[1 4 2 3]

X/Y

Y/X

The musical score for Sqr-10 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, labeled T1 O, T4 O, T2 R, and T3 R on the left. Each system contains three staves, labeled A through J. The notation is in treble clef and includes various notes, rests, and accidentals (sharps and flats). The first measure (X/Y) and the second measure (Y/X) are separated by a vertical bar line. The notes in the second measure are often inverted or transposed relative to the first measure, reflecting the 'Y/X' label.

Sqr-11

[4 1 2 3]

X/Y

Y/X

The musical score for Sqr-11 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, each with a group label on the left:

- T4 RI** (Staves N, M, L, K):
 - Staff N: Treble clef, notes G4, F4, E4.
 - Staff M: Treble clef, notes Bb3, Ab3, Gb3.
 - Staff L: Treble clef, notes Bb3, Ab3, Gb3.
 - Staff K: Treble clef, notes Bb3, Ab3, Gb3.
- T1 RI** (Staves C, B, A):
 - Staff C: Treble clef, notes G#4, F#4, E4.
 - Staff B: Treble clef, notes G#4, F#4, E4.
 - Staff A: Treble clef, notes G#4, F#4, E4.
- T2 R** (Staves D, E, F):
 - Staff D: Treble clef, notes Bb3, Ab3, Gb3.
 - Staff E: Treble clef, notes G#4, F#4, E4.
 - Staff F: Treble clef, notes G#4, F#4, E4.
- T3 R** (Staves G, H, I, J):
 - Staff G: Treble clef, notes G4, F4, E4.
 - Staff H: Treble clef, notes Bb3, Ab3, Gb3.
 - Staff I: Treble clef, notes G#4, F#4, E4.
 - Staff J: Treble clef, notes G#4, F#4, E4.

The notation includes various accidentals (sharps, flats) and ties between notes across the two measures.

Sqr-12

[4 1 2 3]

X/Y

Y/X

The musical score for Sqr-12 is presented in two systems, X/Y and Y/X. Each system contains two measures of music for each instrument. The instruments are labeled on the left as N, M, L, K, C, B, A, F, E, D, J, I, H, and G. The notation is in treble clef and includes various accidentals (sharps, flats, double flats) and slurs. The first system (X/Y) and second system (Y/X) are separated by a vertical bar line. The instruments are grouped into four sets: T4 RI (N, M, L, K), T1 RI (C, B, A), T2 RI (F, E, D), and T3 RI (J, I, H, G).

Sqr-13

[4 1 3 2]

X/Y

Y/X

The musical score for Sqr-13 is presented in two measures: X/Y and Y/X. The notation is organized into four systems of staves, each with a vertical label on the left:

- System 1:** Staves N, M, L, K. Labeled **T4 RI** on the left.
- System 2:** Staves C, B, A. Labeled **T1 RI** on the left.
- System 3:** Staves G, H, I, J. Labeled **T3 O** on the left.
- System 4:** Staves D, E, F. Labeled **T2 O** on the left.

Each staff contains musical notation with notes, stems, and accidentals (sharps and flats). The notation is divided into two measures by a vertical bar line. The first measure is labeled 'X/Y' and the second 'Y/X'. The notes and accidentals vary across the staves, representing different pitches and intervals.

Sqr-14

[4 1 3 2]

X/Y

Y/X

The musical score for Sqr-14 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, each with a system label on the left:

- T4 RI:** Staves N, M, L, K
- T1 RI:** Staves C, B, A
- T3 I:** Staves J, I, H, G
- T2 I:** Staves F, E, D

Each staff contains musical notation in treble clef with various notes and accidentals. The X/Y measure is followed by a double bar line, and the Y/X measure begins after the second double bar line. The notation includes various intervals and chordal structures across the different staves.

Sqr-15

[1 4 3 2]

X/Y

Y/X

The musical score for Sqr-15 is presented in two systems, X/Y and Y/X. The notation is organized into groups of staves:

- System 1 (A-C):** Includes staves for voices A, B, and C, and tenors T1 O and T4 O.
- System 2 (K-N):** Includes staves for voices K, L, M, and N.
- System 3 (J-I):** Includes staves for voices J, I, H, and G.
- System 4 (F-E):** Includes staves for voices F, E, and D.

