Hannah Caroline Firmin

Exercices de style (2020–2022)

for any instrument/s or voice/s, and for any number of players

full score

© Hannah Caroline Firmin

Preface

How to use this book

The performer may play these exercises in any order. This order may be decided prior to the performance or may be chosen at random during the performance. A silence may be left between each exercise, or they may be played in succession. Not all fragments must be heard in one performance, but if the performer wished to do so, then they could. Exercises may be chosen prior/during the performance. The exercises have been put into specific categories (see contents page) dependent upon their character/type of material, the performer may choose to create a varied performance through choosing exercises from each of these different categories. However, the performer is just as welcome to play through all the material from a certain group and nothing else. It is even feasible that the performer may choose to play the entire book of exercises from start to finish or one exercise every two hours. The book may even be used simply as an exercise book and incorporated in the performer's daily practice. If there is more than one performer, then the performers may play an exercise together in unison, or play different exercises individually and layer them, paying no attention to each other at all. Equally, the performer may choose to do a mixture of both. The duration of a performance could be the length of an exercise or ten, twenty, thirty minutes, or could just as well last three days. If the range is too high/low, then the performer should play/sing up/down the octave or two octaves or, in fact, any interval. In fact, there are no limitations to this books use.

Symbols

Durations

Duration symbols do not represent exact durations but instead signify general/rough lengths, for example:

= very short

= short

= quite short

= medium length

= quite long

 = long

= very long

However, this rule does not apply to pages 4, 20, 33, 50, 51, 52, 53, 69, 74, 76, 79, 84, 88, 96–98, 101 (semi-quaver run), 102, 107–109 (variation 1, 4, and 5), and 114 where duration symbols signify exact durations. In instances where there are no durations provided (for example, pages 37, 55, and 81) the performer should keep the pitches equal tempered unless specified otherwise.

Quartertones

 = quarter sharp

= quarter flat

= three quarter sharp

Tempos

Very Fast = 140–160 bpm

Fast = 120–140 bpm

Quite Fast = 110–120 bpm

Moderate Speed = 100–110 bpm

Quite Slow = 90–100 bpm

Slow = 60–90 bpm

Very Slow = 40–60 bpm

Other Notes

Glissandi: if the performers instrument cannot achieve smooth/large glissandi then they should try and find an alternative solution. For example, a flautist/clarinettist may play pitch bends, or a pianist may strum the piano strings.

Chords: if the performers instrument cannot achieve more than one pitch, then they should play one of the pitches, or arpeggiate the chord. The performer may alternatively choose to execute a technique such as a multiphonic or singing and playing simultaneously.

Any other details are explained in full in the score.

Step by step guide to building a piece from the exercises

You may choose to ignore this guide if you wish to create your performance at random.

1) Choose your exercises (using the contents page to help) and order them in the table below:

Order of Exercises	Title of Exercises
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

*Feel free to extend the table onto another piece of paper if needed

2) Choose your techniques

Techniques can be categorised into the following groups:

Group 1 = all pitch; Group 2 = mostly pitch, some noise; Group 3 = half pitches/half noise; Group 4 = mostly noise, some pitch; and Group 5 = all noise.

The performer can choose 1–3 techniques freely for each of these groups. Techniques in 'Group 1' should contain pitch in the sound, and techniques in 'Group 5' should contain no pitch in the sound: a table has been provided below for performers to write their techniques in. The performer may use these techniques throughout the exercises where they feel necessary. However, there are some exercises which ask for specific techniques to be used (see pages 46 and 47, for example). In these exercises the numbers 1 to 5 are written above the pitches in which to apply techniques from a specific group.

Group	Techniques
1) All pitch	1) 2) 3)
2) Mostly pitch, some noise	1) 2) 3)
3) Half pitch/half noise	1) 2) 3)
4) Mostly noise, some pitch	1) 2) 3)
5) All noise	1) 2) 3)

3) Choose your dynamics/articulation

This step only applies to exercises where dynamics have been written in brackets, such as page 1. Where this occurs, the player may play any dynamic between the guidelines given. The performer may choose to switch between these dynamics throughout the exercise or choose one dynamic from the bracket and remain at that level.

Similarly, where there is no articulation, the performer may add phrasing/articulation as they wish.

Contents Page

Notation……p.1

Double Entry; Pitches and Durations……p. 2

Double Entry; Pitches Only……p. 4

Half Intervals……p. 5

Double Intervals……p. 6

Retrograde……p. 7

Inversion of Contour……p. 8

Retrograde Inversion……p. 9

Inversion of Intervals……p. 10

C Major……p. 11

G Sharp Minor……p. 12

Blues Scale……p. 13

Dorian Mode……p. 14

Phrygian Mode……p. 15

Whole Tone Scale……p. 16

Glissandi Points……p. 17

Glissandi Contour……p. 18

Hesitation……p. 19

Precision……p. 20

Duration Inversion……p. 21

All Short Durations……p. 22

All Long Durations……p. 23

Isorhythm……p. 24

Twelve-Tone Matrix……p. 26

Magic Square……p. 27

Ghost Cube……p. 28

Puzzle Canon 1……p. 29

Puzzle Canon 2……p. 30
Canon……p. 31
Mirror Canon……p. 32
Hocket……p. 33
Past……p. 34
Present……p. 35
Prognostication……p. 36
Tri-chords……p. 37
Tri-chords: Pitches and Durations……p. 38
Tetra-chords……p. 39
Tetra-chords: Pitches and Durations……p. 40
Hexa-chords……p. 41
Hexa-chords: Pitches and Durations……p. 42
Clusters……p. 43
Clusters: Pitches and Durations……p. 44
Tremolo Interjections……p. 45
Technique Interjections 1……p. 46
Technique Interjections 2……p. 47
Rest Interjections 1……p. 48
Rest Interjections 2……p. 49
Run 1……p. 50
Run 2……p. 51
Grace Note Run 1……p. 52
Grace Note Run 2……p. 53
Parts of Music……p. 54
Text Piece 1……p. 55
Text Piece 2……p. 56
Text Piece 3……p. 57

Text Piece 4……p. 58
Text Piece 5……p. 59
Text Piece 6……p. 60
Text Piece 7……p. 61
Text Piece 8……p. 62
Text Piece 9……p. 63
Text Piece 10……p. 64
Text Piece 11……p. 65
Text Piece 12……p. 66
Text Piece 13……p. 67
Text Piece 14……p. 68
Open Form 1……p. 69
Open Form 2……p. 70
Open Form 3……p. 71
Open Form 4……p. 72
Open Form 5……p. 73
Open Form 6……p. 74
Open Form 7……p. 75
Open Form 8……p. 76
Arrow Contour……p. 77
Arrow Contour; All short Durations……p. 78
Graphic Notation……p. 79
Relative Pitch Notation 1……p. 80
Relative Pitch Notation 2……p. 81
Space-Time Notation……p. 82
Guitar Tab……p. 83
Exclamations……p. 84
Wordsearch……p. 85