Each system contains two measures of music, separated by a double bar line. The notation uses treble clefs and includes various notes, rests, and accidentals (sharps and flats) to indicate pitch and rhythm. The X/Y system shows a progression of chords and melodic lines, while the Y/X system shows a different arrangement of the same or related material.

Sqr-16

[1 4 3 2]

X/Y

Y/X

The musical score for Sqr-16 is presented on page 33. It consists of two main sections: X/Y and Y/X. The score is organized into 16 staves, labeled A through P. The staves are grouped into four sets of four, each associated with a letter: T1 O (A, B, C, K), T4 O (L, M, N, G), T3 O (H, I, J), and T2 O (D, E, F). Each staff contains musical notation in treble clef, including notes, rests, and accidentals (sharps and flats). The X/Y section is on the left, and the Y/X section is on the right, separated by a vertical bar line. The notation is complex, with many notes beamed together and various accidentals used throughout.

Sqr-17

[1 3 4 2]

X/Y

Y/X

The musical score is organized into two systems: X/Y and Y/X. Each system contains six staves, labeled A through F. The strings are grouped into four pairs: T1 O (A, B, C), T3 RI (J, I, H), T4 RI (N, M, L), and T2 O (D, E, F). Each staff contains musical notation with notes and accidentals. The X/Y system is on the left, and the Y/X system is on the right, separated by a double bar line. The notation includes various note values, accidentals (sharps, flats, naturals), and slurs.

Sqr-18

[1 3 4 2]

X/Y

Y/X

A
 T1 O B
 C
 J
 T3 RI I
 H
 G
 K
 T4 R L
 M
 N
 F
 T2 I E
 D

The musical score is divided into two systems: X/Y and Y/X. Each system contains 14 staves, labeled A through D. The staves are grouped into four sets of four: (A, B, C, J), (I, H, G, K), (L, M, N, F), and (E, D). The notation includes treble clefs, notes, rests, and accidentals (sharps and flats). The X/Y system shows a sequence of notes across the staves, while the Y/X system shows a different sequence, often with more complex rhythmic patterns and accidentals.

Sqr-19

[3 1 4 2]

X/Y

Y/X

The musical score for Sqr-19 is presented in two measures: X/Y and Y/X. The notation is organized into six systems, each corresponding to a specific fretboard position labeled on the left: T3 O (G, H, I, J), T1 RI (C, B, A), T4 R (K, L, M, N), and T2 I (F, E, D). Each system consists of four staves. The notes are written in treble clef with various accidentals (sharps and flats) and are connected by lines, indicating fingerings or melodic paths. The X/Y measure is followed by a double bar line, and the Y/X measure begins with a new set of notes. The overall structure is a 2x4 grid of notes across the fretboard positions.

Sqr-20

[3 1 4 2]

X/Y

Y/X

The musical score for Sqr-20 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, each with a letter label on the left. The first system (G, H, I, J) is labeled T3 O. The second system (C, B, A) is labeled T1 RI. The third system (N, M, L, K) is labeled T4 RI. The fourth system (D, E, F) is labeled T2 O. Each staff contains musical notation with notes, stems, and accidentals (sharps and flats) indicating pitch and rhythm. The notation is written in treble clef. The X/Y measure is followed by a double bar line, and the Y/X measure begins. The score concludes with a final double bar line.

Sqr-21

[3 1 2 4]

X/Y

Y/X

The musical score for Sqr-21 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, each with a label on the left:

- T3 O:** Staves G, H, I, J
- T1 RI:** Staves C, B, A
- T2 RI:** Staves F, E, D
- T4 O:** Staves K, L, M, N

Each staff contains musical notation with notes, accidentals, and stems. The notation is split by a double bar line between the X/Y and Y/X measures. The notes are primarily eighth and quarter notes, often beamed together. Accidentals include sharps (#) and flats (b). The overall structure is a 4x4 grid of notes across the two measures.

Sqr-22

[3 1 2 4]

X/Y

Y/X

The musical score is organized into two systems, T3 O and T4 I, each with six strings (G, H, I, J and C, B, A for T3 O; D, E, F, N, M, L, K for T4 I). The notation is in treble clef. The first section, labeled 'X/Y', contains two measures of music for each string. The second section, labeled 'Y/X', also contains two measures of music for each string. The notes are primarily eighth and quarter notes, often beamed together. The key signature is one flat (Bb), and the time signature is 3/4. The strings are labeled G, H, I, J, C, B, A, D, E, F, N, M, L, K on the left side of the score.

Sqr-23

[1 3 2 4]

X/Y

Y/X

The musical score for Sqr-23 is presented in two measures: X/Y and Y/X. The score is organized into four groups of staves, each with a group label on the left:

- T1 O:** Staves A, B, and C.
- T3 RI:** Staves J, I, H, and G.
- T2 R:** Staves D, E, and F.
- T4 I:** Staves N, M, L, and K.

Each staff contains musical notation in treble clef, including notes, rests, and accidentals (sharps and flats). The notation is divided into two measures by a double bar line. The X/Y measure shows various melodic and harmonic patterns, while the Y/X measure shows a different set of patterns, often appearing as a transposition or inversion of the X/Y patterns.

Sqr-24

[1 3 2 4]

X/Y

Y/X

The musical score for Sqr-24 is presented in two measures: X/Y and Y/X. The score is organized into four systems of staves, each with a letter label on the left and a time signature on the far left.

- System 1 (Staves A, B, C):** Labeled **T1 O**. Stave A contains a half note chord with notes G4, B4, and D5. Stave B contains a half note chord with notes G4, B4, and D5. Stave C contains a half note chord with notes G4, B4, and D5.
- System 2 (Staves J, I, H, G):** Labeled **T3 RI**. Stave J contains a half note chord with notes G4, B4, and D5. Stave I contains a half note chord with notes G4, B4, and D5. Stave H contains a half note chord with notes G4, B4, and D5. Stave G contains a half note chord with notes G4, B4, and D5.
- System 3 (Staves F, E, D):** Labeled **T2 RI**. Stave F contains a half note chord with notes G4, B4, and D5. Stave E contains a half note chord with notes G4, B4, and D5. Stave D contains a half note chord with notes G4, B4, and D5.
- System 4 (Staves K, L, M, N):** Labeled **T4 O**. Stave K contains a half note chord with notes G4, B4, and D5. Stave L contains a half note chord with notes G4, B4, and D5. Stave M contains a half note chord with notes G4, B4, and D5. Stave N contains a half note chord with notes G4, B4, and D5.

The notation includes various accidentals (sharps, flats, double flats) and ties between notes in the two measures. The overall structure is a square progression of four chords.