Crossword……..p. 86

Sudoku……..p. 87

Consequences……..p. 88

In the Style of Earle Brown's *4 Systems*……..p. 89

In the Style of Christian Wolf's *Changing the System*……..p. 90

In the Style of John Cage's *4'33"*……...p. 92

In the Style of Morton Feldman's *Projections*……..p. 93

In the Style of Terry Riley's *In C*……p. 96

Permutations by Groups of Three and Four Pitches/Durations……p. 99

Permutations by Groups of Four Chords……..p. 101

Permutations by Groups of Three Phrases……..p. 102

Binary Form……..p. 103

Ternary Form……..p. 104

Rondo Form……..p. 105

Theme and Variations……p. 107

Violent……p. 110

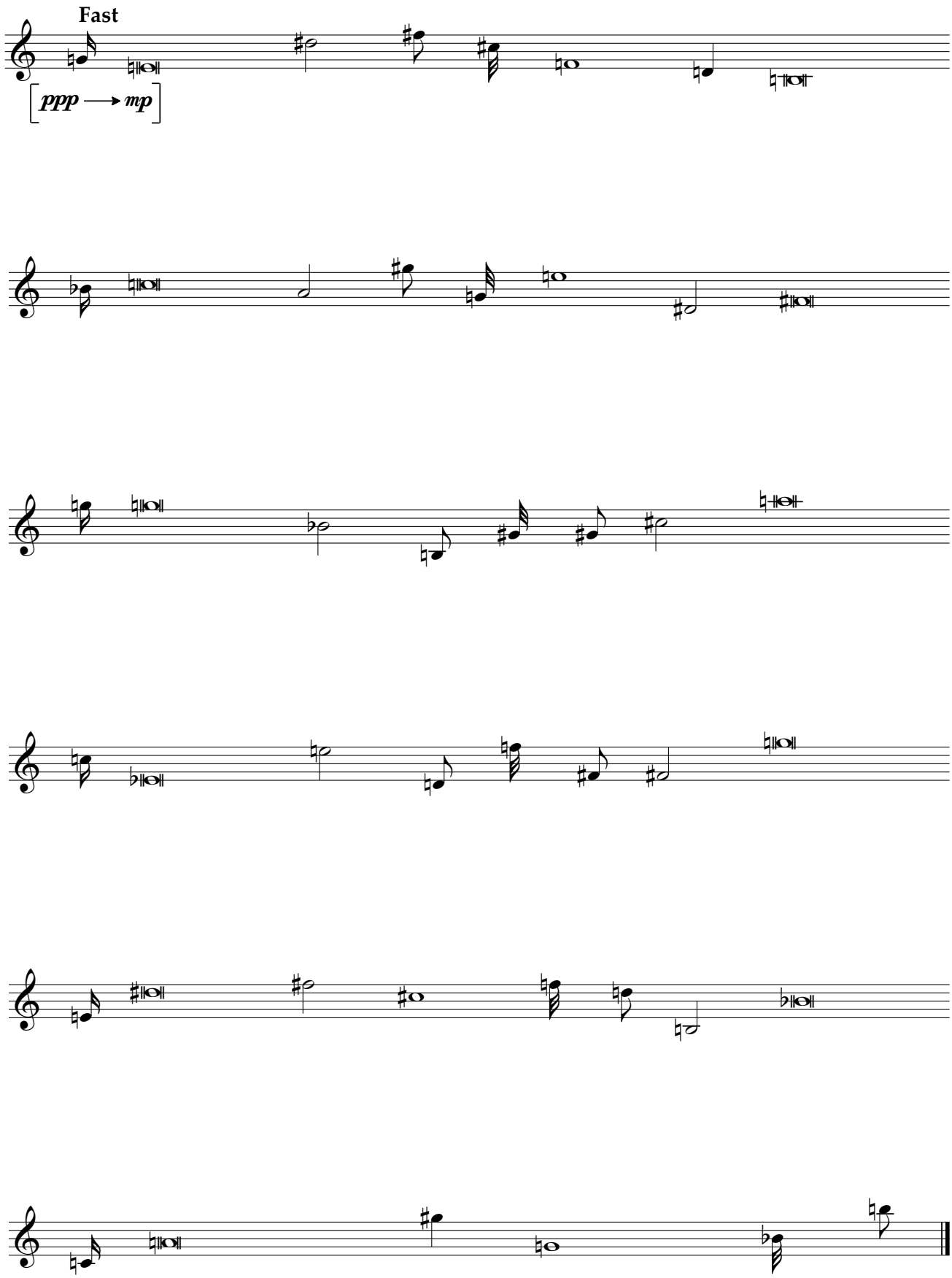
Gentle……p. 111

Frantic……p. 112

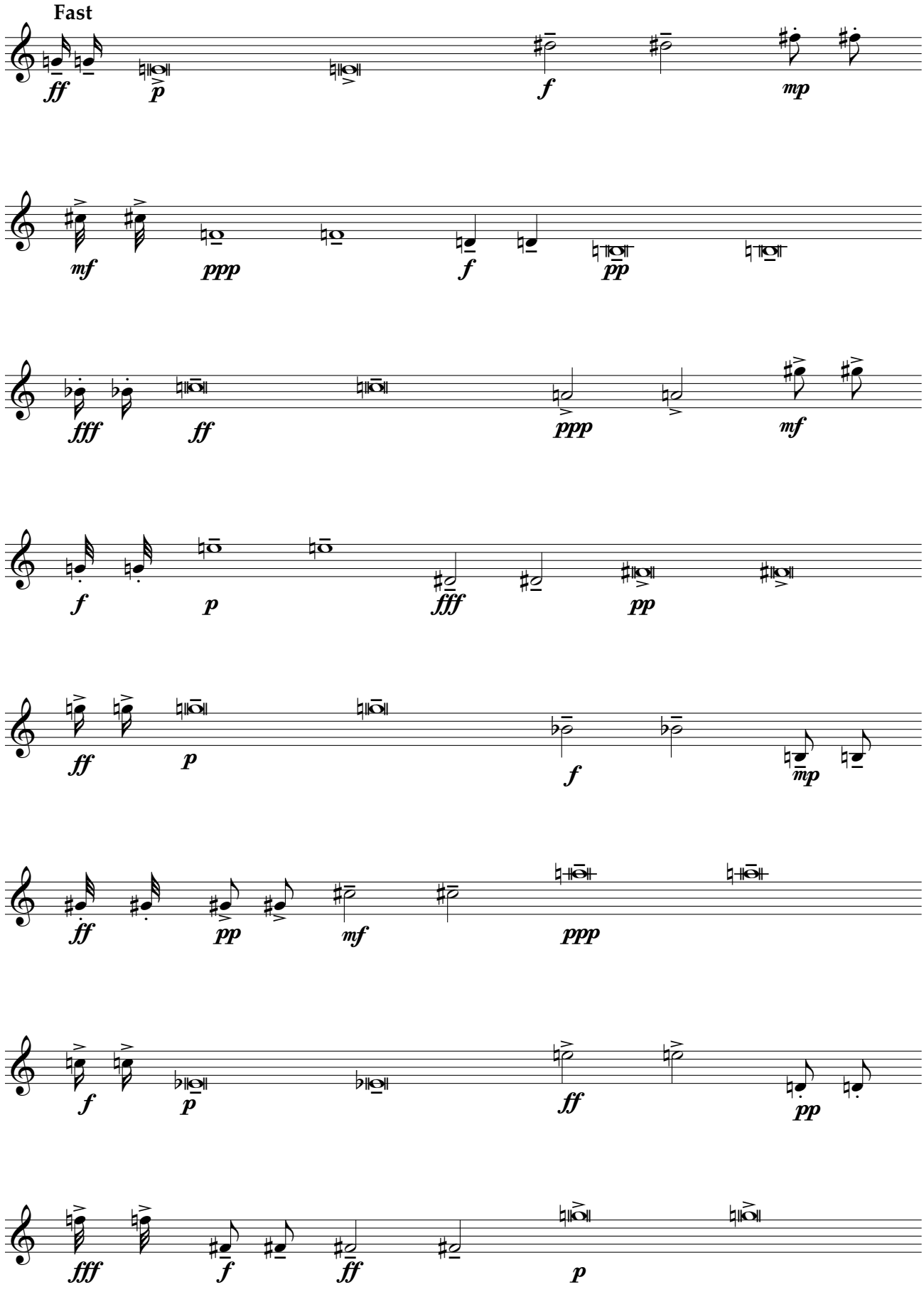
Calm……p. 113

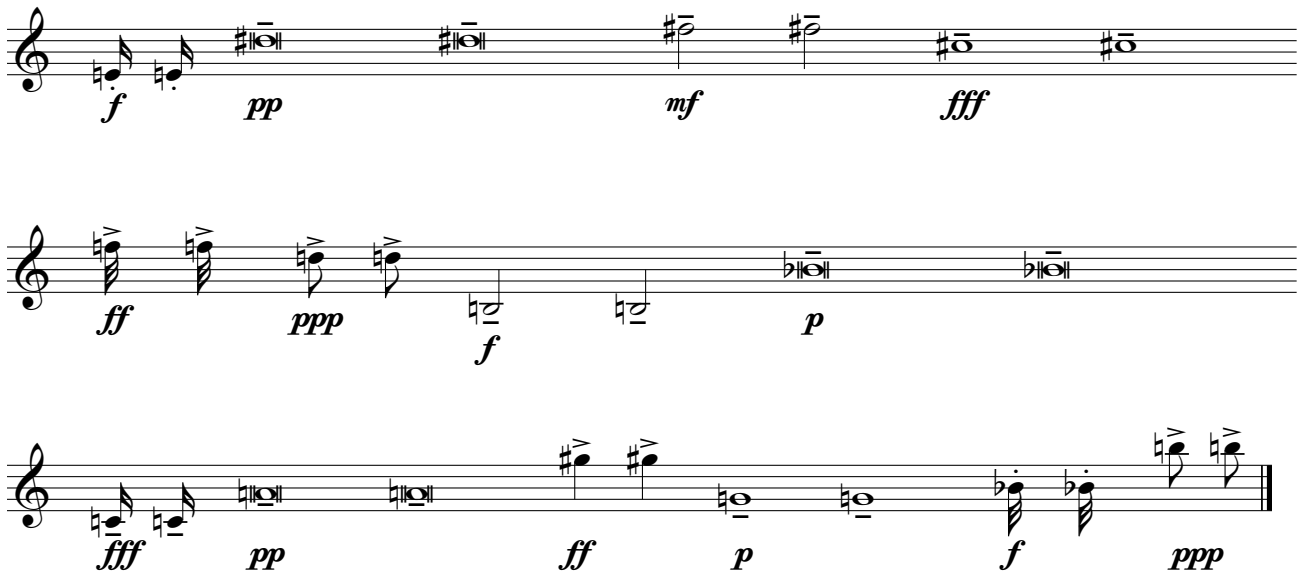
Mathematical……..p. 114

Notation



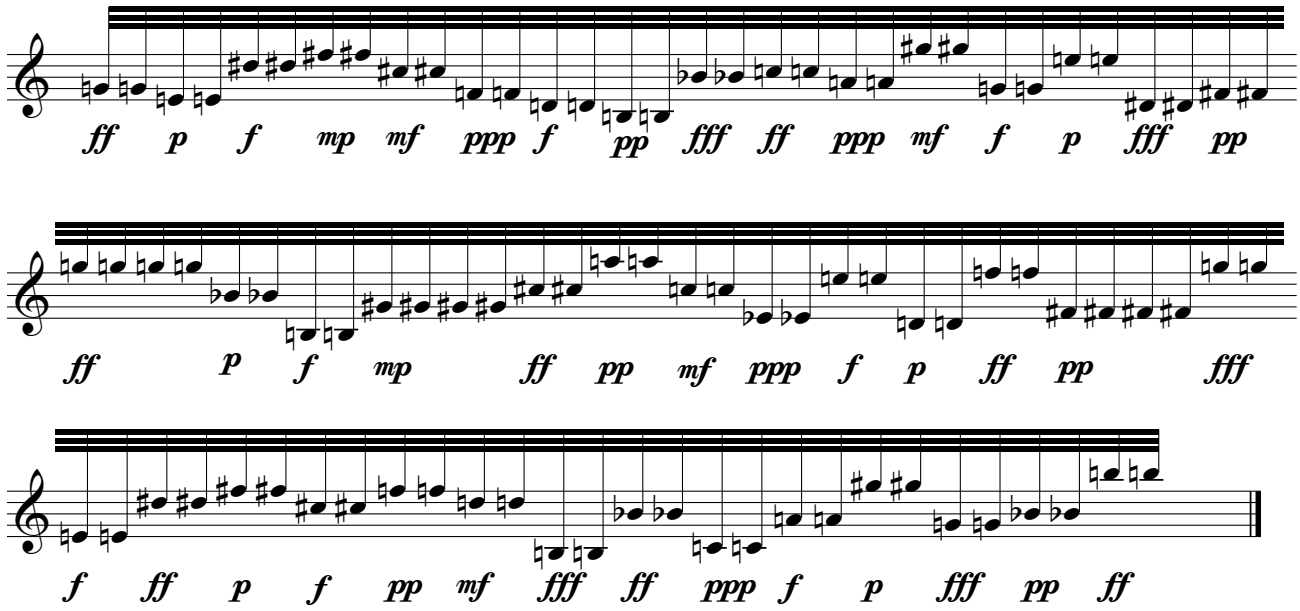
Double Entry; Pitches and Durations



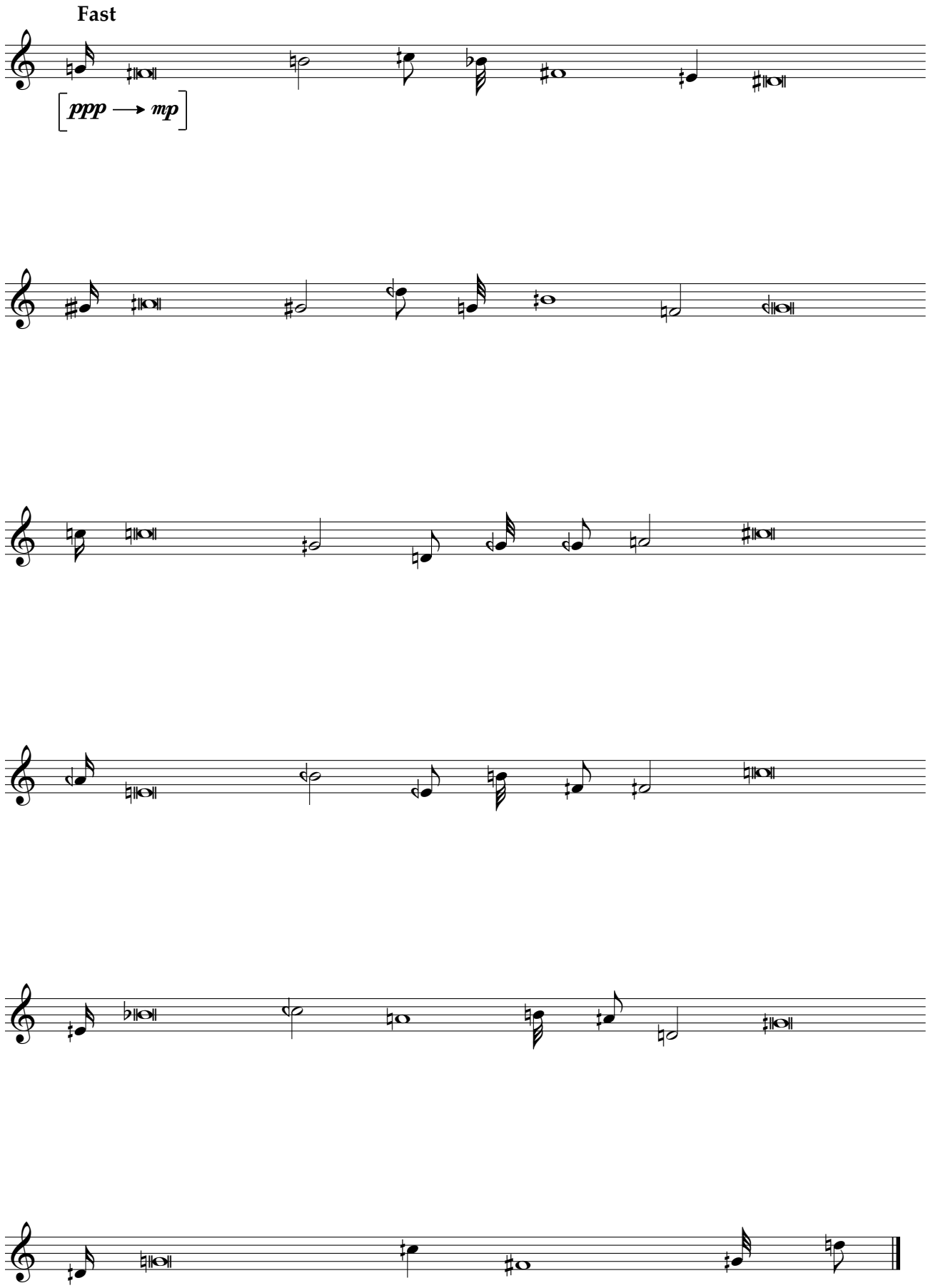

f
pp
mf
fff
ff
ppp
f
p
fff
pp
ff
p
f
ppp

Double Entry; Pitches Only

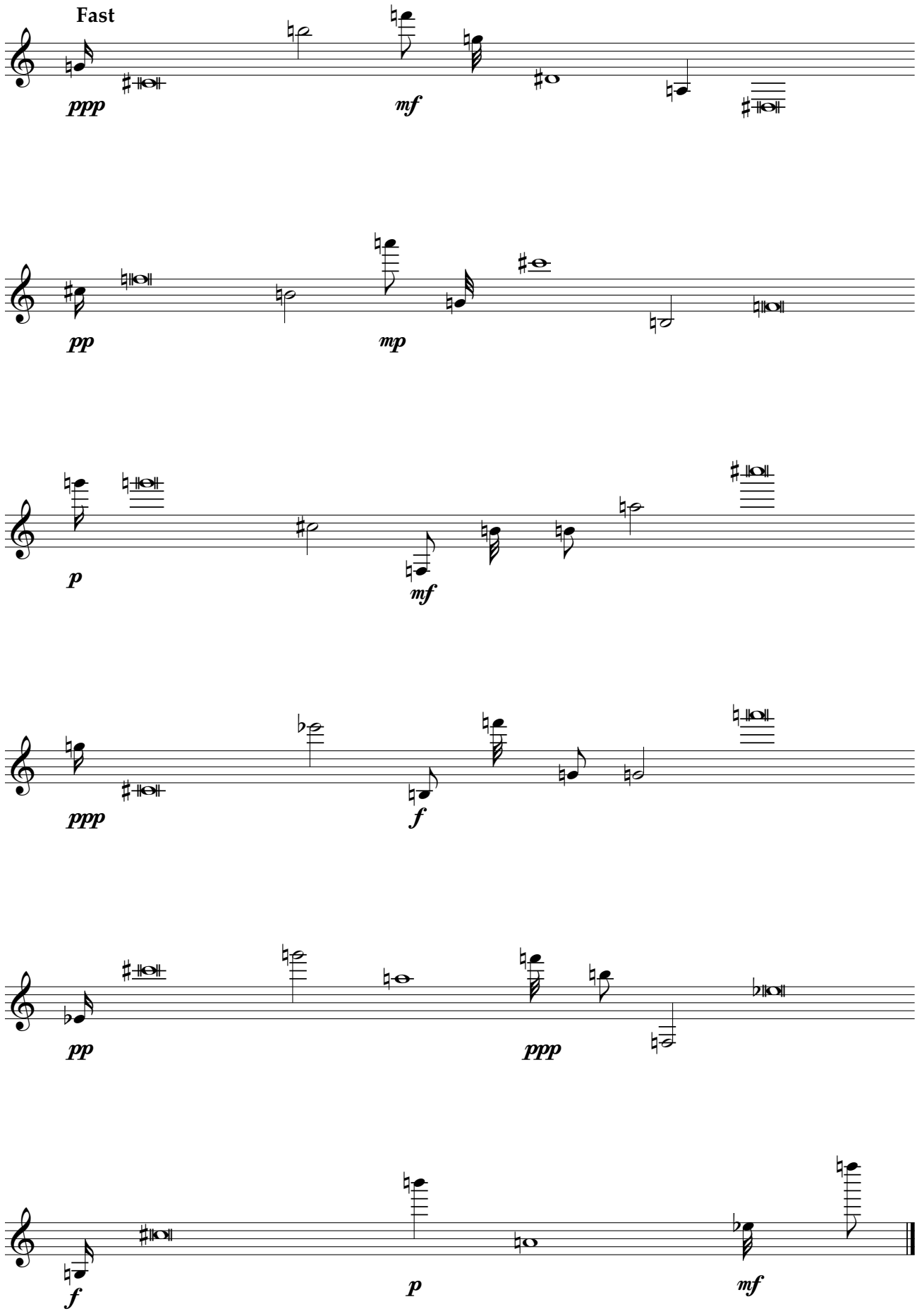
Quite Slow



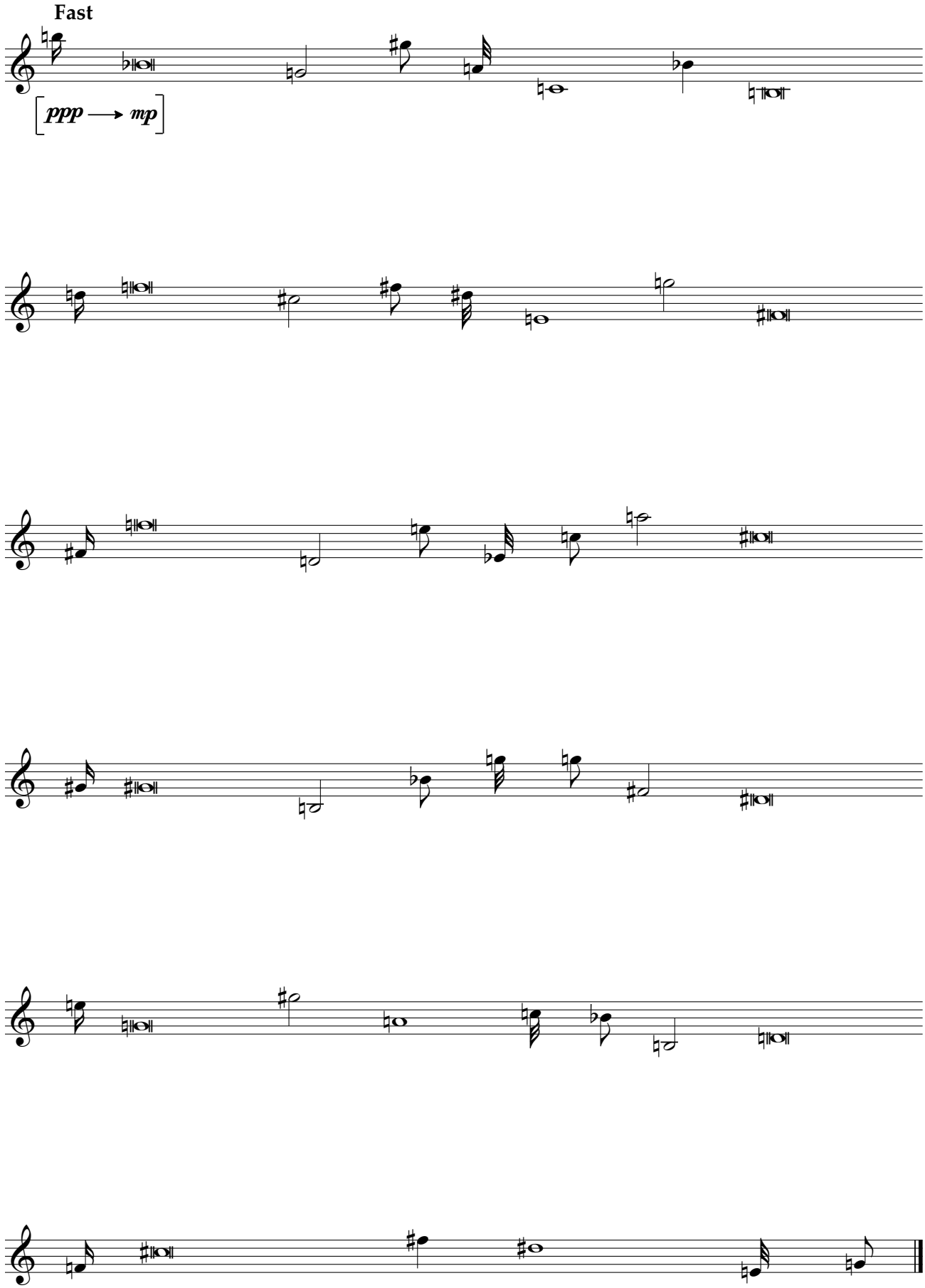