Distribution of Core Triangles: Summary
by
Square Assignment, Level, Orientation

<p>Sqr-01</p> <p>T1 O \ 1st half-bar T2 O / T3 O \ 2nd half-bar T4 O /</p>	<p>Sqr-02</p> <p>T1 O etc. T2 O T3 I T4 I</p>	<p>Sqr-03</p> <p>T2 RI T1 RI T3 I T4 I</p>	<p>Sqr-04</p> <p>T2 RI T1 RI T3 O T4 O</p>
<p>Sqr-05</p> <p>T2 RI T1 RI T4 RI T3 RI</p>	<p>Sqr-06</p> <p>T2 RI T1 RI T4 R T3 R</p>	<p>Sqr-07</p> <p>T1 O T2 O T4 R T3 R</p>	<p>Sqr-08</p> <p>T1 O T2 O T4 RI T3 RI</p>
<p>Sqr-09</p> <p>T1 O T4 O T2 RI T3 RI</p>	<p>Sqr-10</p> <p>T1 O T4 O T2 R T3 R</p>	<p>Sqr-11</p> <p>T4 RI T1 RI T2 R T3 R</p>	<p>Sqr-12</p> <p>T4 RI T1 RI T2 RI T3 RI</p>
<p>Sqr-13</p> <p>T4 RI T1 RI T3 O T2 O</p>	<p>Sqr-14</p> <p>T4 RI T1 RI T3 I T2 I</p>	<p>Sqr-15</p> <p>T1 O T4 O T3 I T2 I</p>	<p>Sqr-16</p> <p>T1 O T4 O T3 O T2 O</p>
<p>Sqr-17</p> <p>T1 O T3 RI T4 RI T2 O</p>	<p>Sqr-18</p> <p>T1 O T3 RI T4 R T2 I</p>	<p>Sqr-19</p> <p>T3 O T1 RI T4 R T2 I</p>	<p>Sqr-20</p> <p>T3 O T1 RI T4 RI T2 O</p>
<p>Sqr-21</p> <p>T3 O T1 RI T2 RI T4 O</p>	<p>Sqr-22</p> <p>T3 O T1 RI T2 R T4 I</p>	<p>Sqr-23</p> <p>T1 O T3 RI T2 R T4 I</p>	<p>Sqr-24</p> <p>T1 O T3 RI T2 RI T4 O</p>

Odd Man Out!

[No Tri, No Rec]

X/Y

Y/X

The musical score consists of 14 staves, labeled A through N, arranged vertically. Each staff contains two columns of musical notation. The first column is labeled 'X/Y' and the second column is labeled 'Y/X'. The notation is written in treble clef and includes various notes, rests, and accidentals (sharps and flats). The score is divided into two measures by a vertical bar line. The notes in the 'X/Y' column are generally more complex, often involving triplets or sixteenth notes, while the 'Y/X' column features simpler, more rhythmic patterns. The overall structure is that of a guitar exercise or a short piece for a stringed instrument.

Appendix

14 Pieces: full specification

Pce-A

X/Y

Y/X

The musical score for Percussion A (Pce-A) is presented in two parts: X/Y and Y/X. The score is organized into three systems, each containing eight numbered staves (01-08, 09-16, and 17-24). The X/Y part is on the left, and the Y/X part is on the right, separated by a vertical line. The notation includes treble clefs, notes, rests, and accidentals.

System 1 (Staves 01-08):

- Staff 01: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 02: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 03: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 04: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 05: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 06: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 07: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 08: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.

System 2 (Staves 09-16):

- Staff 09: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 10: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 11: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 12: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 13: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 14: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 15: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 16: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.

System 3 (Staves 17-24):

- Staff 17: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 18: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 19: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 20: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 21: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 22: X/Y has a quarter note G#4, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 23: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.
- Staff 24: X/Y has a quarter note G4, quarter rest, quarter note G4. Y/X has a quarter note G#4, quarter note G4.

Pce-B

X/Y

Y/X

The musical score for Percussion (Pce-B) consists of 24 measures, organized into three systems of eight measures each. The first system (measures 01-08) is labeled 'X/Y' and the second system (measures 09-16) is labeled 'Y/X'. Each system contains two staves: a top staff with a treble clef and a bottom staff with a bass clef. The notation includes various rhythmic patterns, such as eighth and sixteenth notes, and rests. The 'X/Y' system features more complex rhythmic patterns, while the 'Y/X' system features simpler, more repetitive patterns. The score is presented in a standard musical notation style with a vertical bar line separating the two systems.

Pce-C

X/Y

Y/X

The image displays a musical score for a Percussion instrument (Pce-C) across 24 measures. The score is organized into three systems, each containing two columns of staves. The left column is labeled 'X/Y' and the right column is labeled 'Y/X'. Each system consists of five staves, numbered 01-05, 09-13, and 17-21 respectively. The notation includes various rhythmic values, accidentals (sharps and flats), and slurs. The right column (Y/X) features a consistent rhythmic pattern of quarter notes with a sharp sign, while the left column (X/Y) shows more varied rhythmic patterns, including eighth and sixteenth notes, and rests.

Pce-D

X/Y

Y/X

The musical score for Pce-D is presented in two systems, X/Y and Y/X, across 24 measures. The notation is arranged in three groups of staves, each with a brace on the left. The first group (measures 01-08) has a piano (p) marking. The second group (measures 09-16) has a celeste (c) marking. The third group (measures 17-24) has a piano (p) marking. The score consists of two systems: X/Y and Y/X. The notation includes various chords and intervals, with some measures showing a change in the right-hand part between the two systems.

Measure	System	Instrument	Notes
01	X/Y	Piano	F4, C5, G4
01	Y/X	Piano	F4, C5, G4
02	X/Y	Piano	F4, C5, G4
02	Y/X	Piano	F4, C5, G4
03	X/Y	Piano	F#4, C#5, G#4
03	Y/X	Piano	F#4, C#5, G#4
04	X/Y	Piano	F#4, C#5, G#4
04	Y/X	Piano	F#4, C#5, G#4
05	X/Y	Piano	F#4, C#5, G#4
05	Y/X	Piano	F#4, C#5, G#4
06	X/Y	Piano	F#4, C#5, G#4
06	Y/X	Piano	F#4, C#5, G#4
07	X/Y	Piano	F4, C5, G4
07	Y/X	Piano	F4, C5, G4
08	X/Y	Piano	F4, C5, G4
08	Y/X	Piano	F4, C5, G4
09	X/Y	Celeste	F#4, C#5, G#4
09	Y/X	Celeste	F#4, C#5, G#4
10	X/Y	Celeste	F4, C5, G4
10	Y/X	Celeste	F#4, C#5, G#4
11	X/Y	Celeste	F4, C5, G4
11	Y/X	Celeste	F#4, C#5, G#4
12	X/Y	Celeste	F#4, C#5, G#4
12	Y/X	Celeste	F#4, C#5, G#4
13	X/Y	Celeste	F4, C5, G4
13	Y/X	Celeste	F4, C5, G4
14	X/Y	Celeste	F#4, C#5, G#4
14	Y/X	Celeste	F4, C5, G4
15	X/Y	Celeste	F#4, C#5, G#4
15	Y/X	Celeste	F4, C5, G4
16	X/Y	Celeste	F4, C5, G4
16	Y/X	Celeste	F4, C5, G4
17	X/Y	Piano	F4, C5, G4
17	Y/X	Piano	F4, C5, G4
18	X/Y	Piano	F#4, C#5, G#4
18	Y/X	Piano	F4, C5, G4
19	X/Y	Piano	F#4, C#5, G#4
19	Y/X	Piano	F4, C5, G4
20	X/Y	Piano	F4, C5, G4
20	Y/X	Piano	F4, C5, G4
21	X/Y	Piano	F#4, C#5, G#4
21	Y/X	Piano	F#4, C#5, G#4
22	X/Y	Piano	F4, C5, G4
22	Y/X	Piano	F#4, C#5, G#4
23	X/Y	Piano	F4, C5, G4
23	Y/X	Piano	F#4, C#5, G#4
24	X/Y	Piano	F#4, C#5, G#4
24	Y/X	Piano	F#4, C#5, G#4

Pce-E

X/Y

Y/X

The musical score is organized into three systems of eight staves each, numbered 01 to 24. The notation is as follows:

- System 1 (Staves 01-08):** The left column (X/Y) contains notes with sharps (#) and naturals (n). The right column (Y/X) contains notes with flats (b) and naturals (n).
- System 2 (Staves 09-16):** The left column (X/Y) contains notes with flats (b) and naturals (n). The right column (Y/X) contains notes with sharps (#) and naturals (n).
- System 3 (Staves 17-24):** The left column (X/Y) contains notes with flats (b) and naturals (n). The right column (Y/X) contains notes with sharps (#) and naturals (n).