Half Intervals



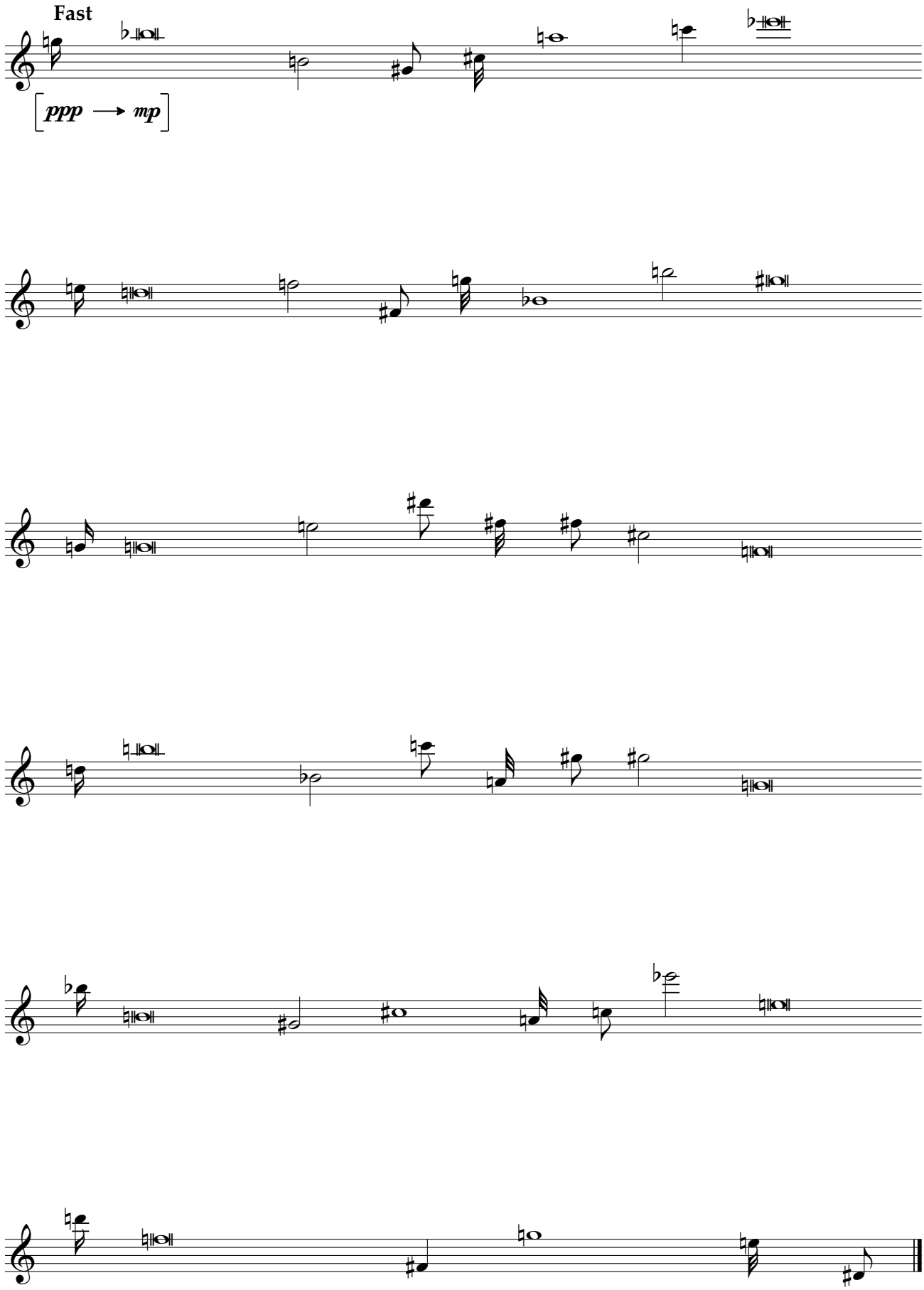
Double Intervals



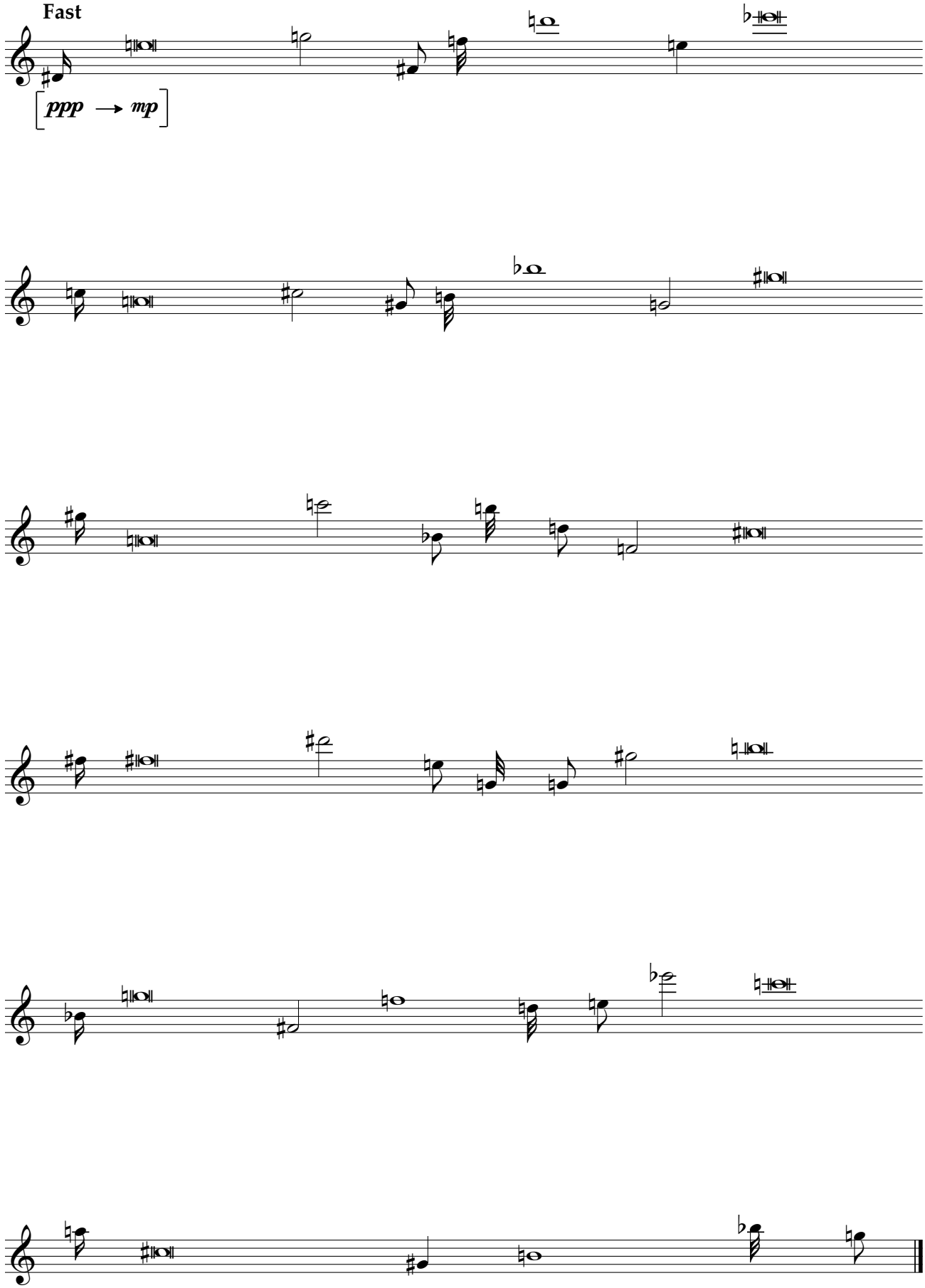
Retrograde



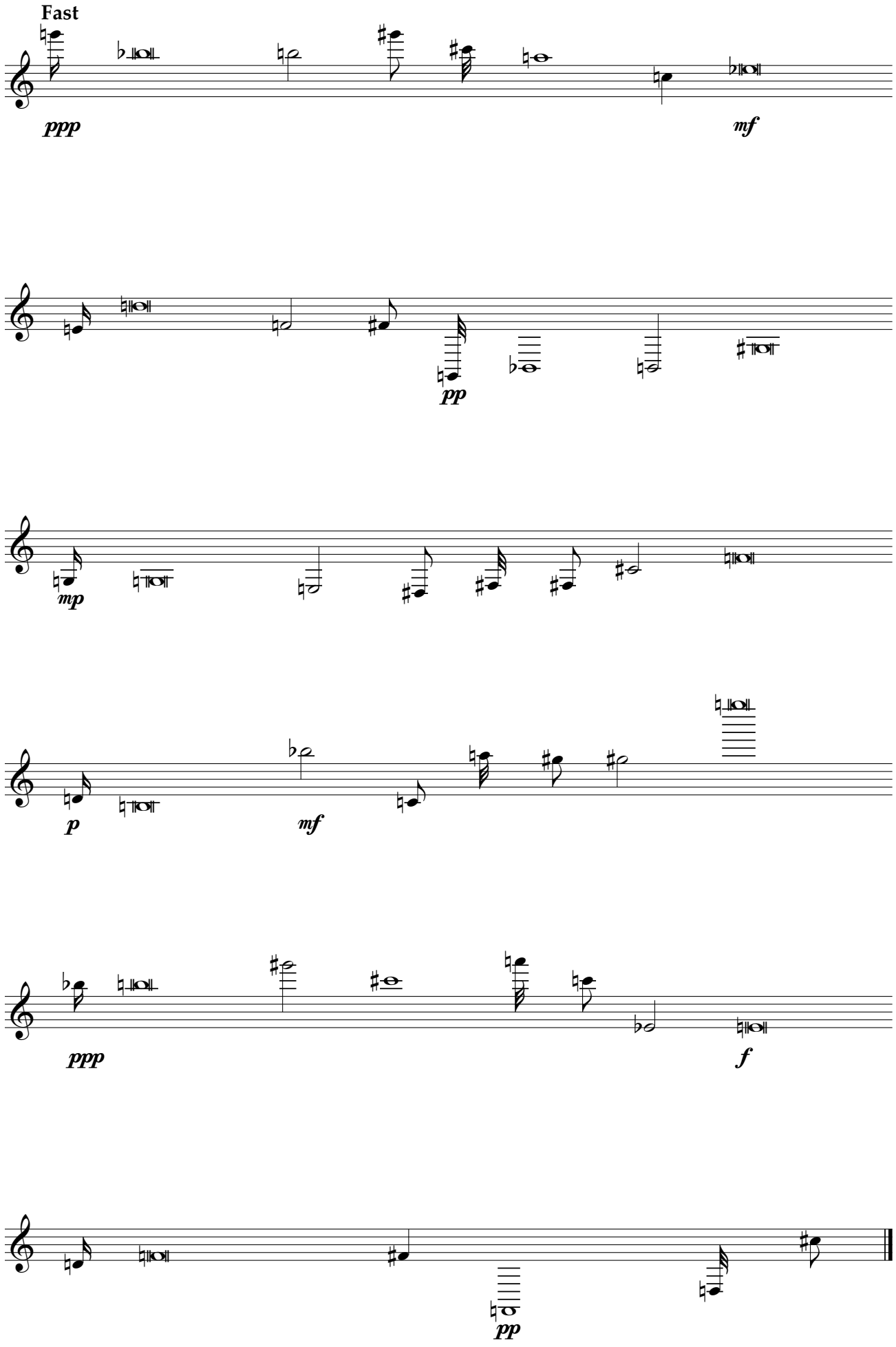
Inversion of Contour



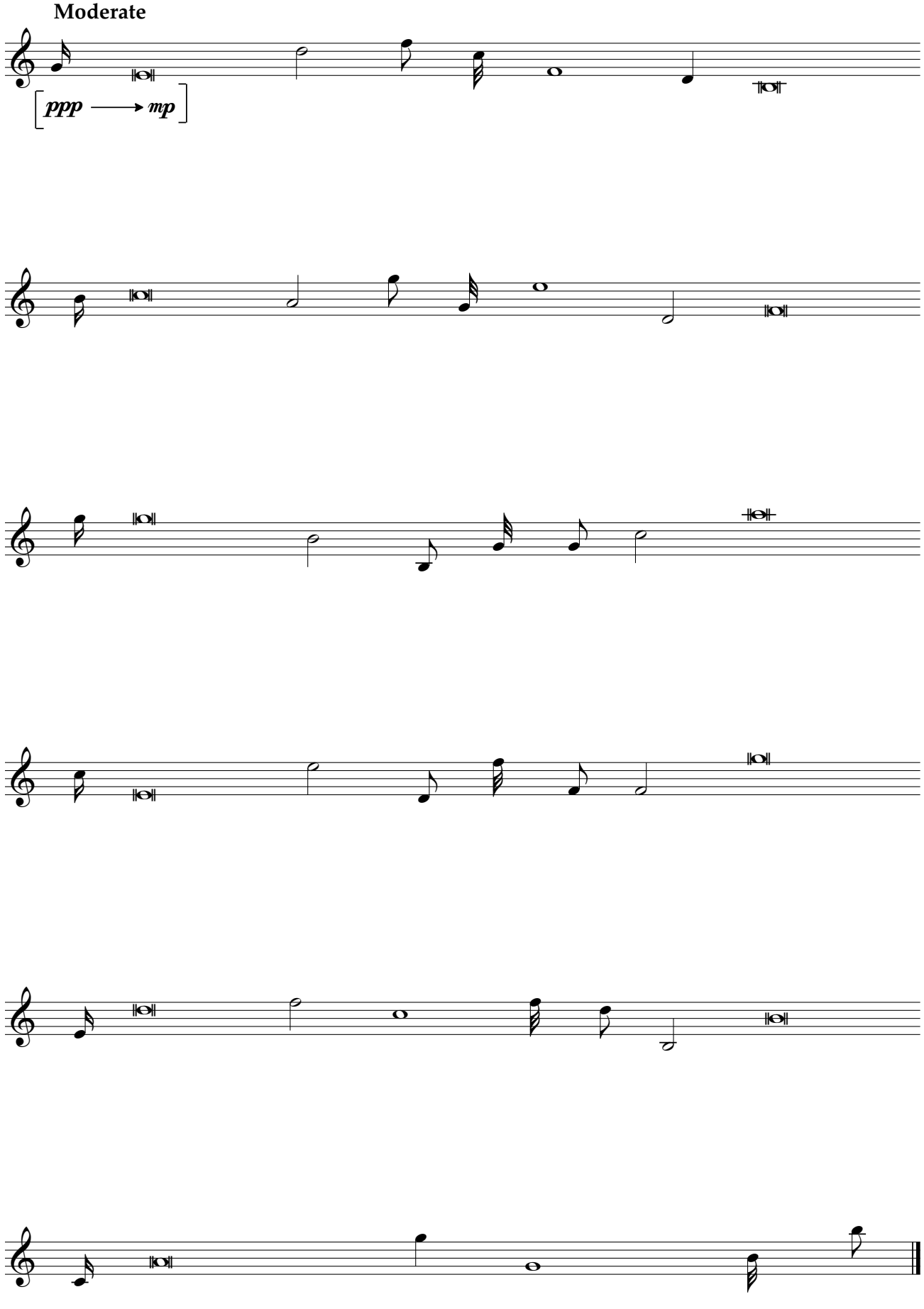
Retrograde Inversion



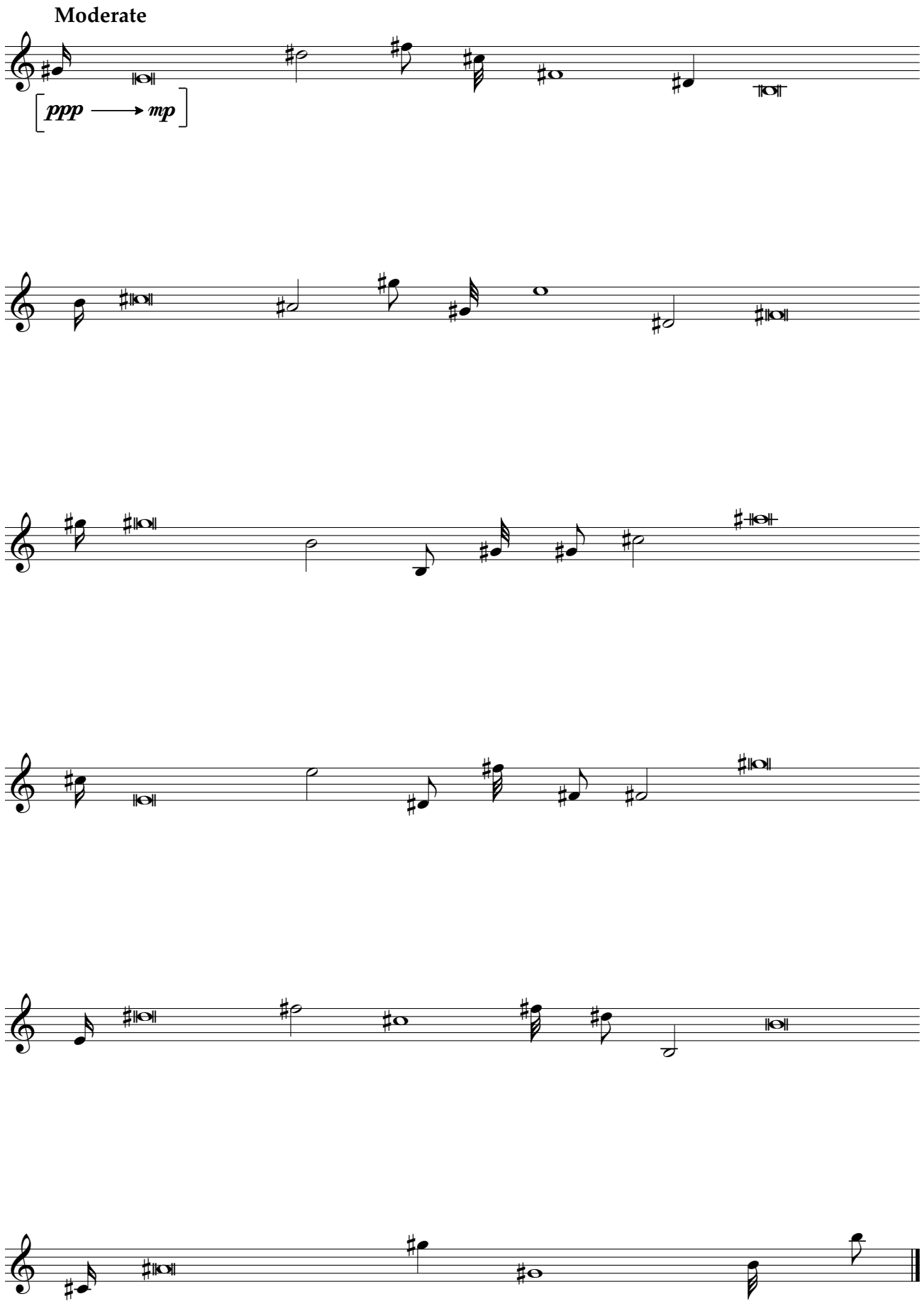
Inversion of Intervals



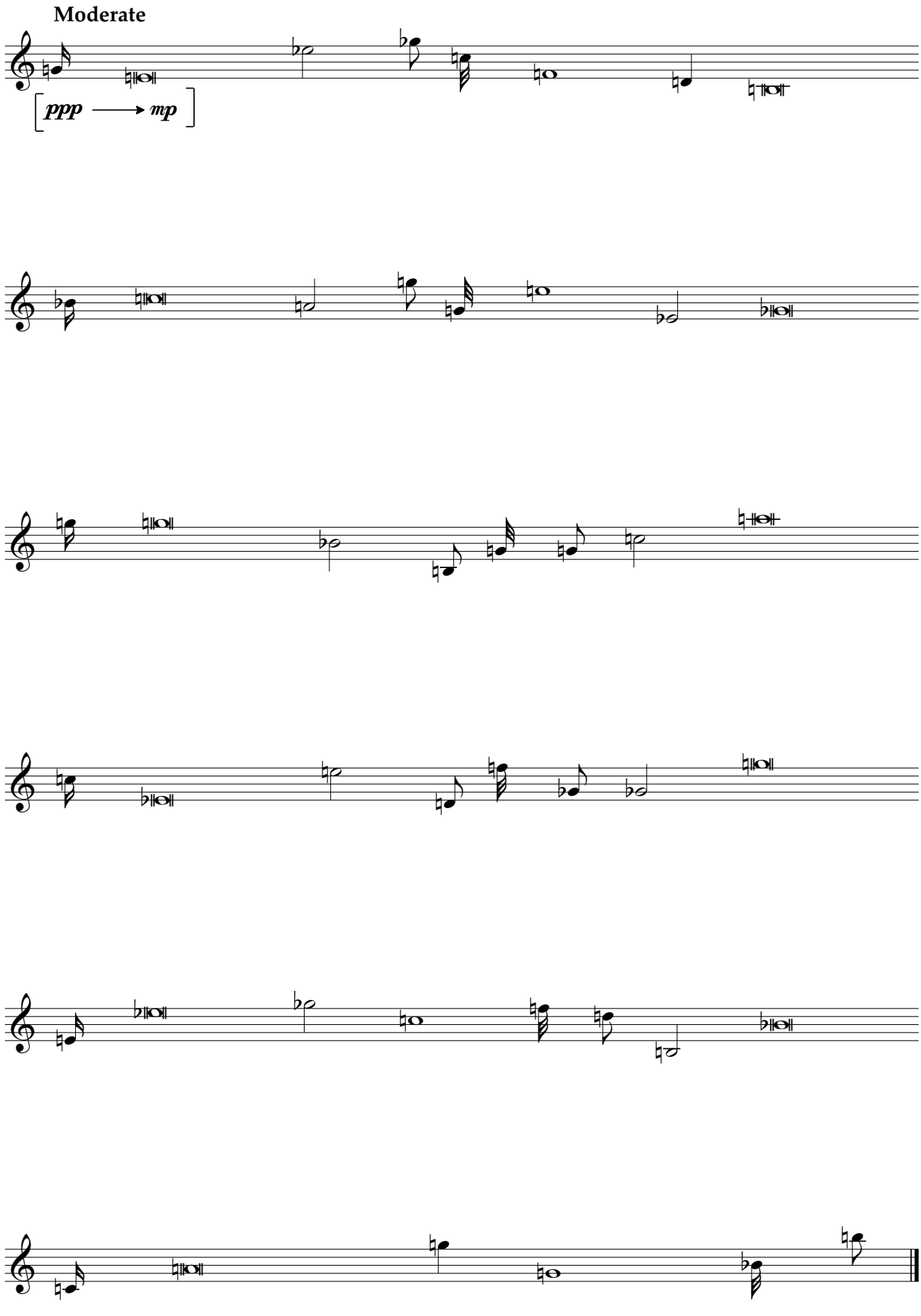
C Major Scale



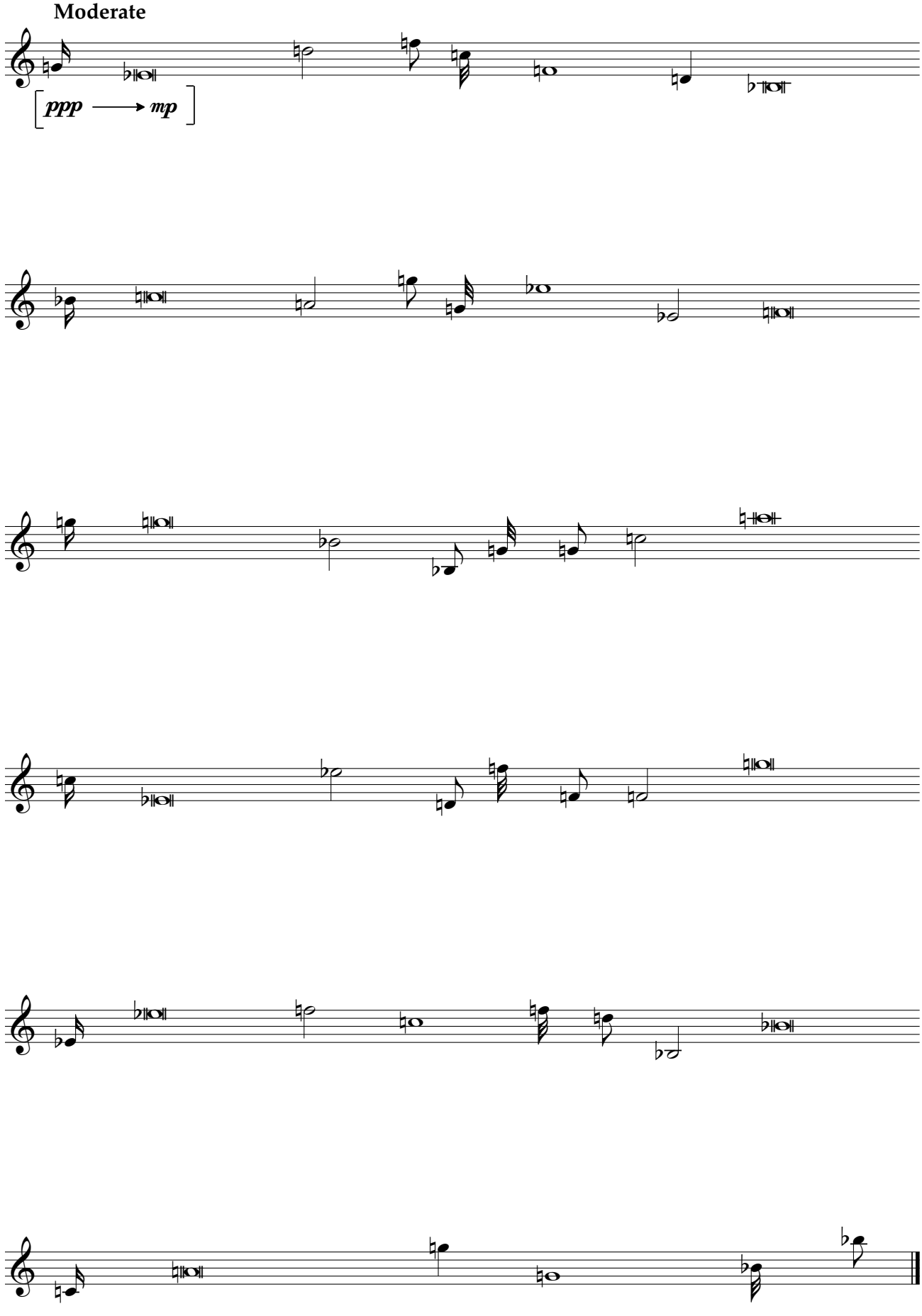
G Sharp Minor



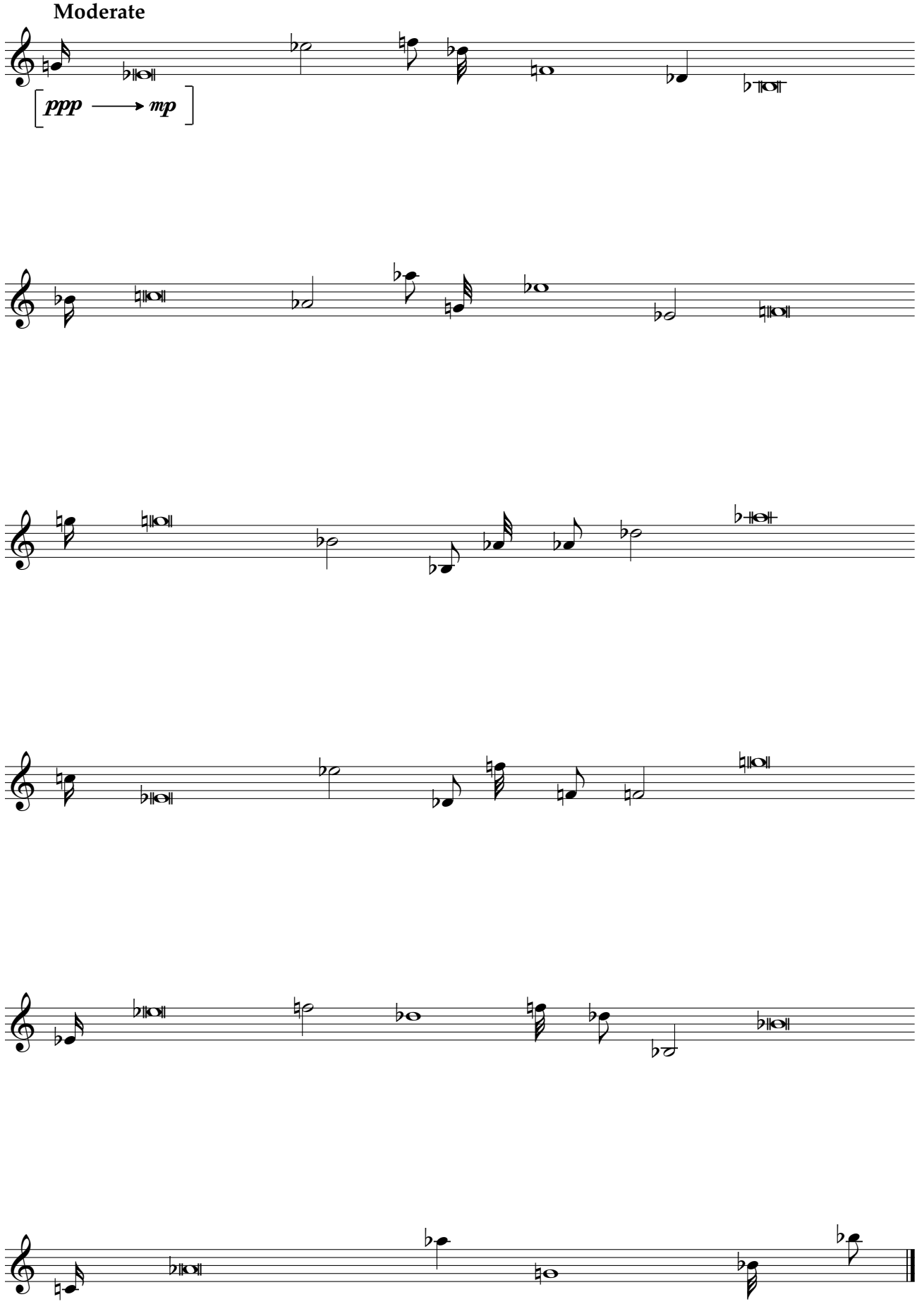
Blues Scale



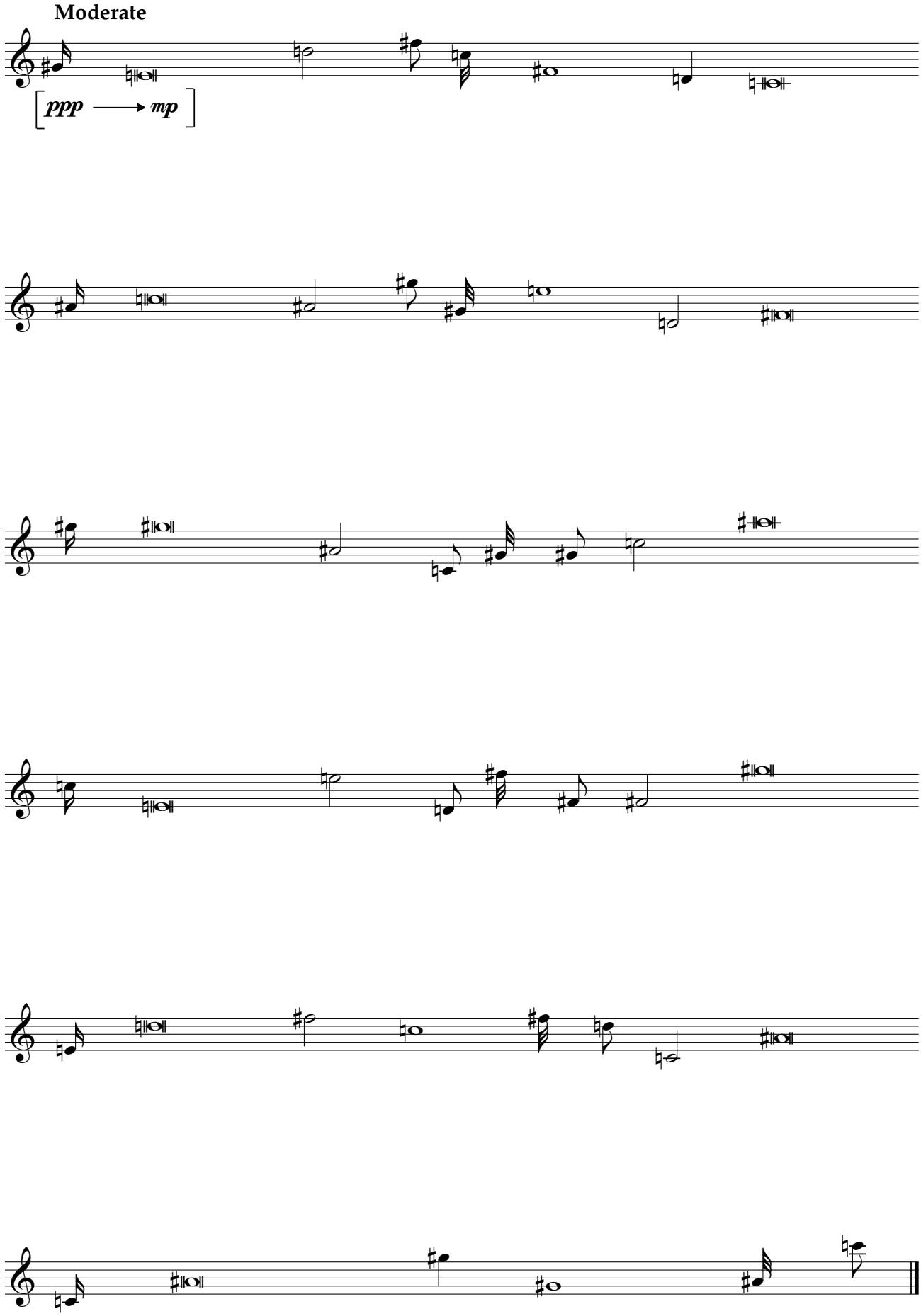
Dorian Mode



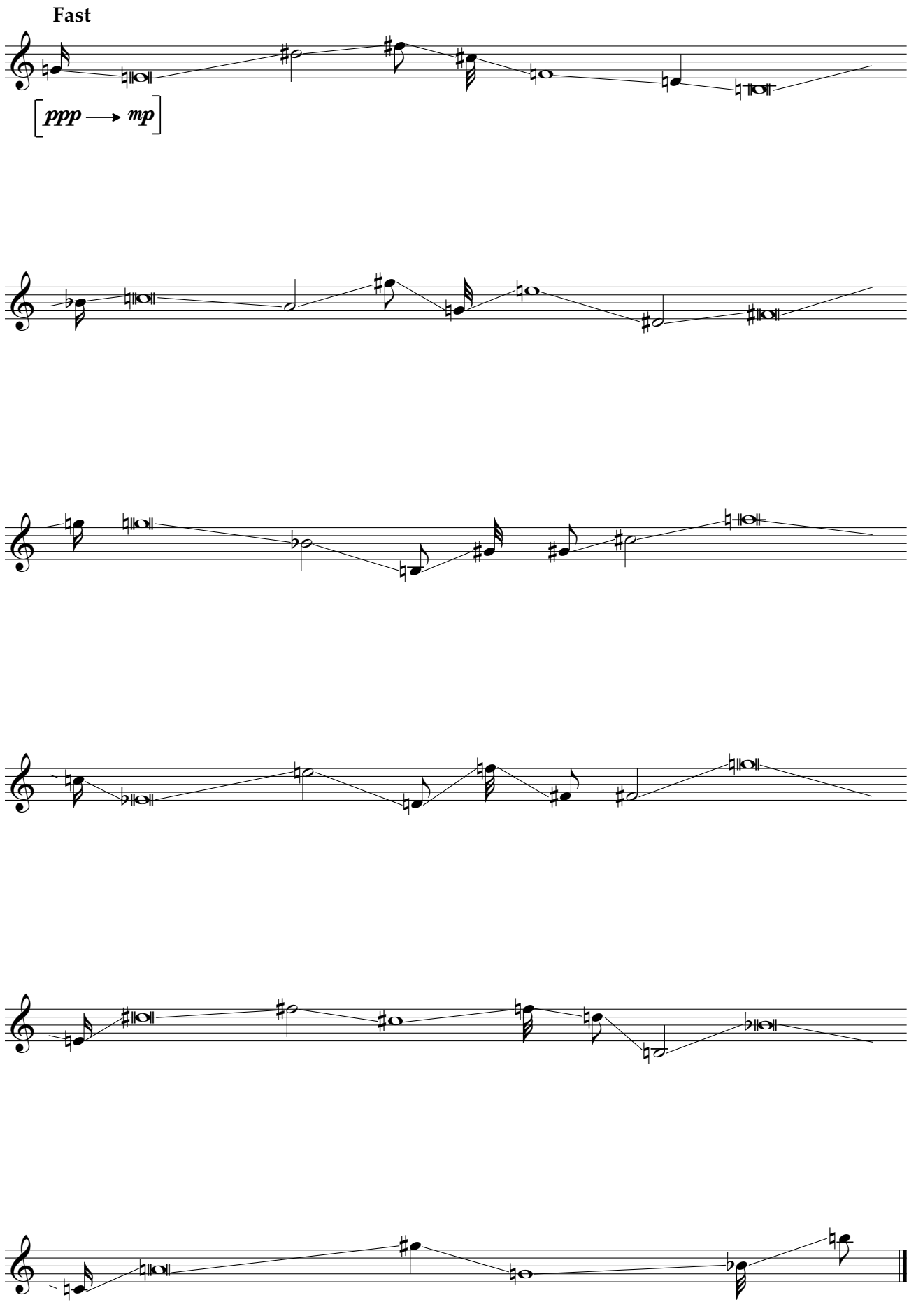
Phrygian Mode



Whole Tone Scale

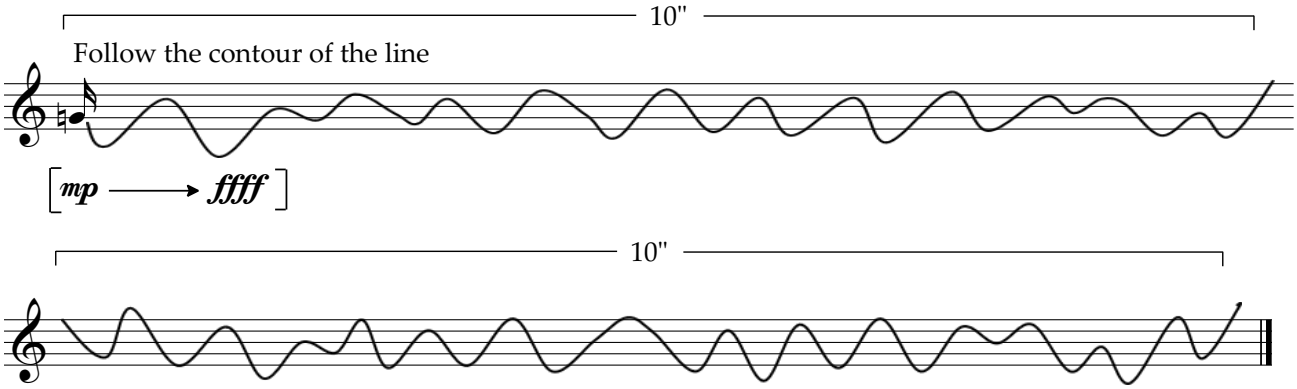


Glissandi Points



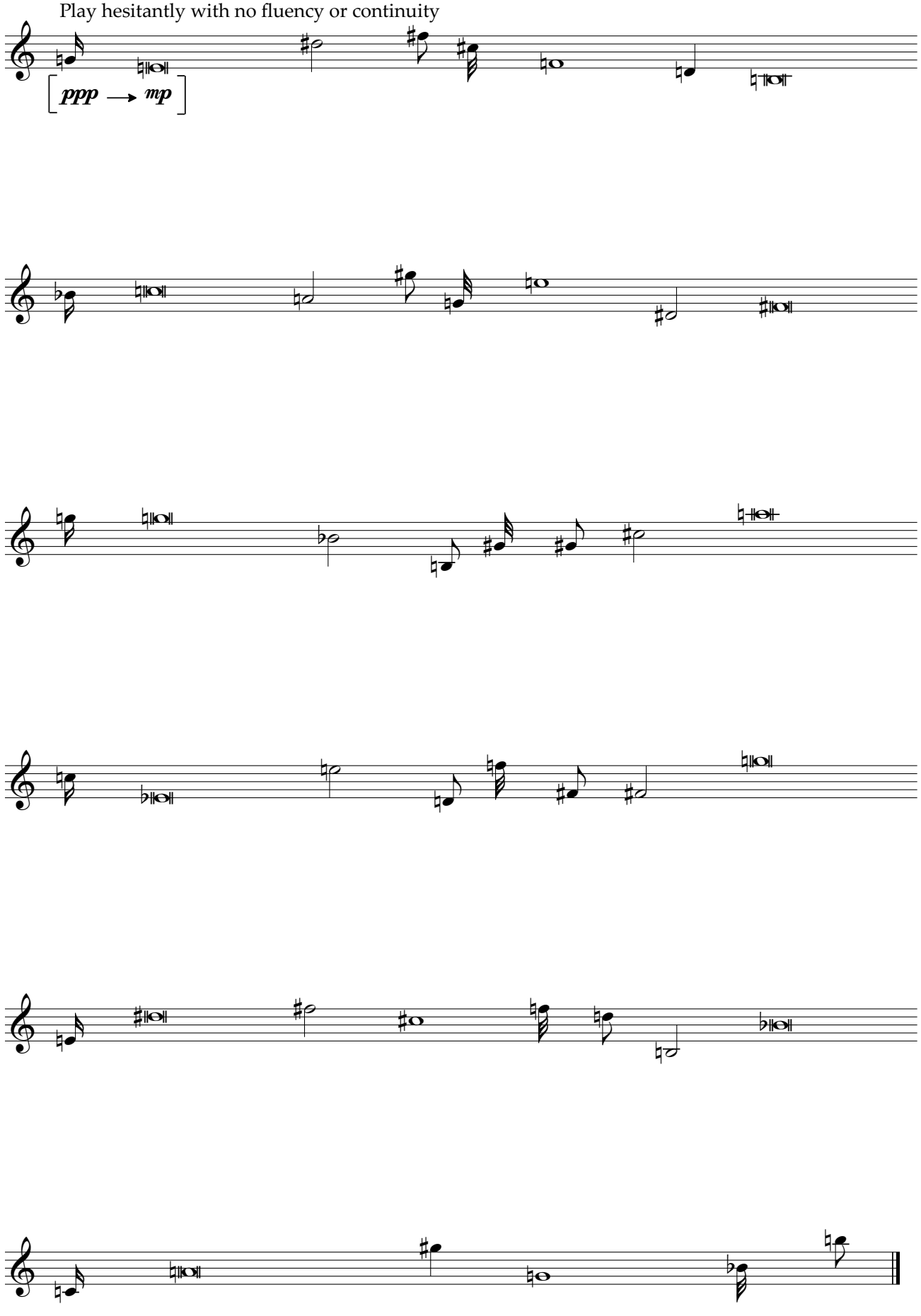
Glissandi Contour

Moderate



Hesitation

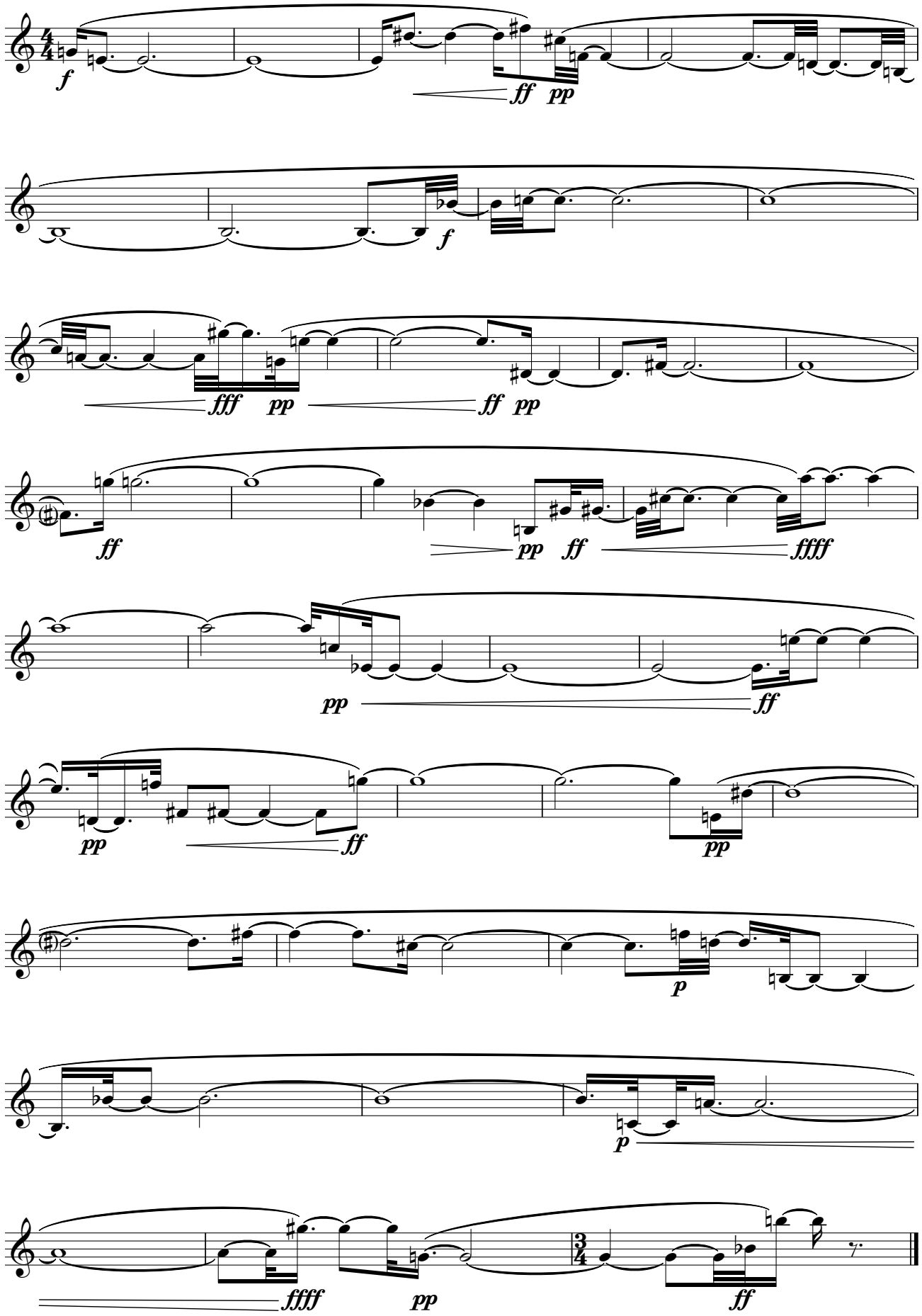
Play hesitantly with no fluency or continuity



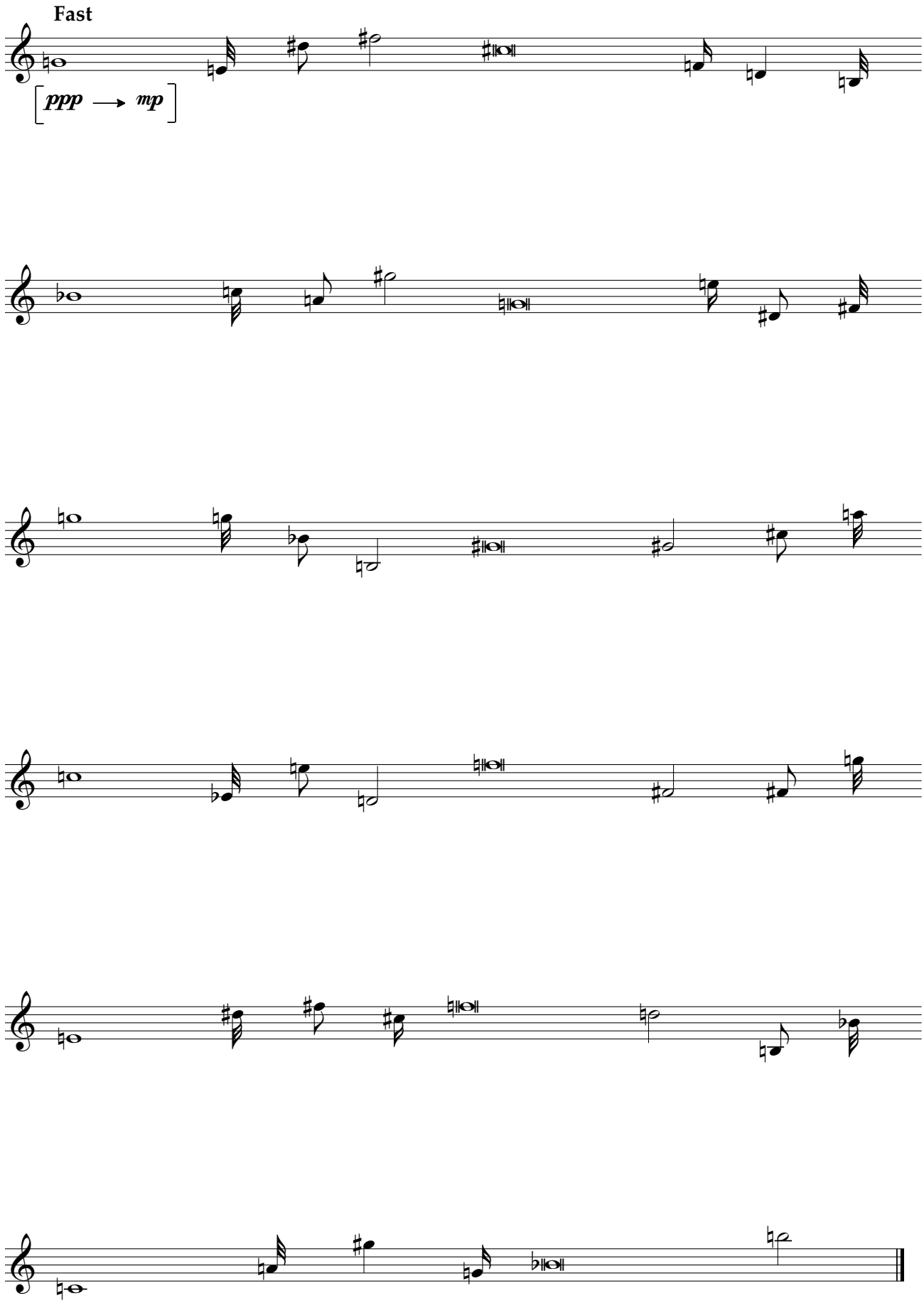
Precision

♩=112

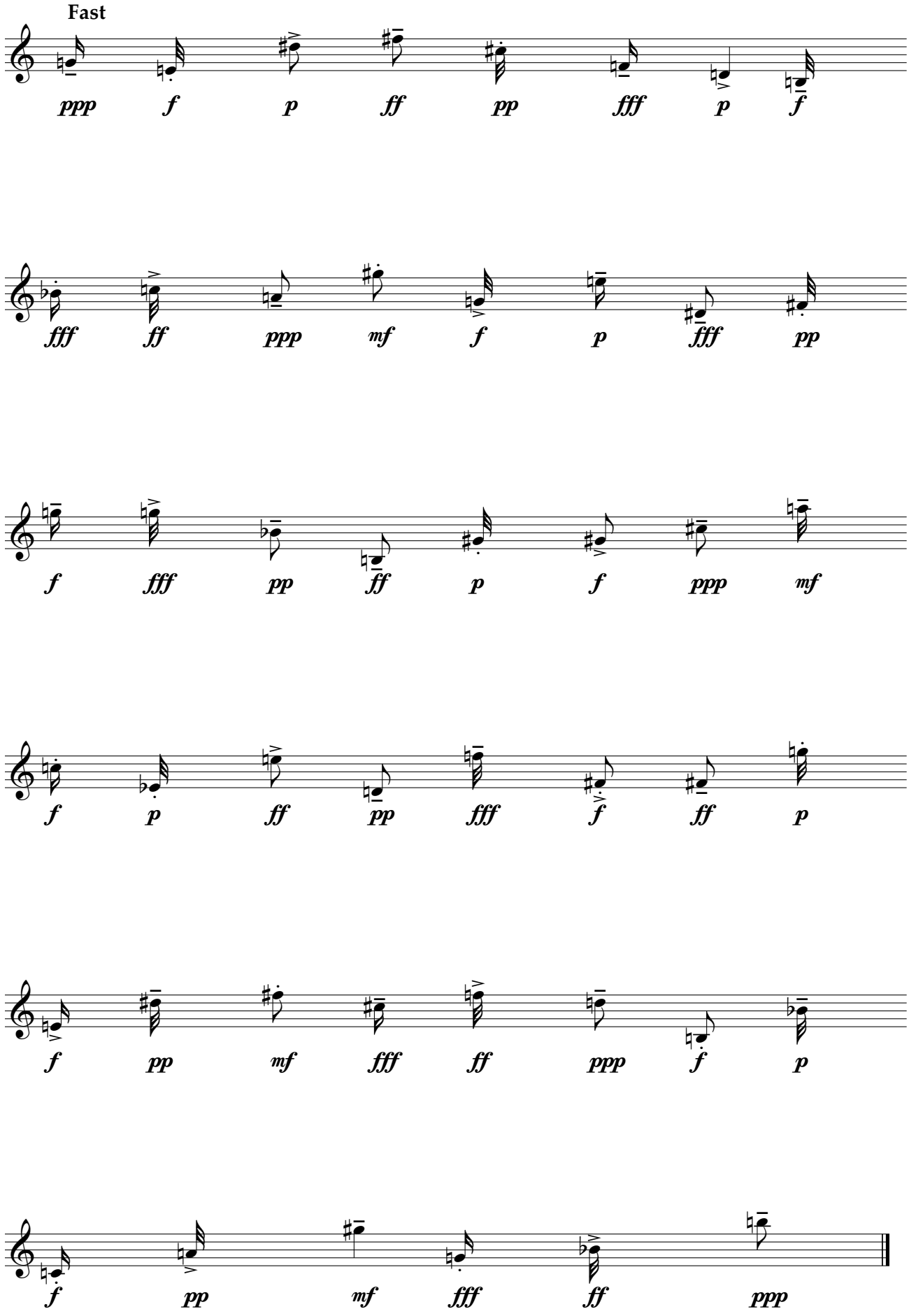
Play with precision and in strict time, paying attention to every little detail



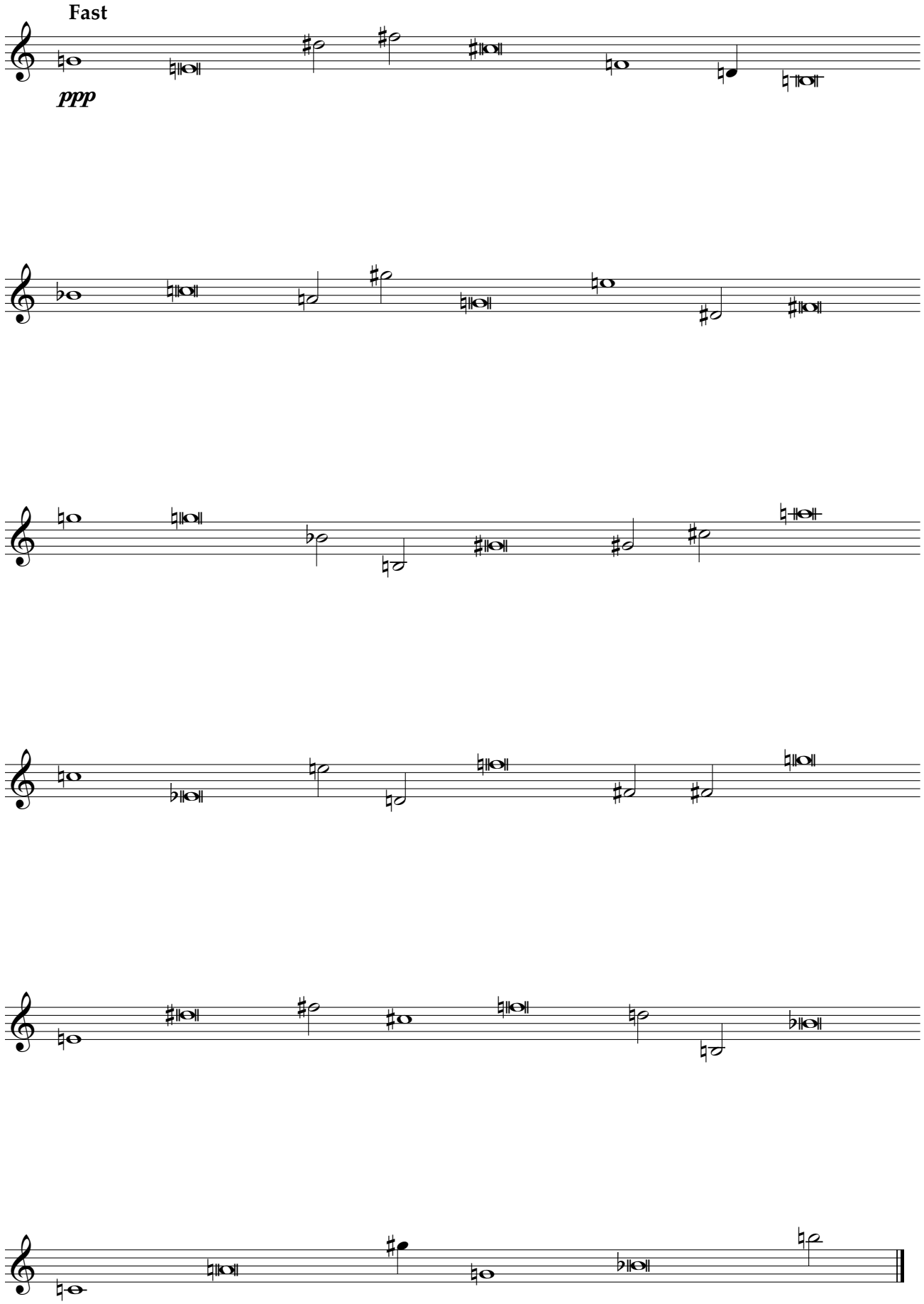
Duration Inversion