Pce-F

X/Y

Y/X

The musical score for Pce-F is presented in two systems, X/Y and Y/X, across 24 measures. The notation is arranged in three groups of staves, each with a brace on the left. The first group (measures 01-08) has two staves per measure. The second group (measures 09-16) has three staves per measure. The third group (measures 17-24) has two staves per measure. The notation includes piano (p) and celeste (ce) markings, and various note values and accidentals.

Measures 01-08: The first system (X/Y) shows piano markings. The second system (Y/X) shows celeste markings. Measures 01-08 are grouped together.

Measures 09-16: The first system (X/Y) shows piano markings. The second system (Y/X) shows celeste markings. Measures 09-16 are grouped together.

Measures 17-24: The first system (X/Y) shows piano markings. The second system (Y/X) shows celeste markings. Measures 17-24 are grouped together.

Pce-G

X/Y

Y/X

The image displays a musical score for Percussion (Pce-G) on page 52. The score is organized into two columns: 'X/Y' on the left and 'Y/X' on the right. It consists of 24 numbered staves, grouped into three systems of eight staves each. Each staff contains musical notation, including notes, rests, and dynamic markings. The notation is primarily rhythmic and melodic, with some staves showing complex patterns. The 'X/Y' column generally features more active rhythmic patterns, while the 'Y/X' column often shows sustained notes or rests. The overall layout is clean and professional, typical of a printed musical score.

Pce-H

X/Y

Y/X

Musical score for Pce-H, measures 01-24. The score is divided into two columns: X/Y and Y/X. The notation consists of 24 measures, numbered 01 to 24. Each measure is represented by a pair of staves (treble and bass clef) connected by a brace. The X/Y column shows chords and intervals, while the Y/X column shows the corresponding intervals and chords. The notation includes various accidentals (sharps, flats, naturals) and stems.

Measure	X/Y	Y/X
01	$\text{b}^{\flat}\text{b}^{\flat}$	
02	$\sharp^{\sharp}\sharp^{\sharp}$	
03	$\sharp^{\sharp}\sharp^{\sharp}$	
04	$\text{b}^{\flat}\text{b}^{\flat}$	
05	$\sharp^{\sharp}\sharp^{\sharp}$	
06	$\text{b}^{\flat}\text{b}^{\flat}$	
07	$\text{b}^{\flat}\text{b}^{\flat}$	
08	$\sharp^{\sharp}\sharp^{\sharp}$	
09	$\sharp^{\sharp}\sharp^{\sharp}$	
10	$\text{b}^{\flat}\text{b}^{\flat}$	
11	$\text{b}^{\flat}\text{b}^{\flat}$	
12	$\sharp^{\sharp}\sharp^{\sharp}$	
13	$\text{b}^{\flat}\text{b}^{\flat}$	
14	$\sharp^{\sharp}\sharp^{\sharp}$	
15	$\sharp^{\sharp}\sharp^{\sharp}$	
16	$\text{b}^{\flat}\text{b}^{\flat}$	
17	$\sharp^{\sharp}\sharp^{\sharp}$	
18	$\sharp^{\sharp}\sharp^{\sharp}$	
19	$\text{b}^{\flat}\text{b}^{\flat}$	
20	$\text{b}^{\flat}\text{b}^{\flat}$	
21	$\text{b}^{\flat}\text{b}^{\flat}$	
22	$\text{b}^{\flat}\text{b}^{\flat}$	
23	$\sharp^{\sharp}\sharp^{\sharp}$	
24	$\sharp^{\sharp}\sharp^{\sharp}$	

Pce-I

X/Y

Y/X

The musical score for Pce-I is presented in two systems, X/Y and Y/X, across 24 measures. The notation is as follows:

- Measures 01-08:** The X/Y system features a sequence of chords: G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, and F4-G4-A4. The Y/X system features a sequence of chords: G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, and F4-G4-A4.
- Measures 09-16:** The X/Y system features a sequence of chords: F4-G4-A4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, F4-G4-A4, G#4-A4-B4, F4-G4-A4, and E4-F4-G4. The Y/X system features a sequence of chords: G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, and F4-G4-A4.
- Measures 17-24:** The X/Y system features a sequence of chords: F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, and E4-F4-G4. The Y/X system features a sequence of chords: G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, F4-G4-A4, E4-F4-G4, G#4-A4-B4, and F4-G4-A4.

Pce-J

X/Y

Y/X

The musical score for Pce-J is presented in two systems, X/Y and Y/X, across 24 measures. The notation is arranged in three groups of four staves each, with a brace on the left side of each group. The first group (measures 01-08) features piano notation with chords and single notes. The second group (measures 09-16) includes celeste notation with chords and single notes. The third group (measures 17-24) continues with piano notation, including chords and single notes. The score is divided into two systems by a vertical line, with the first system labeled 'X/Y' and the second 'Y/X'. The notation includes various musical symbols such as treble clefs, accidentals (sharps and flats), and stems with flags.

Pce-K

X/Y

Y/X

This musical score is for a Percussion Keyboard (Pce-K) and consists of 24 measures, divided into two systems of 12 measures each. The notation is presented in two columns: 'X/Y' on the left and 'Y/X' on the right. Each measure is represented by a pair of staves, with a brace on the left side of each pair. The notes are primarily eighth and sixteenth notes, often beamed together. The 'X/Y' column shows a sequence of chords and melodic lines, while the 'Y/X' column shows a corresponding sequence, often with different voicings or rhythmic patterns. The key signature is not explicitly shown but appears to be C major or a related key based on the accidentals used.

Pce-L

X/Y

Y/X

The image displays a musical score for Percussion (Pce-L) consisting of 24 numbered staves. The score is organized into two main sections: 'X/Y' on the left and 'Y/X' on the right, separated by a vertical bar line. Each staff contains rhythmic notation, including notes with stems and beams, and rests. The notation is consistent across all staves, indicating a uniform rhythmic pattern. The staves are numbered from 01 to 24, with the first eight staves (01-08) forming the first system, the next eight (09-16) the second, and the final eight (17-24) the third. The 'X/Y' section shows a sequence of notes that transition into the 'Y/X' section, which features a similar but inverted sequence of notes.

Pce-M

X/Y

Y/X

Musical score for Pce-M, measures 01-24. The score is divided into two parts: X/Y and Y/X. The notation is presented in a grand staff format with 24 numbered staves. The X/Y part (left side) and Y/X part (right side) are separated by a vertical line. The notation includes various musical symbols such as notes, rests, and accidentals.

Measure	X/Y	Y/X
01	Two notes with sharps	Two notes
02	Two notes with flats	Two notes
03	Two notes with flats	Two notes
04	Two notes with sharps	Two notes
05	Two notes with flats	Two notes with flats
06	Two notes with sharps	Two notes with flats
07	Two notes with sharps	Two notes with flats
08	Two notes with flats	Two notes with flats
09	Two notes with sharps	Two notes with sharps
10	Two notes with sharps	Two notes with sharps
11	Two notes with flats	Two notes
12	Two notes with flats	Two notes
13	Two notes with flats	Two notes
14	Two notes with flats	Two notes
15	Two notes with sharps	Two notes with sharps
16	Two notes with sharps	Two notes with sharps
17	Two notes with flats	Two notes with flats
18	Two notes with sharps	Two notes with flats
19	Two notes with sharps	Two notes with flats
20	Two notes with flats	Two notes with flats
21	Two notes with sharps	Two notes
22	Two notes with flats	Two notes
23	Two notes with flats	Two notes
24	Two notes with sharps	Two notes

Pce-N

X/Y

Y/X

The musical score for Pce-N is presented in two systems, X/Y and Y/X, across 24 measures. The notation is arranged in three groups of staves, each with a brace on the left. The first group (measures 01-08) has 8 staves, the second (measures 09-16) has 8 staves, and the third (measures 17-24) has 8 staves. Each measure is divided into two parts by a vertical bar line. The notation includes various note values, accidentals (sharps and flats), and slurs. The key signature is not explicitly shown but appears to be B-flat major or D minor based on the accidentals used.