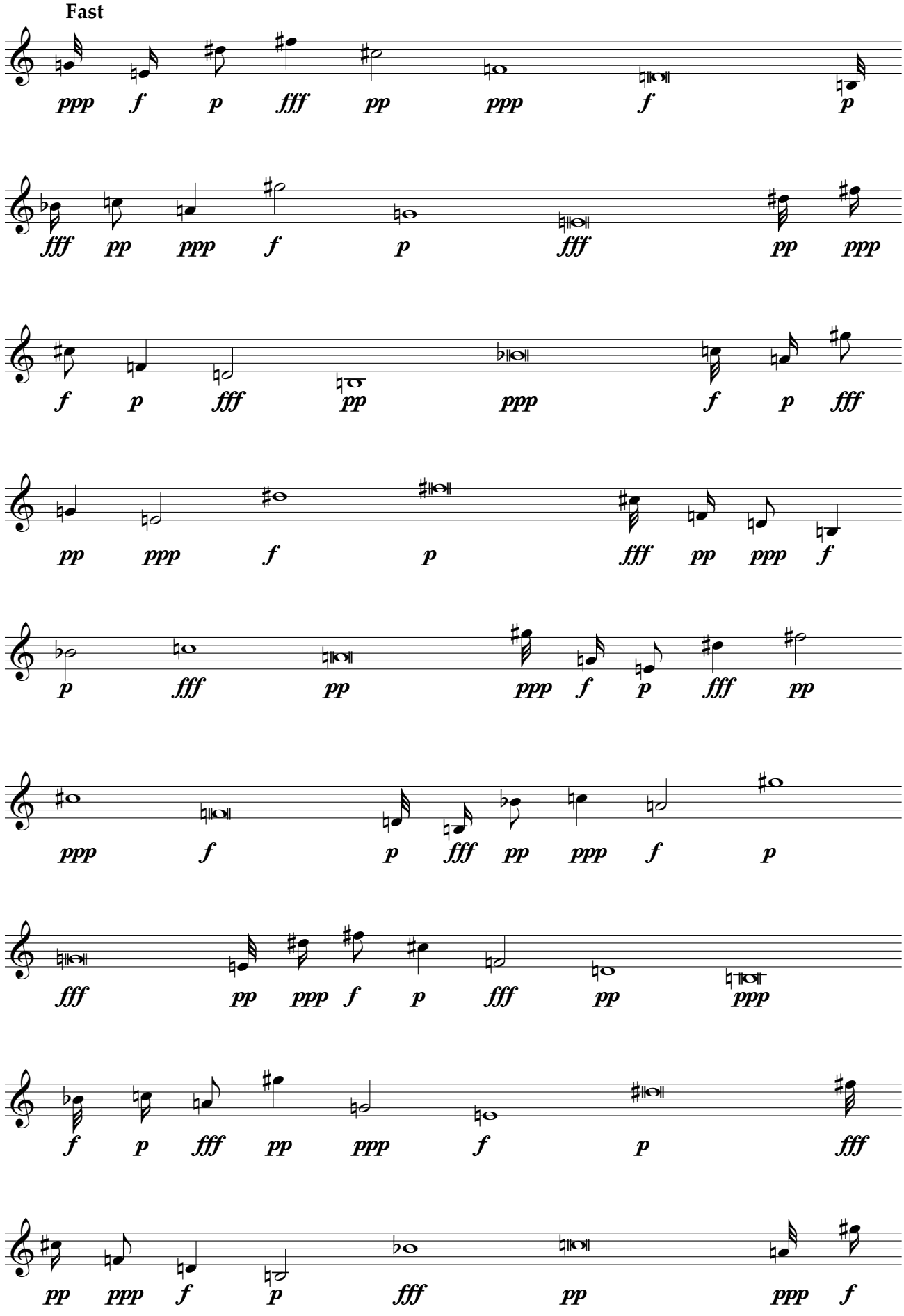
All Short Durations

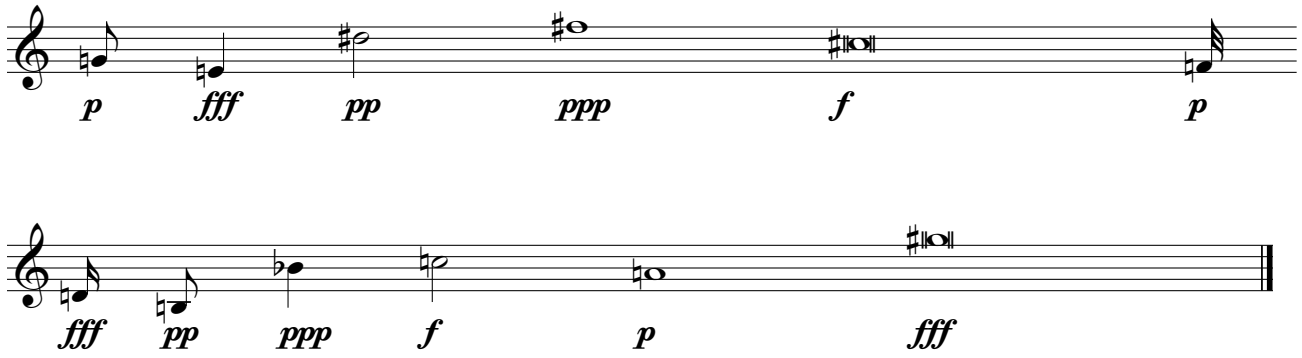


All Long Durations



Isorhythm


Fast
ppp f p fff pp ppp f p
fff pp ppp f p fff pp ppp
f p fff pp ppp f p fff
pp ppp f p fff pp ppp f
p fff pp ppp f p fff pp
ppp f p fff pp ppp f p
fff pp ppp f p fff pp ppp
f p fff pp ppp f p fff
pp ppp f p fff pp ppp f


p
fff
pp
ppp
f
p
fff
pp
ppp
f
p
fff

Twelve-Tone Matrix

Below is a twelve-tone matrix. The performer may wish to play the rows from left to right and vice versa; play the columns from top to bottom and vice versa; play several rows or columns simultaneously (where possible); or may wish to play a combination of paths. The performer may decide to choose their path through the matrix during the performance, or may create a short piece from the materials provided prior to the performance. Durations: follow the duration sequence from left to right, once you reach the end start from the beginning again (as many times as needed). A tempo marking and a range of dynamics have also been provided. Articulation is at the performer's discretion.

Slow $\left[ppp \longrightarrow mp \right]$

	I-0	I-9	I-8	I-11	I-6	I-10	I-7	I-4	I-3	I-5	I-2	I-1	
P-0	G	E	Eb	F#	C#	F	D	B	Bb	C	A	Ab	**R-0**
P-3	Bb	G	F#	A	E	Ab	F	D	C#	Eb	C	B	**R-3**
P-4	B	Ab	G	Bb	F	A	F#	Eb	D	E	C#	C	**R-4**
P-1	Ab	F	E	G	D	F#	Eb	C	B	C#	Bb	A	**R-1**
P-6	C#	Bb	A	C	G	B	Ab	F	E	F#	Eb	D	**R-6**
P-2	A	F#	F	Ab	Eb	G	E	C#	C	D	B	Bb	**R-2**
P-5	C	A	Ab	B	F#	Bb	G	E	Eb	F	D	C#	**R-5**
P-8	Eb	C	B	D	A	C#	Bb	G	F#	Ab	F	E	**R-8**
P-9	E	C#	C	Eb	Bb	D	B	Ab	G	A	F#	F	**R-9**
P-7	D	B	Bb	C#	Ab	C	A	F#	F	G	E	Eb	**R-7**
P-10	F	D	C#	E	B	Eb	C	A	Ab	Bb	G	F#	**R-10**
P-11	F#	Eb	D	F	C	E	C#	Bb	A	B	Ab	G	**R-11**
	IR-0	**IR-9**	**IR-8**	**IR-11**	**IR-6**	**IR-10**	**IR-7**	**IR-4**	**IR-3**	**IR-5**	**IR-2**	**IR-1**	

Duration Sequence:

Magic Square

Below is a magic square containing pitches attached to specific durations. Each small number is positioned on the right of the specified pitch in each square, and equals a duration. Each number is attached to a specific duration (see key below). The performer may wish to play the rows from left to right and vice versa; play the columns from top to bottom and vice versa; play the diagonals starting from any corner; play several rows, columns or diagonals simultaneously (where possible); or may wish to play a combination of paths. The performer may also decide to choose their path through the square during the performance, or may create a short piece from the materials provided prior to the performance. A tempo marking and a range of dynamics have also been provided.

Fast $\left[mf \longrightarrow fff \right]$

G$_2$	E$_7$	D#$_3$	F#$_8$	C#$_4$	F$_9$	D$_5$	B$_1$	Bb$_6$
C$_7$	A$_3$	F#$_8$	F$_4$	G#$_9$	D#$_5$	G$_1$	E$_6$	C#$_2$
G#$_3$	G$_8$	E$_4$	C#$_9$	C$_5$	D#$_1$	Bb$_6$	D$_2$	B$_7$
Bb$_8$	G$_4$	F#$_9$	D#$_5$	C$_1$	B$_6$	D$_2$	A$_7$	C#$_3$
E$_4$	C#$_9$	Bb$_5$	A$_1$	F#$_6$	D#$_2$	D$_7$	F$_3$	C$_8$
C#$_9$	F$_5$	D$_1$	B$_6$	Bb$_2$	G$_7$	E$_3$	D#$_8$	F#$_4$
B$_5$	F#$_1$	Bb$_6$	G$_2$	E$_7$	D#$_3$	C$_8$	A$_4$	G#$_9$
D$_1$	F$_6$	C$_2$	E$_7$	C#$_3$	Bb$_8$	A$_4$	F#$_9$	D#$_5$
C$_6$	B$_2$	D$_7$	A$_3$	C#$_8$	Bb$_4$	G$_9$	F#$_5$	D#$_1$

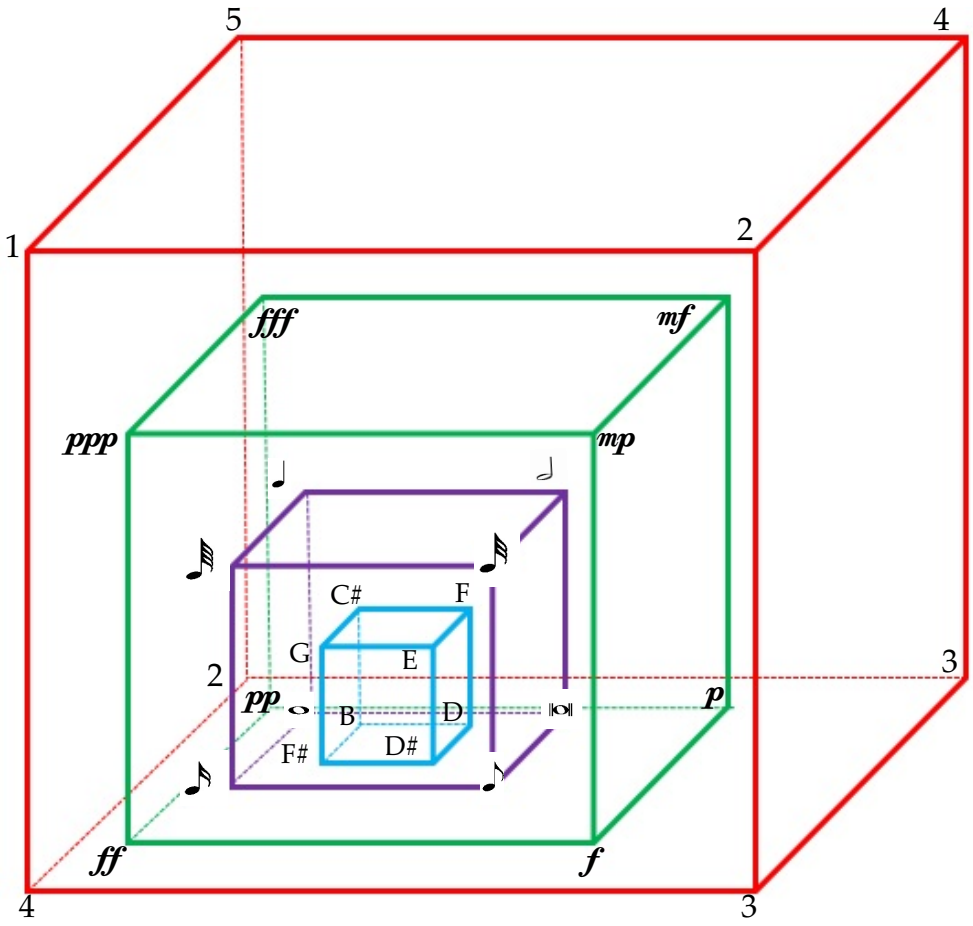
1= 2= 3= 4= 5=

6= 7= 8= 9=

Ghost Cube

Below is a ghost cube: a pre-compositional technique developed by Xenakis. The smallest cube contains a set of pitches (one pitch attached to each corner). Similarly, the second to smallest cube has one duration attached to each corner; the second to largest cube, dynamics; and the largest cube, techniques (the numbers correspond to the numbers in your devised technique table). Use the set of cubes to create a short musical exercise via matching the parameters of the corners with one another: for example, if playing the back left hand corner the pitch will be C#, the duration will be a crotchet, the dynamic will be triple forte, and the technique will be 5 (all noise). Similarly, if plying the top front right hand corner the result would be an E paired with a demi-semi-quaver, mezzo forte and 2 (mostly pitch, some noise). The performer may also wish to rotate one or more of the cubes at any time in order to get different combinations of the different parameters. The performer may also wish to improvise or notate their path through the ghost cube. If choosing the latter option the performer may wish to notate every aspect and set the range of each pitch etc. into a sequence which can be played as written in the performance.

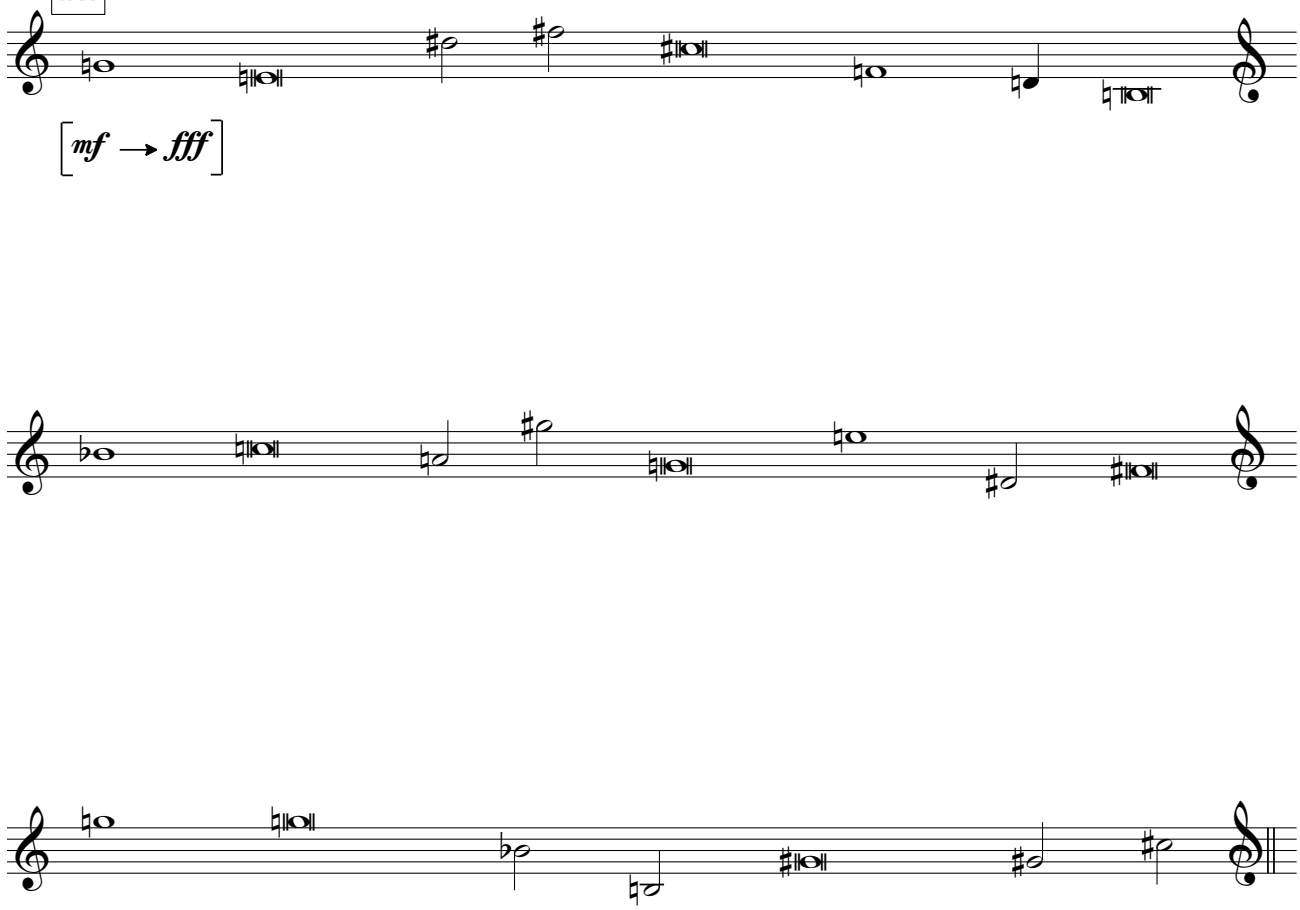
Moderate



Puzzle Canon 1

Fast

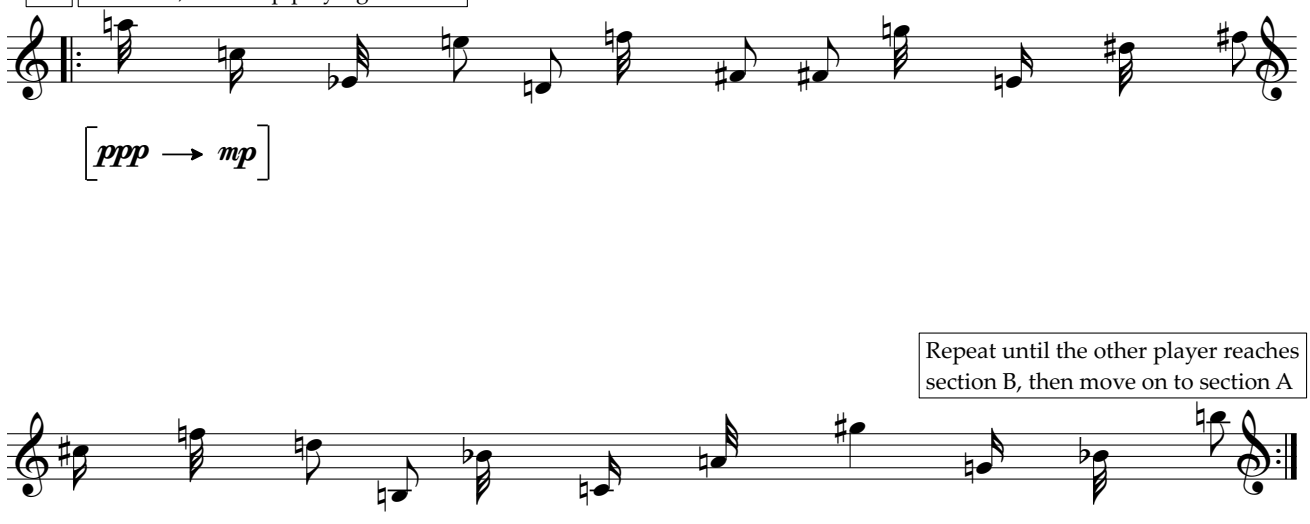
A



Moderate

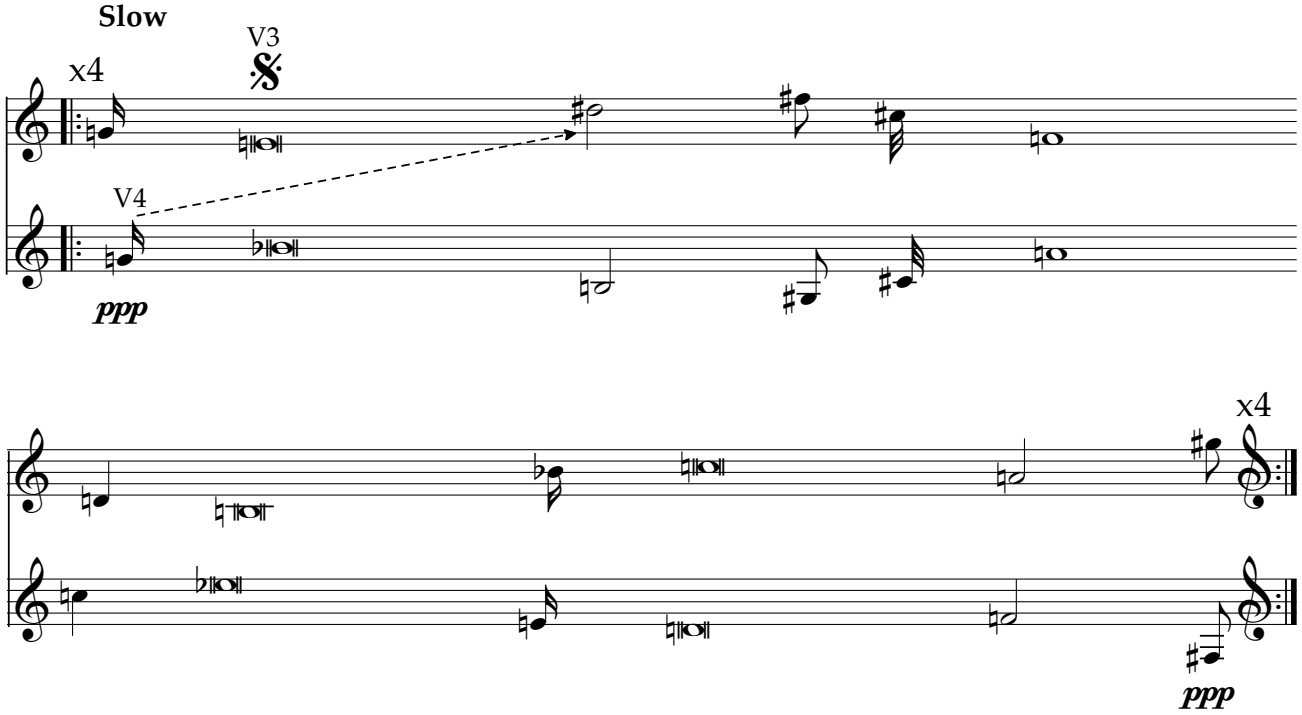
B

Repeat until the other player finishes section A, then stop playing



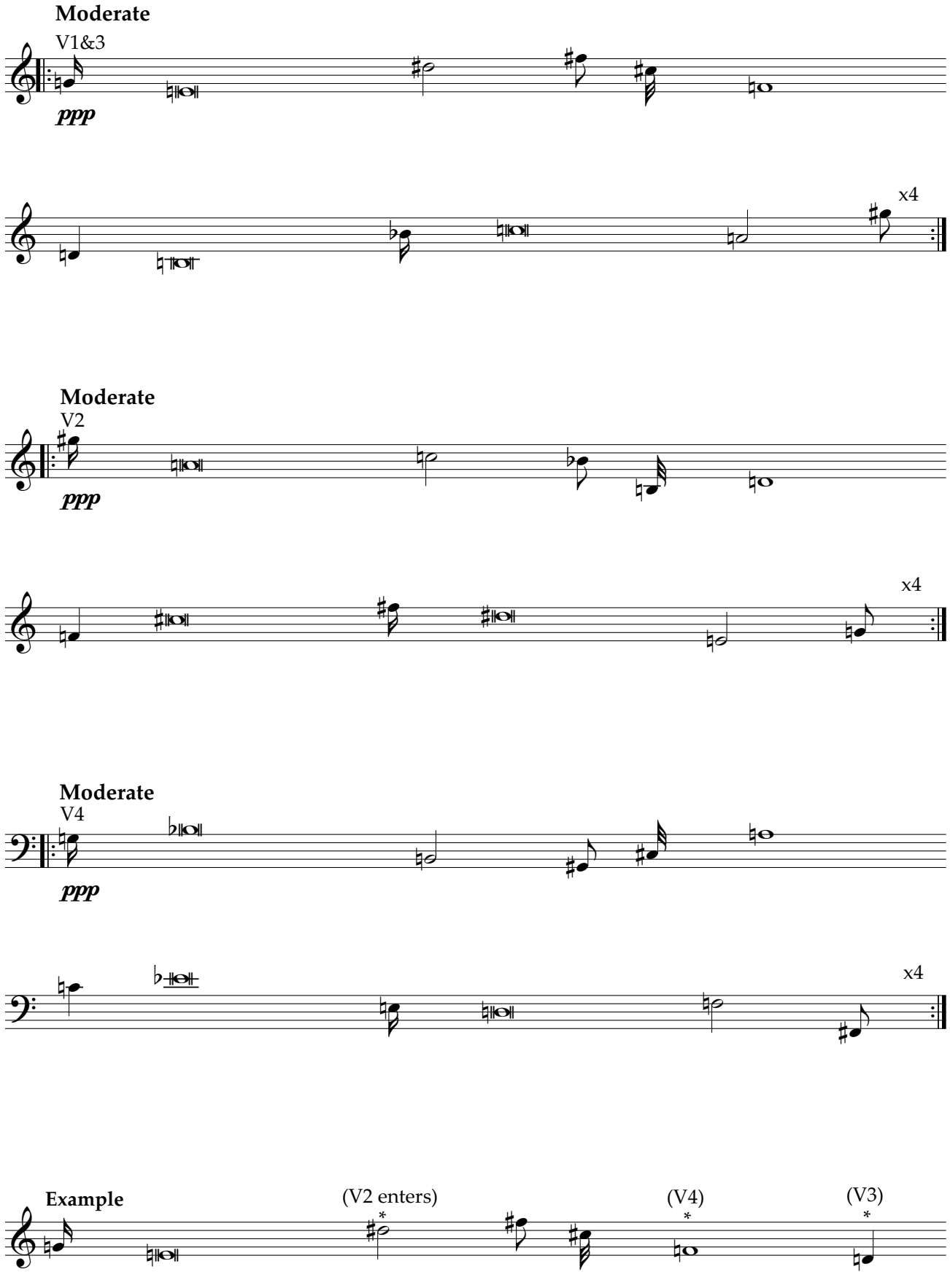
Repeat until the other player reaches section B, then move on to section A

Puzzle Canon 2

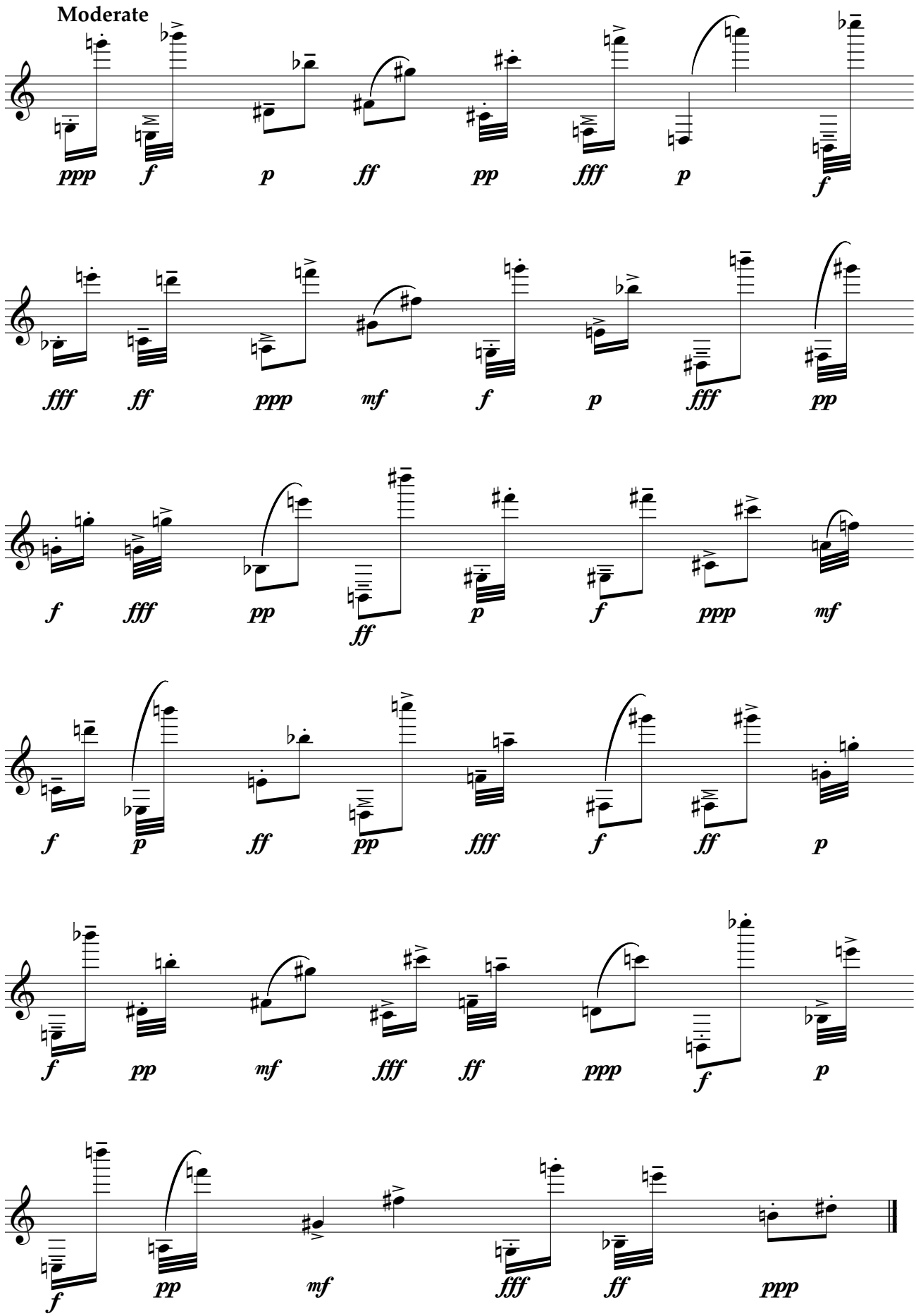


Canon

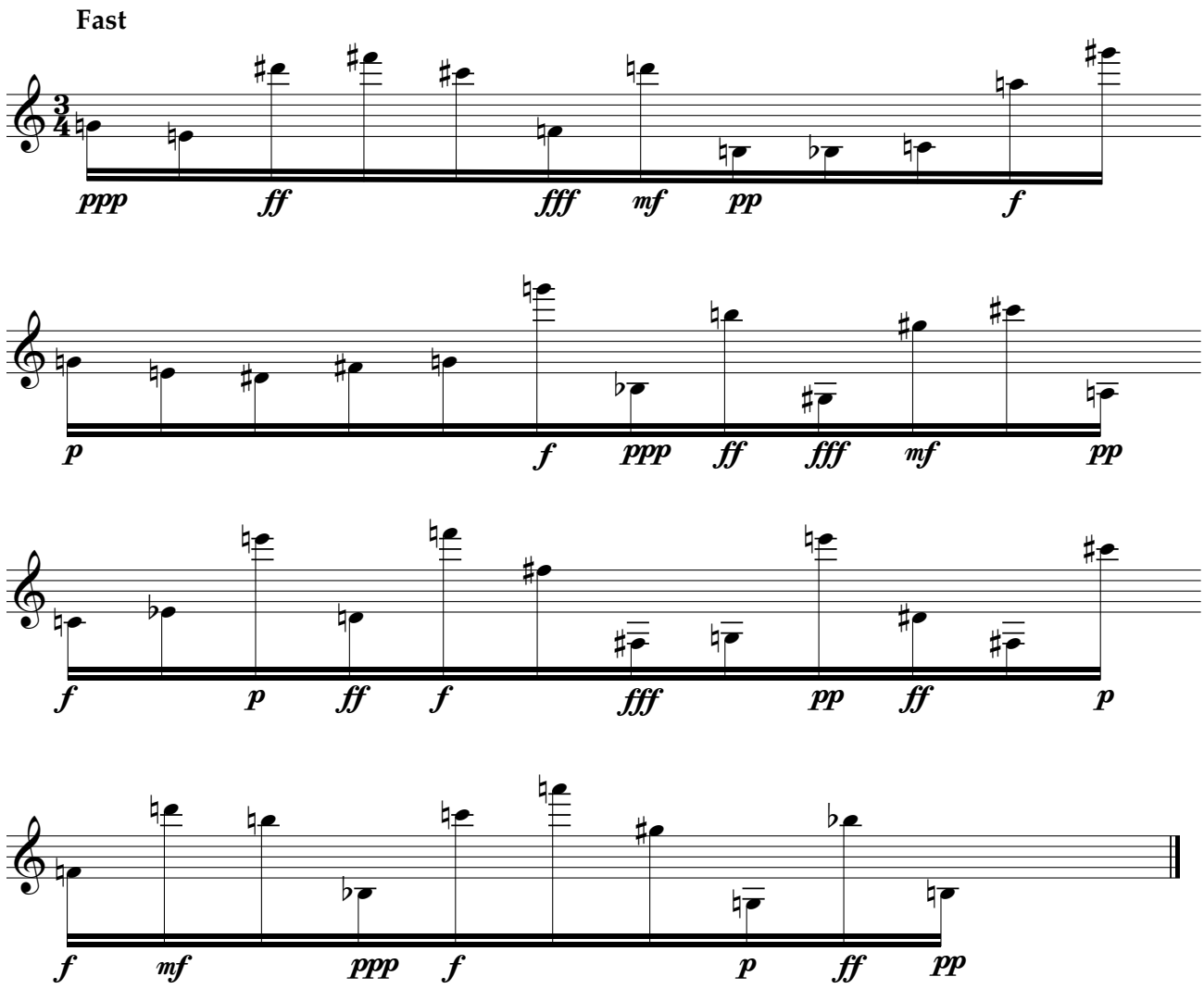
Below is a four-part canon. Each voice/instrument should repeat their part 4 times, and start at the places indicated in the example at the bottom of the page.



Mirror Canon



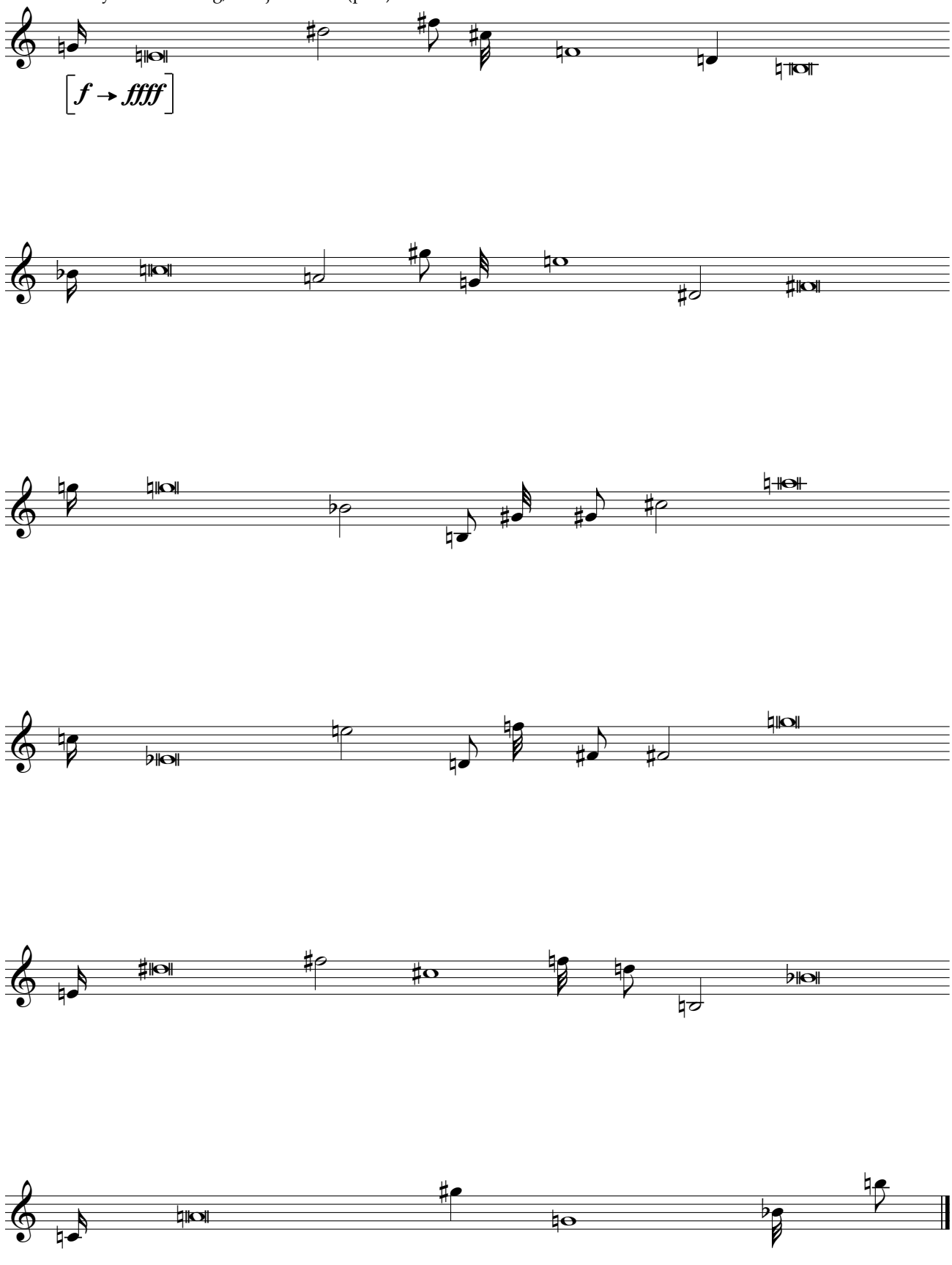
Hocket


Fast
ppp
ff
fff
mf
pp
f
p
f
ppp
ff
fff
mf
pp
f
p
ff
f
fff
pp
ff
p
f
mf
ppp
f
p
ff
pp

Past

Very Fast

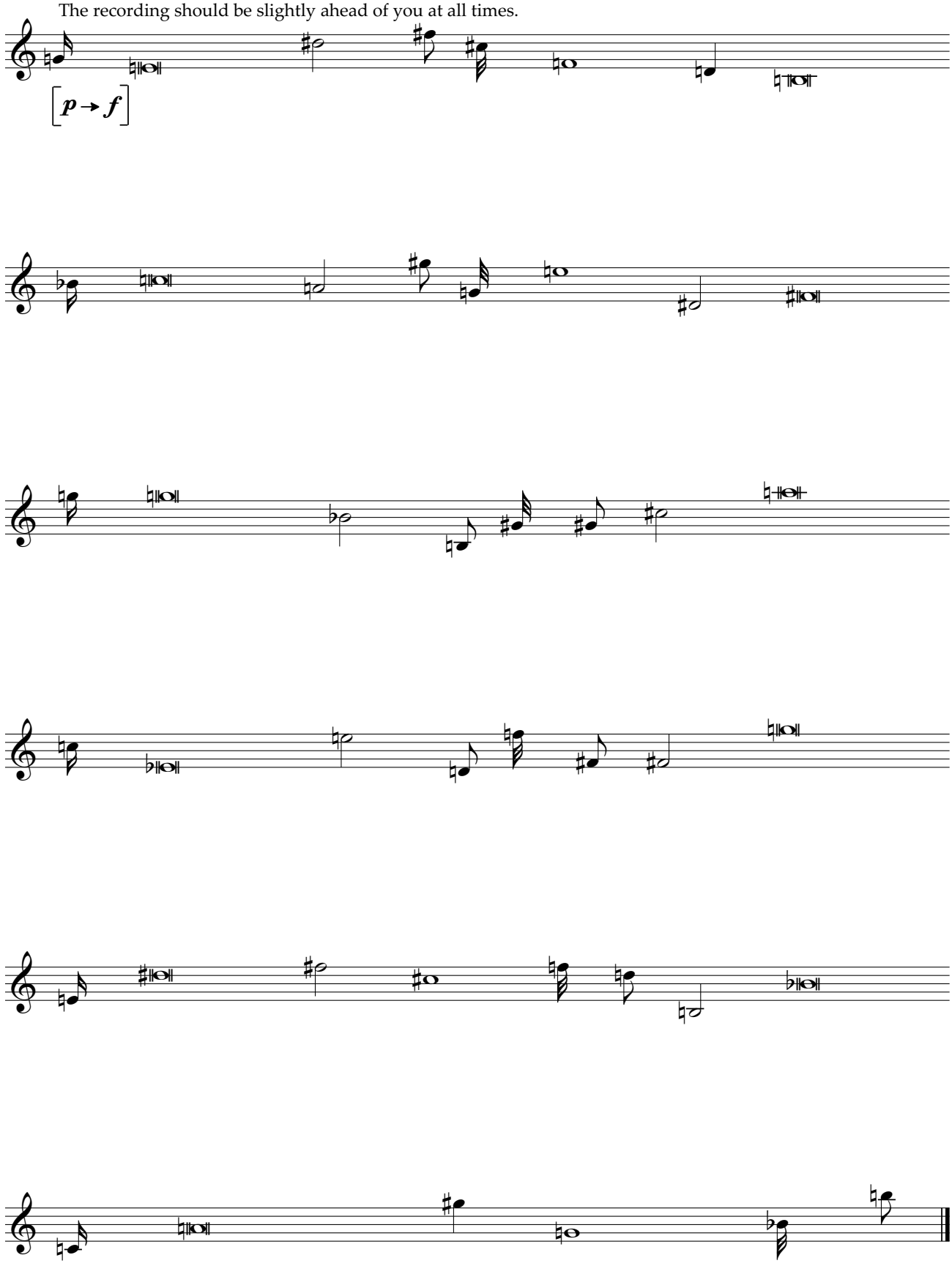
1. Play the exercise once through while audio recording it on an available recording device.
2. Play the recording, and just listen (past).



Present

Moderate

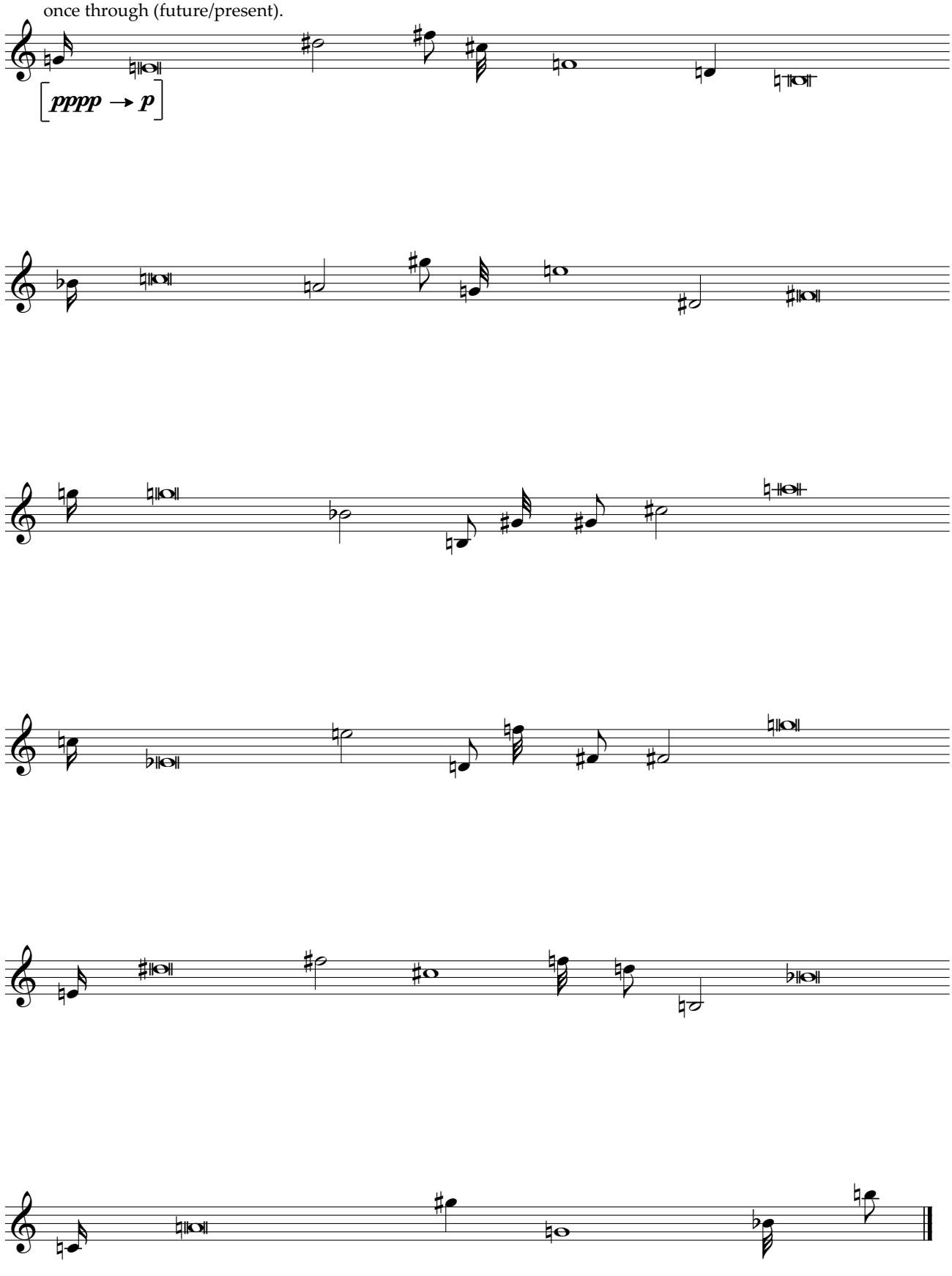
1. Prior to the performance, audio record yourself playing the exercise once through on an available recording device.
2. During the performance, play the recording, and then play the exercise along with the recording. The recording should be slightly ahead of you at all times.



Prognostication

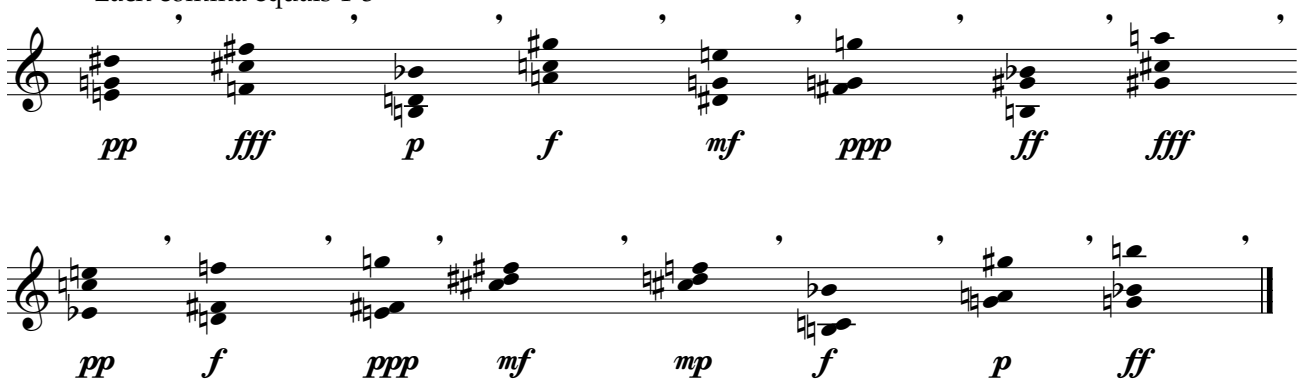
Very Slow

1. Walk into the performance space, put your music on your stand, sit down, prepare to start and then play the exercise once through (prediction).
2. Once finished walk over to the side of the performance space and sit and wait for one minute.
3. Walk back onto the stage, put your music on your stand, sit down, prepare to start and then play the exercise once through (future/present).



Tri-chords

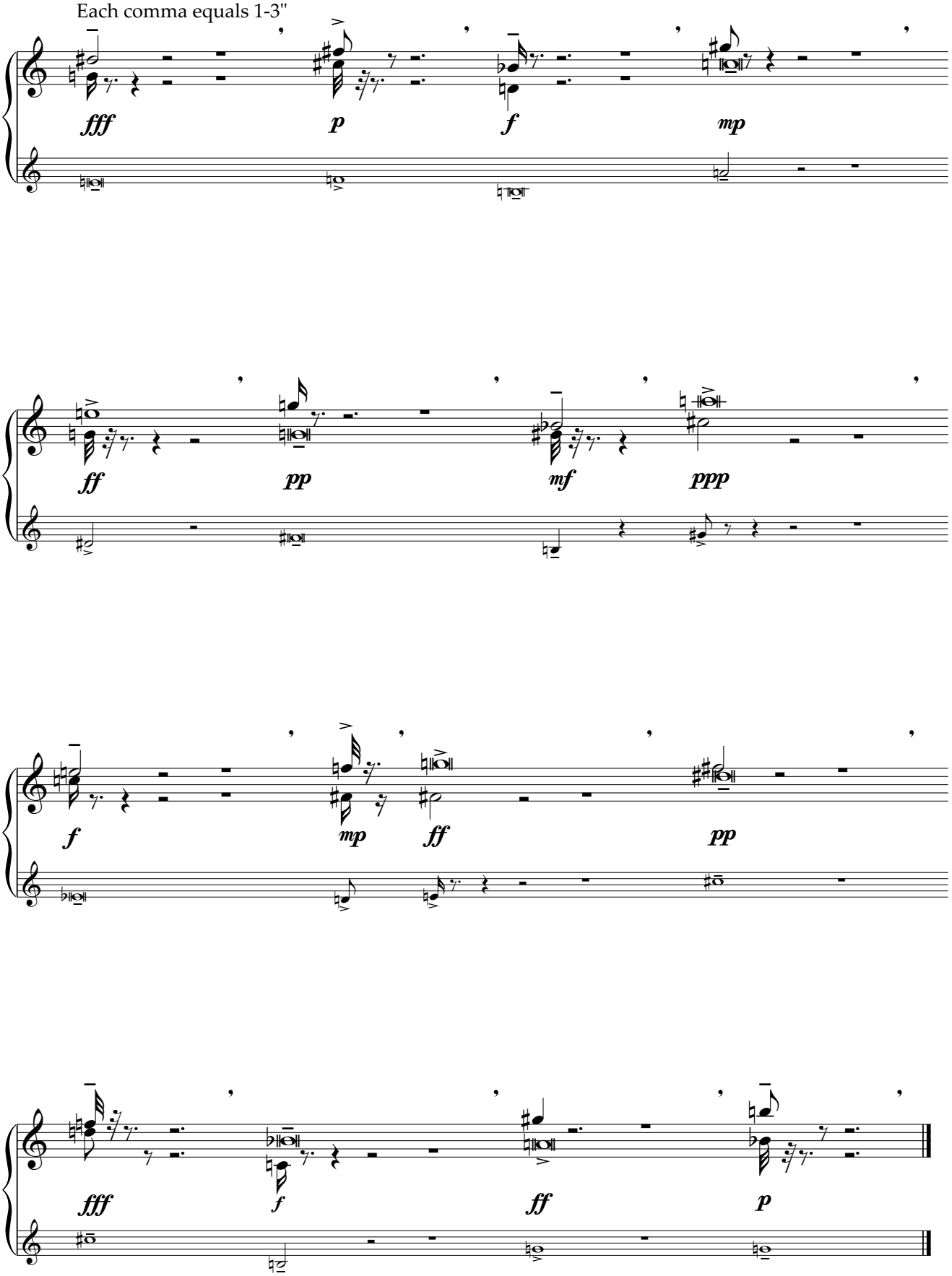
senza misura
Each comma equals 1-3"



Tri-chords: Pitches and Durations

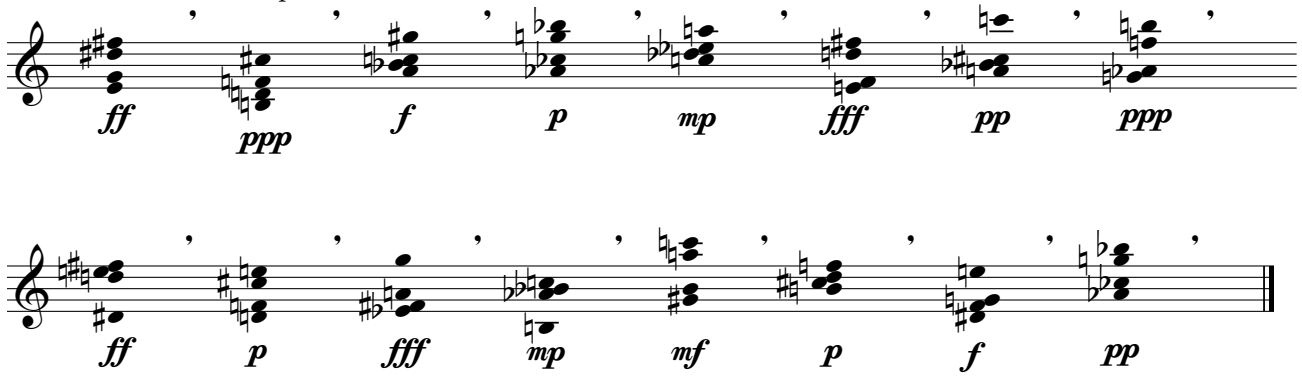
Fast

Each comma equals 1-3"

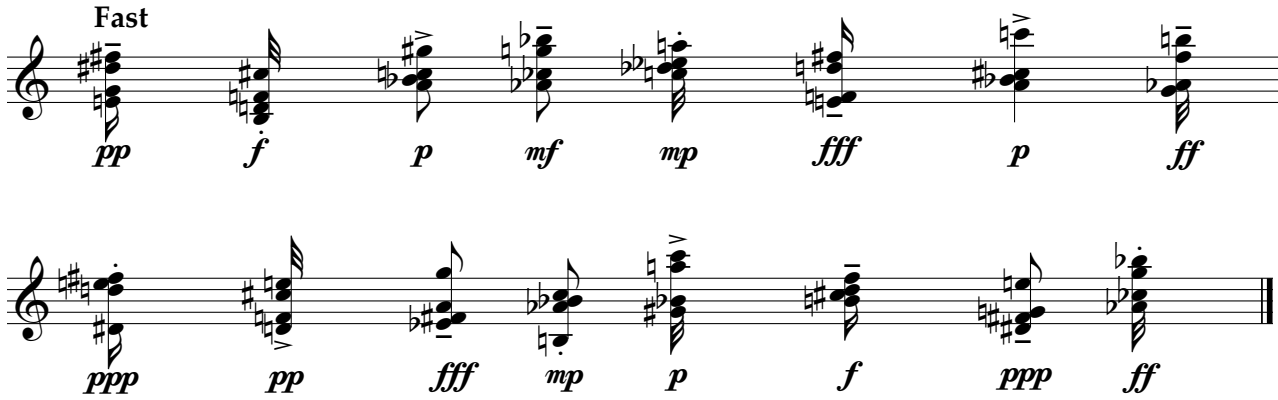


Tetra-chords

senza misura
Each comma equals 1-3"

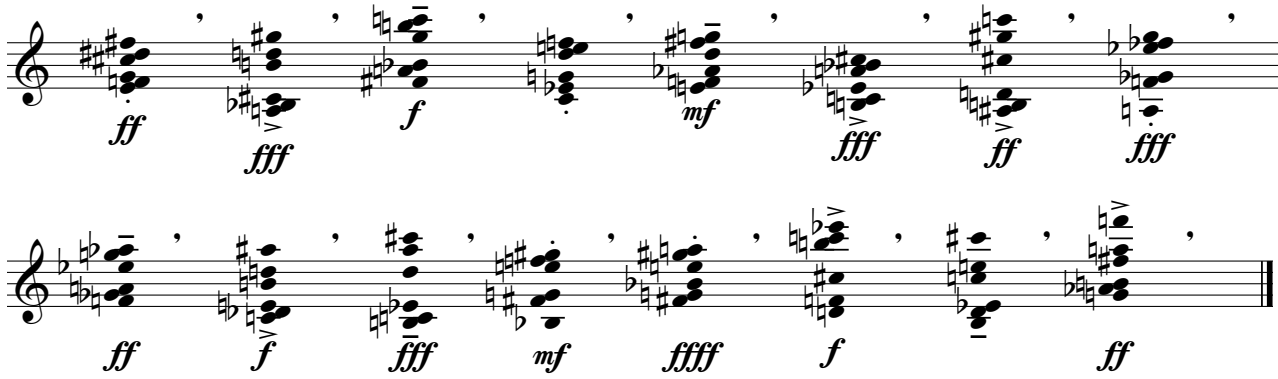


Tetra-chords: Pitches and Durations

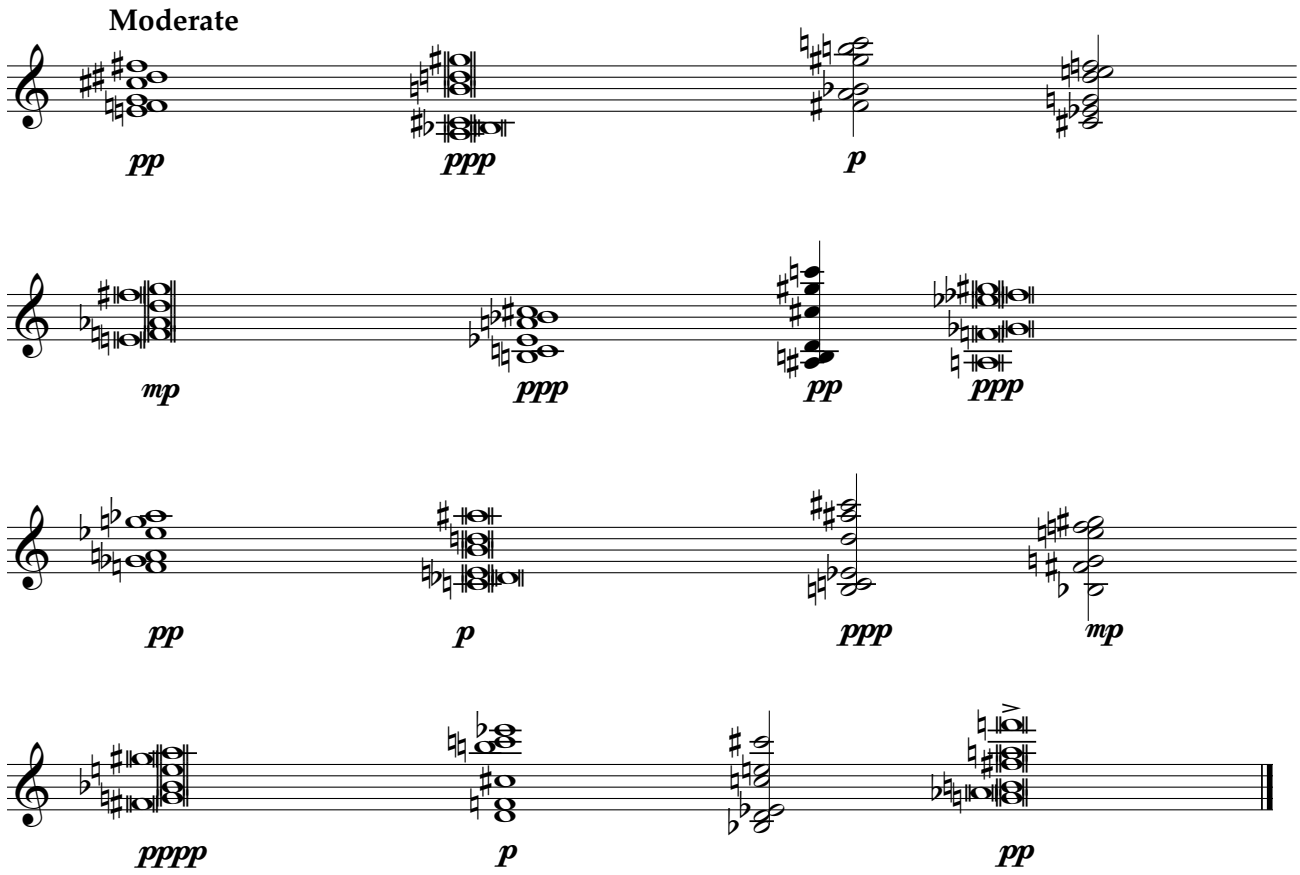


Hexa-chords

senza misura
Each comma equals 6-9"

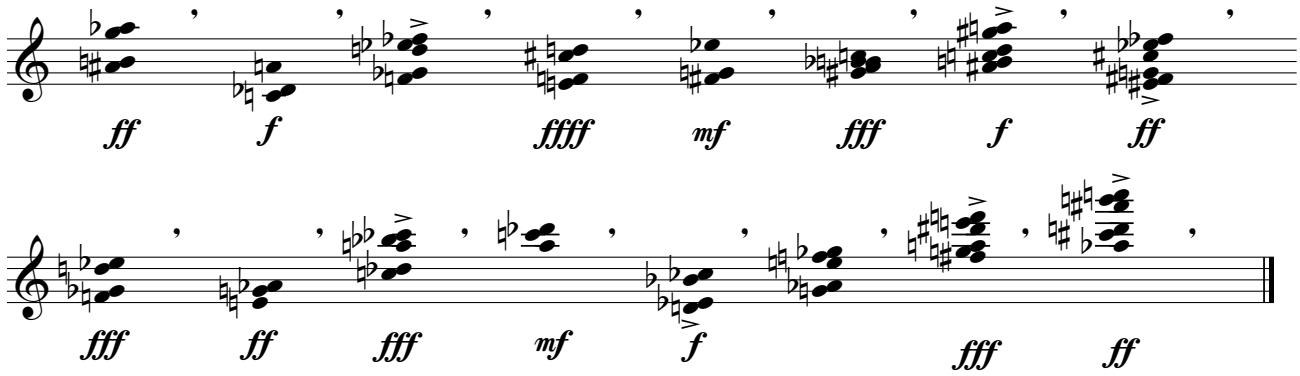


Hexa-chords: Pitches and Durations

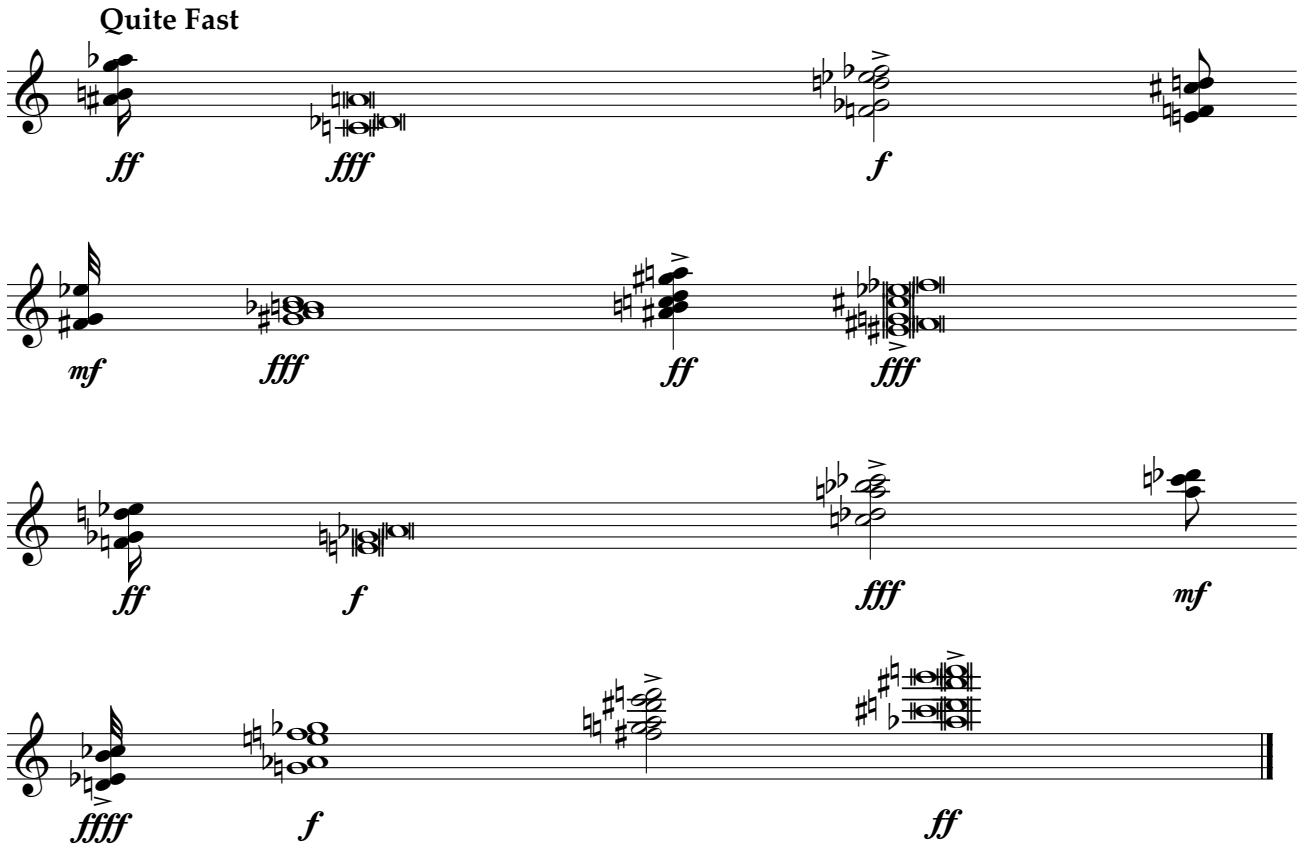


Clusters

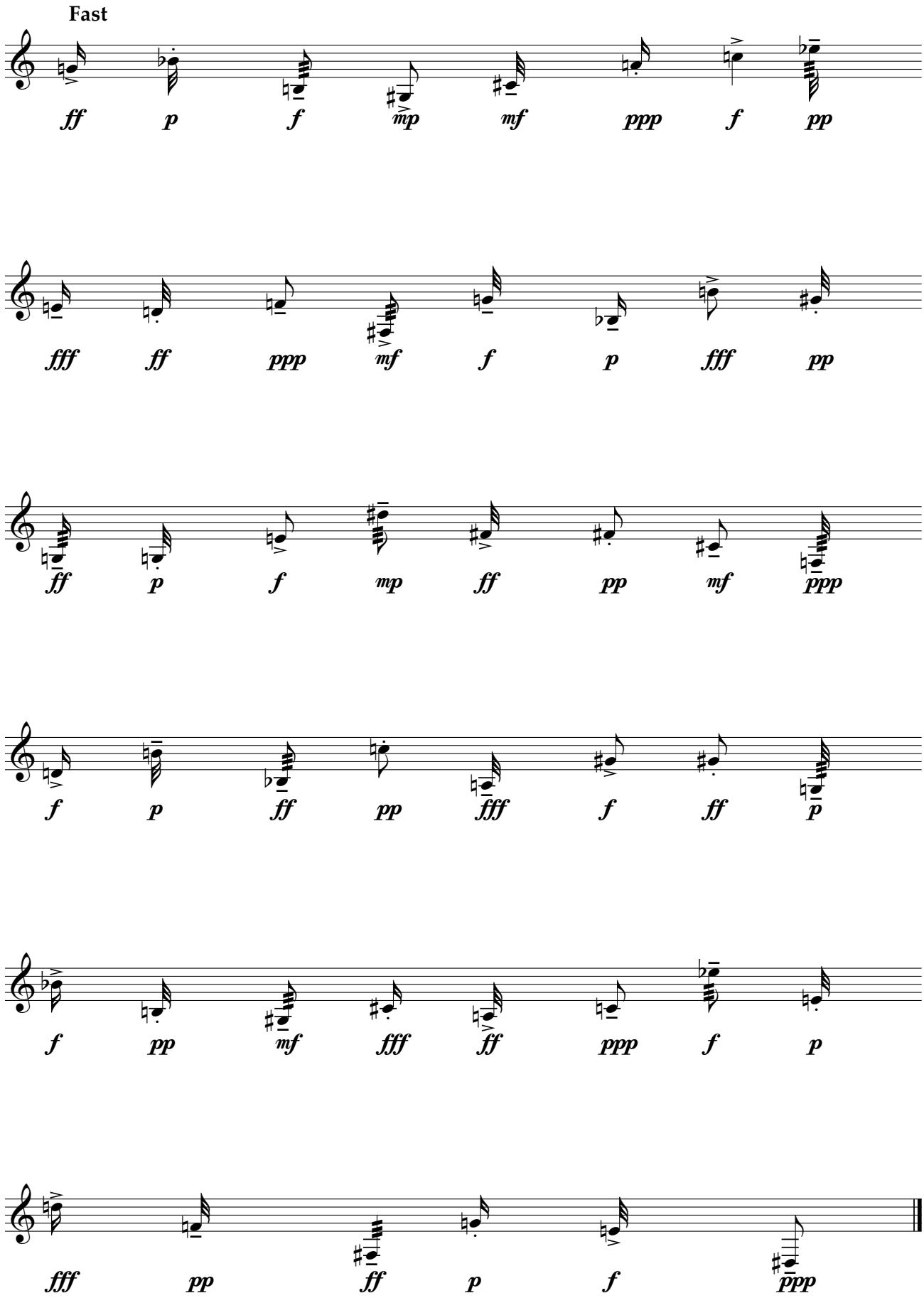
senza misura
Each comma equals 3-6"



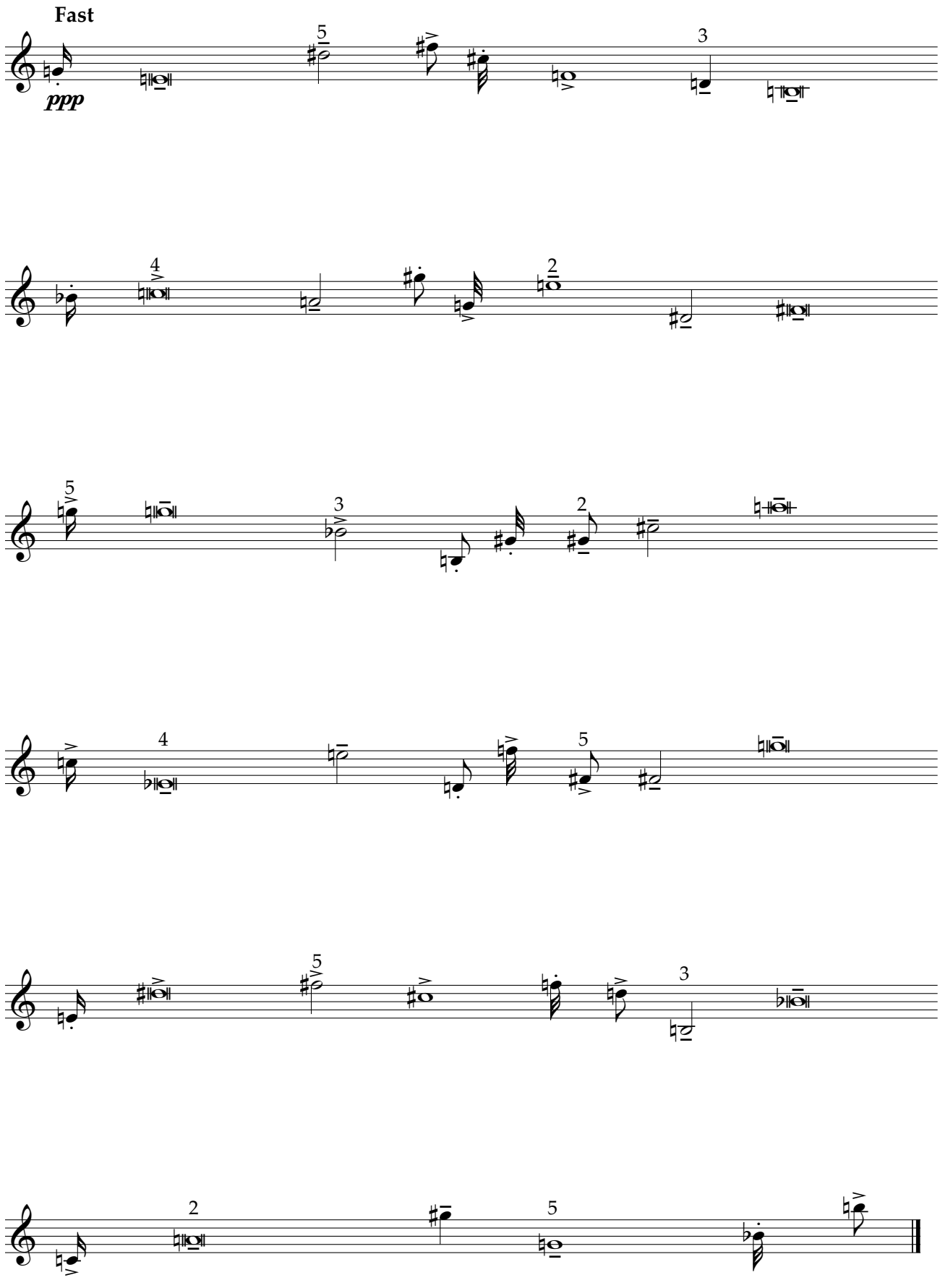
Clusters: Pitches and Durations



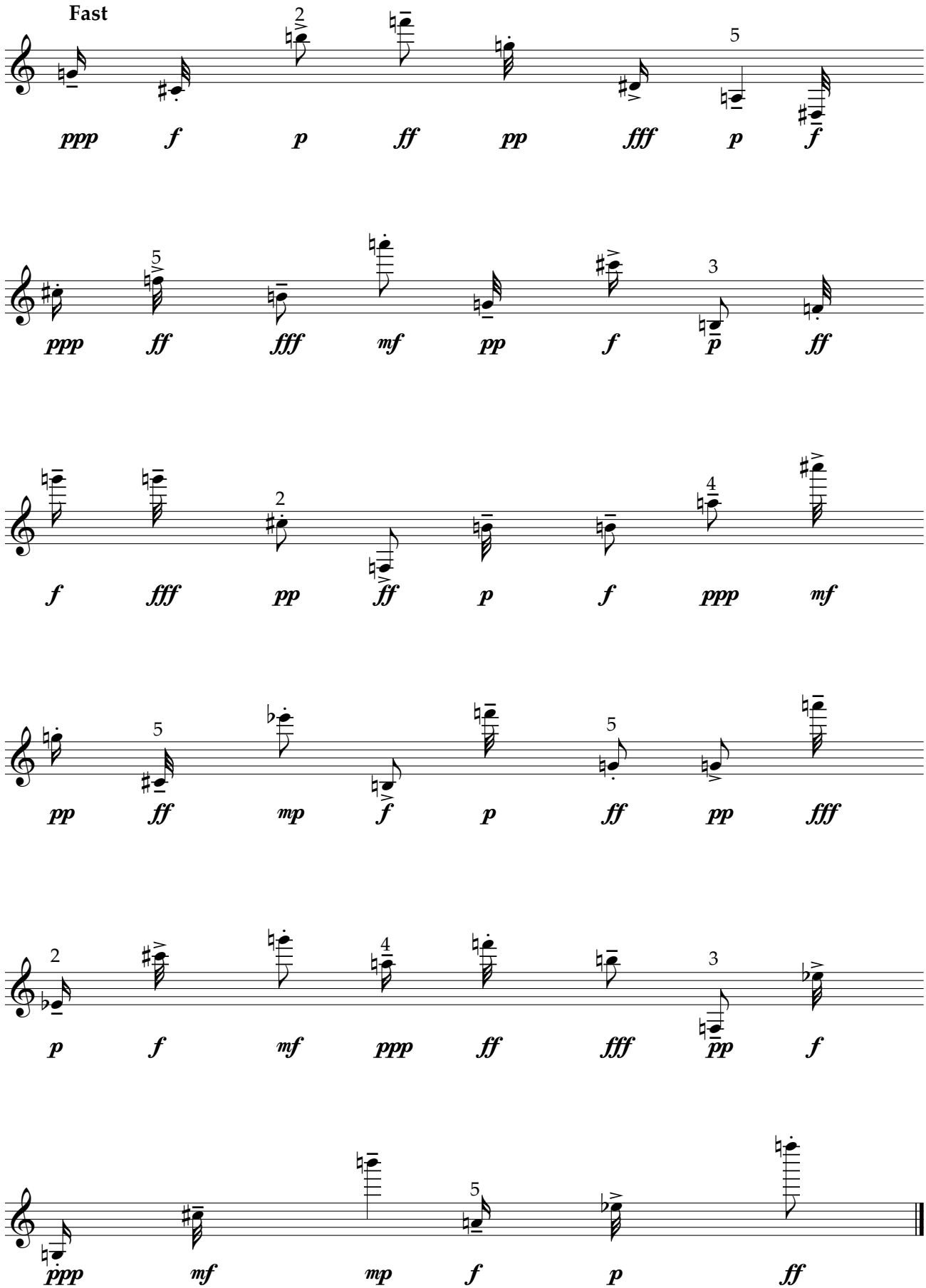
Tremolo Interjections



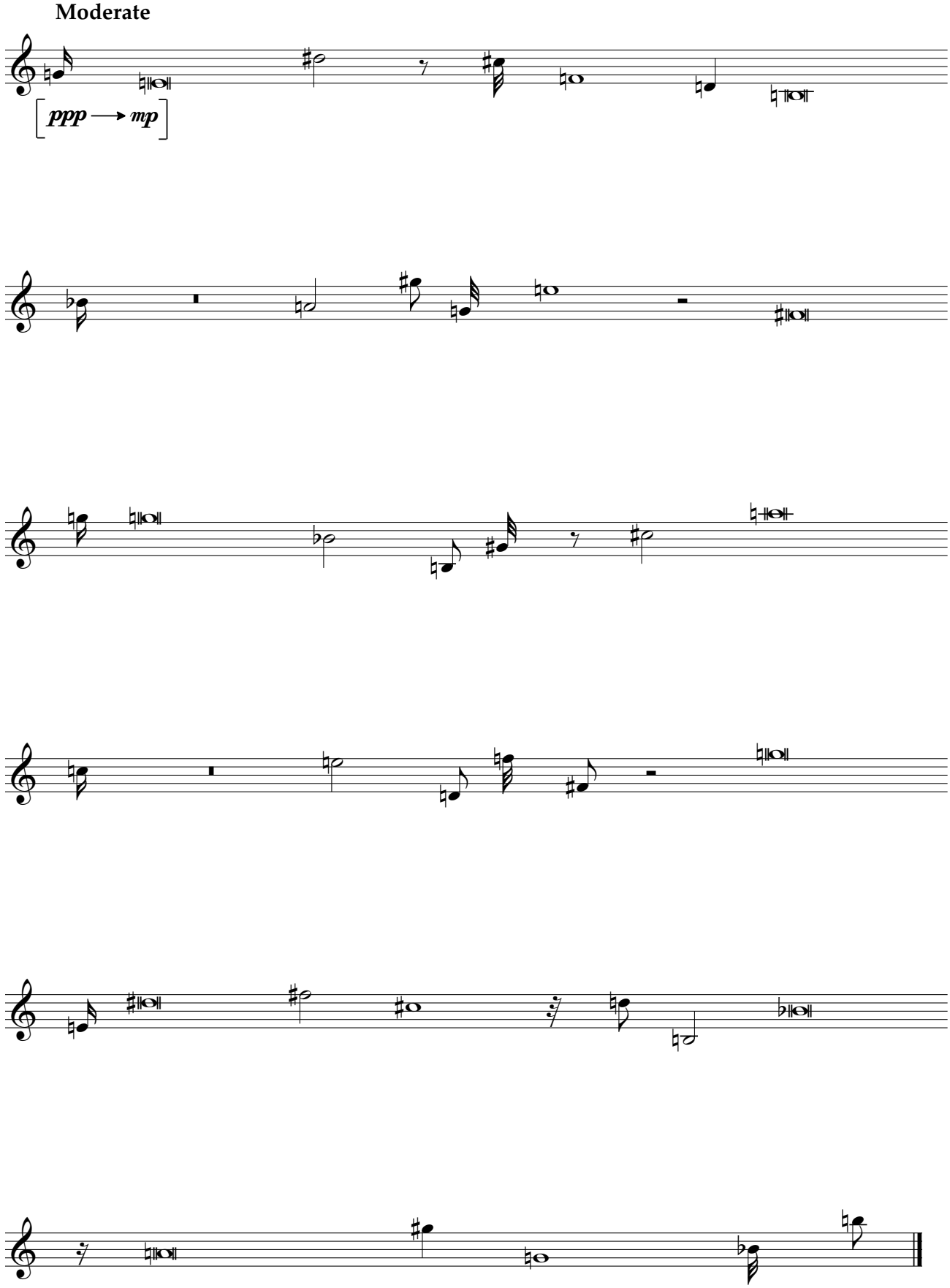
Technique Interjections 1



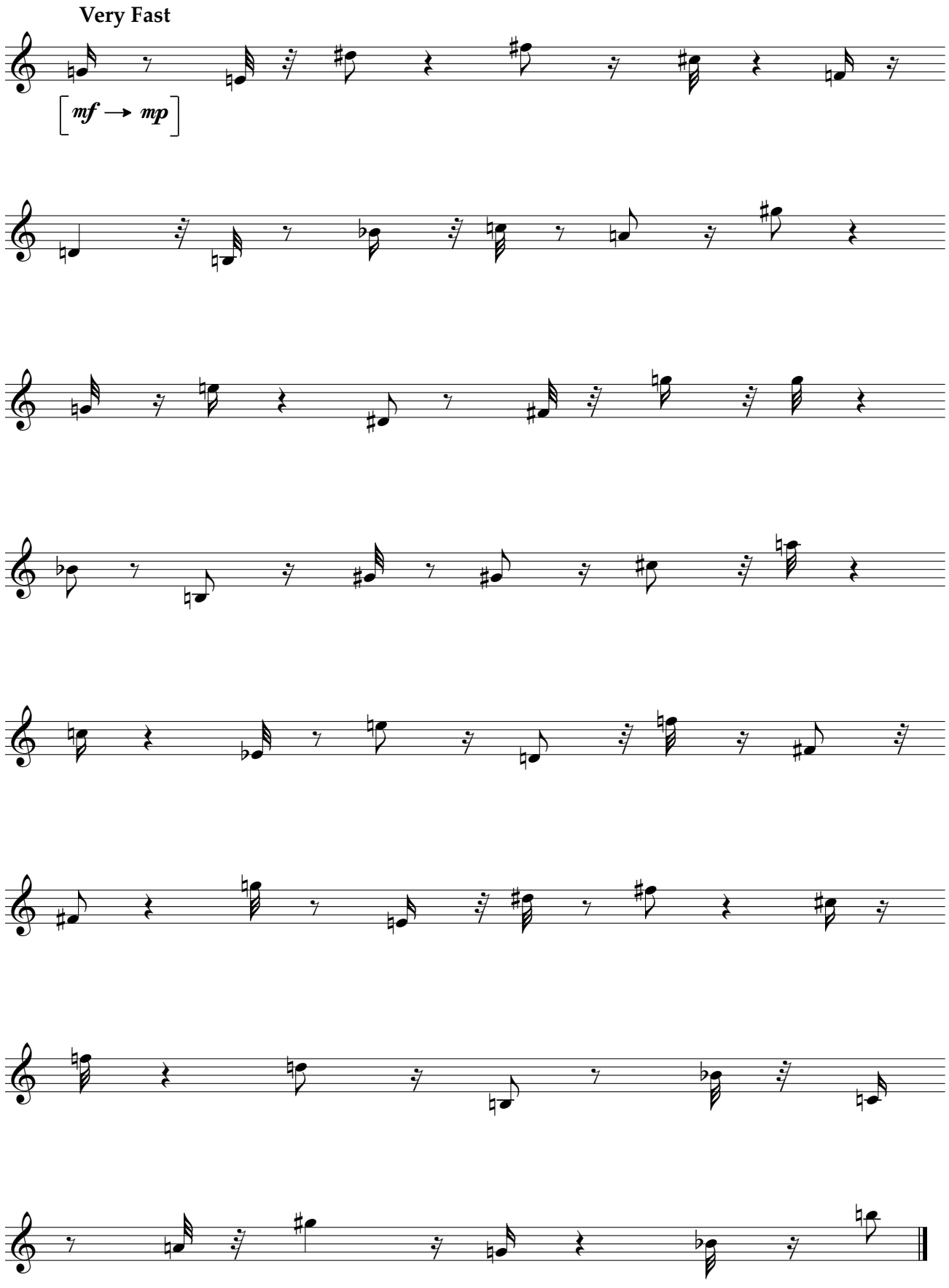
Technique Interjections 2



Rest Interjections 1

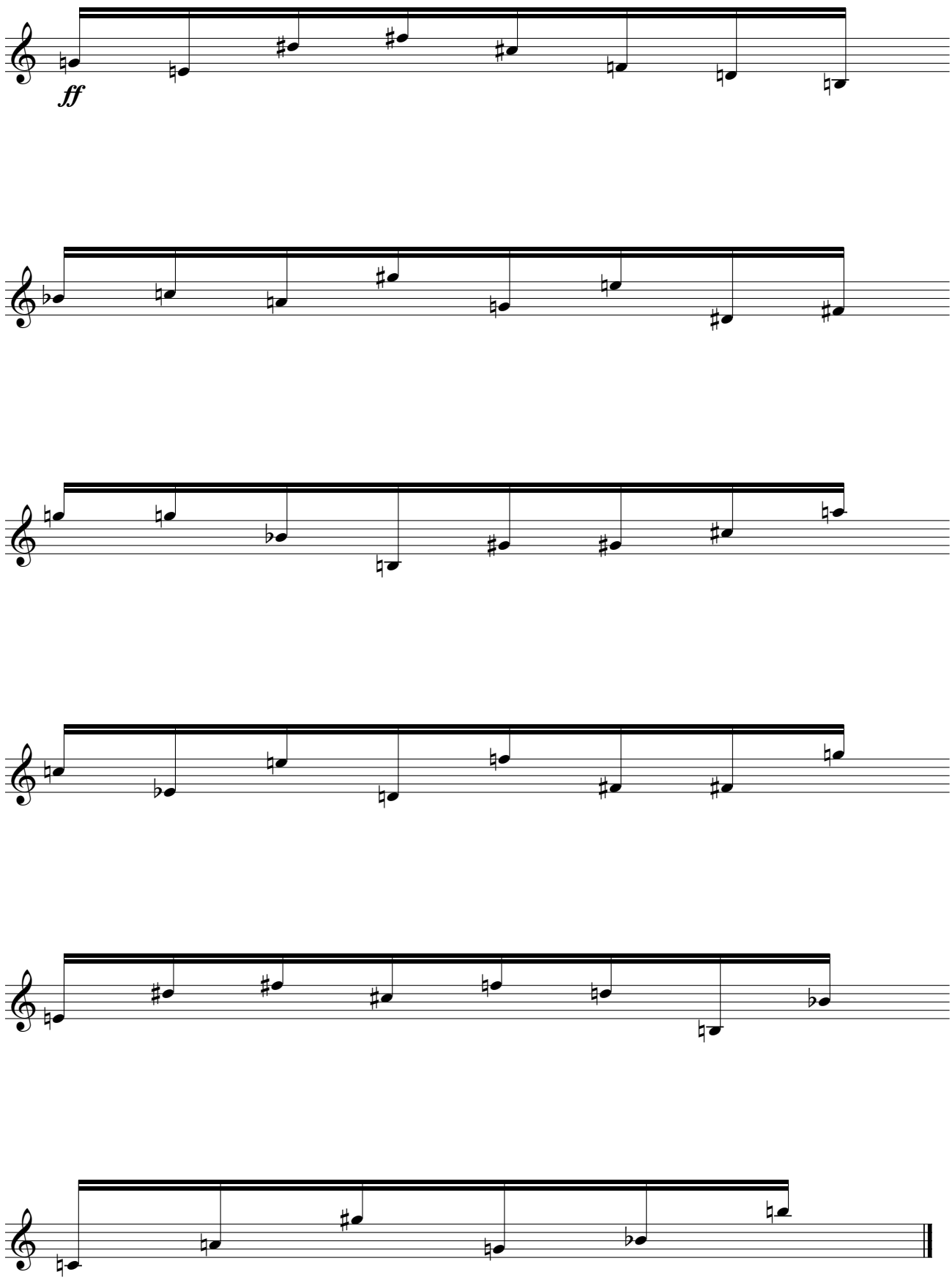


Rest Interjections 2



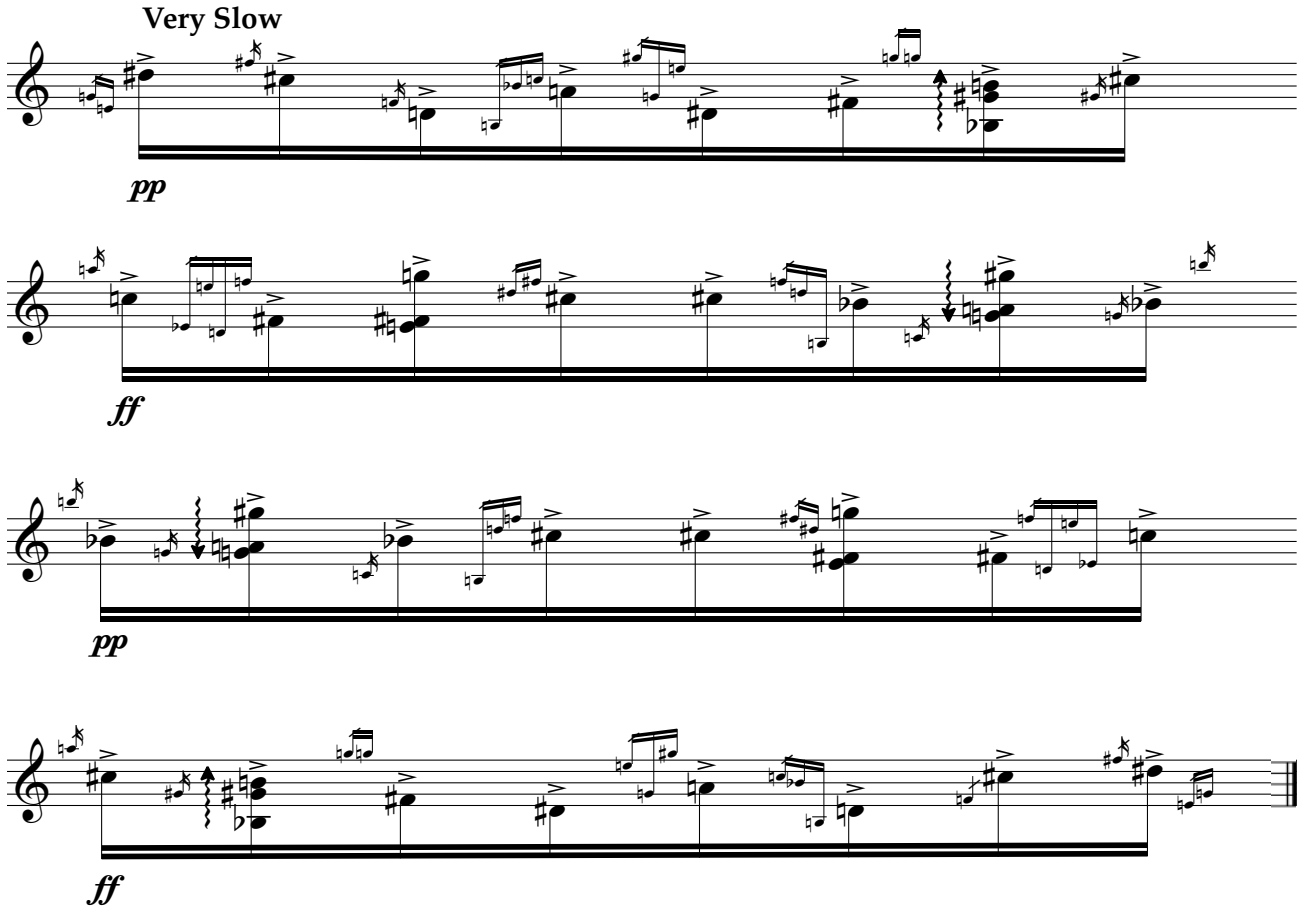
Run 1

Quite Fast

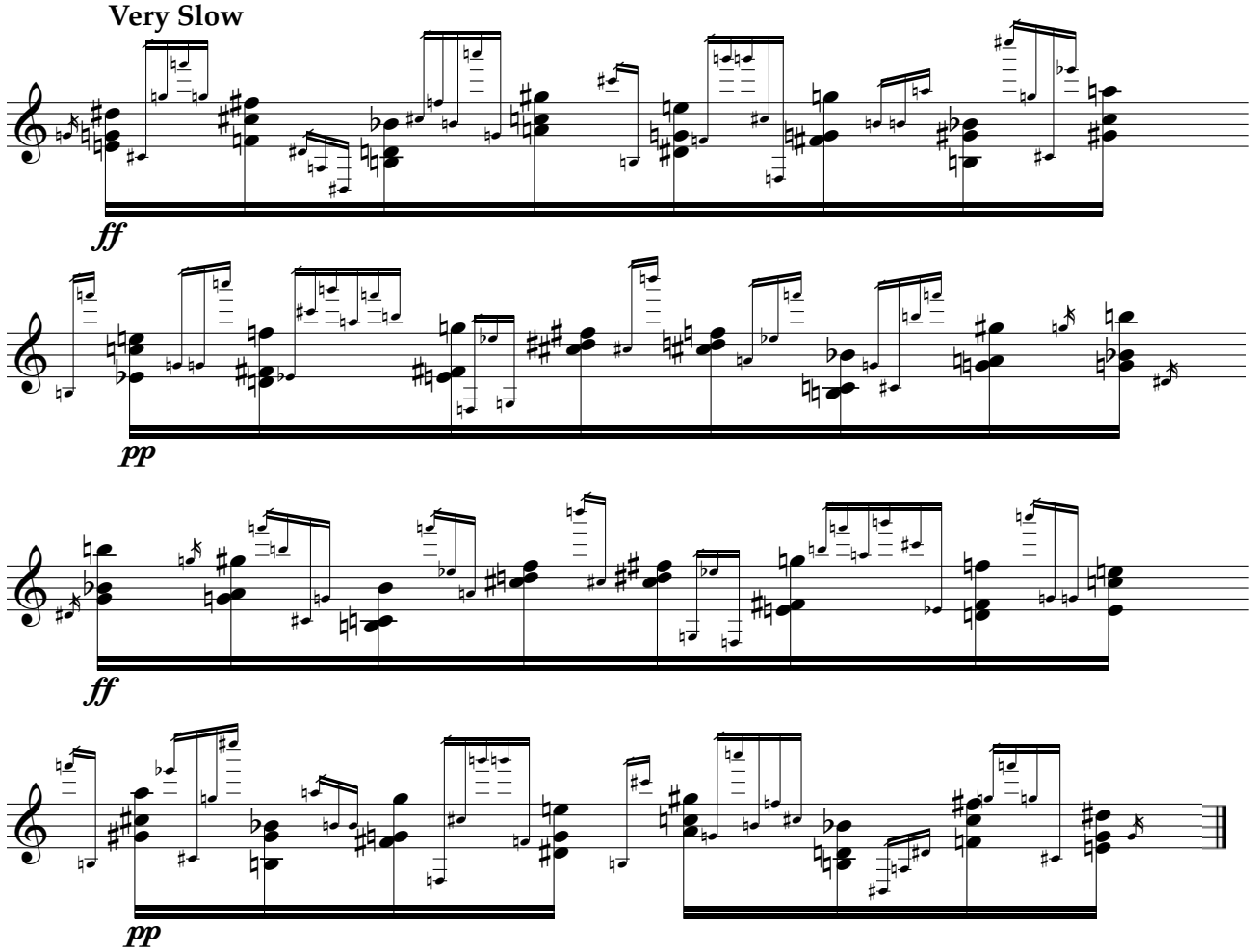


Run 2

Grace Note Run 1



Grace Note Run 2

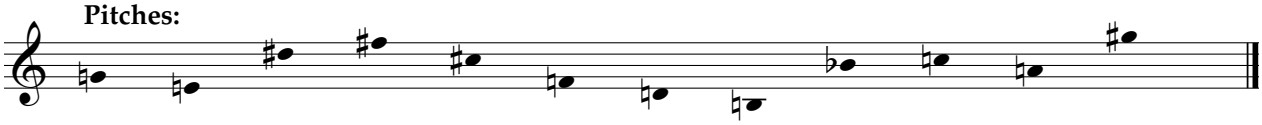


Parts of Music

Quite Slow

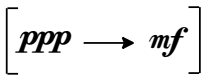
Combine the below materials in various ways for no shorter than 30", and no longer than 5'. Pitches must remain in their original order for the first iteration, for all other iterations the pitches may be fragmented. All other parameters should be improvised.

Pitches:



Durations:

Dynamics:

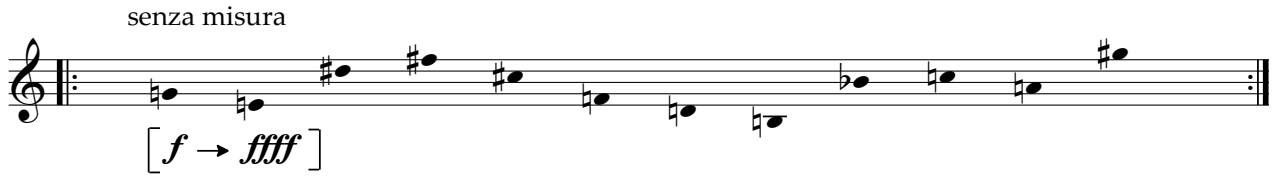


Techniques:

Trill/Ord./Tremolo

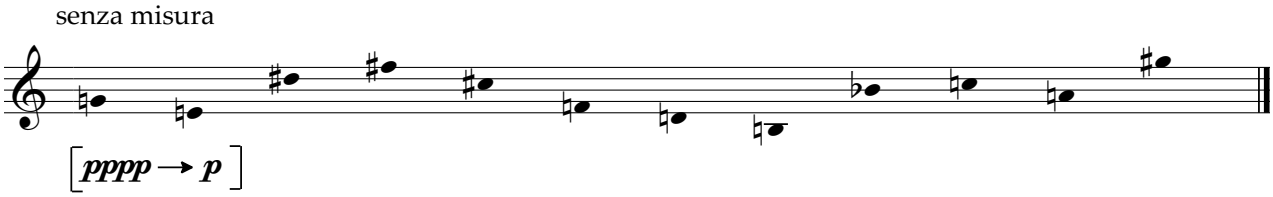
Text Piece 1

Play pitches in their original order as fast as possible, and in the highest range possible. The sequence may be repeated as many times as the performer wishes. Articulation is at the performer's discretion.
Duration: 30"



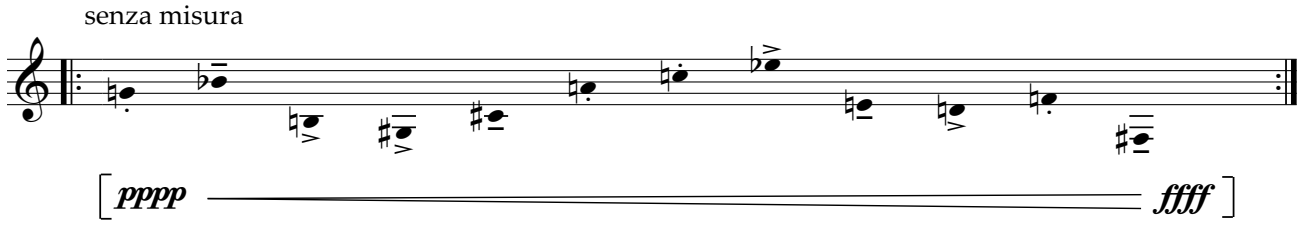
Text Piece 2

Play pitches in their original order as slow as possible, and in the lowest range possible. Only play the sequence once. Articulation is at the performer's discretion. Duration: as long as it takes to play all 12 pitches at a very slow tempo.



Text Piece 3

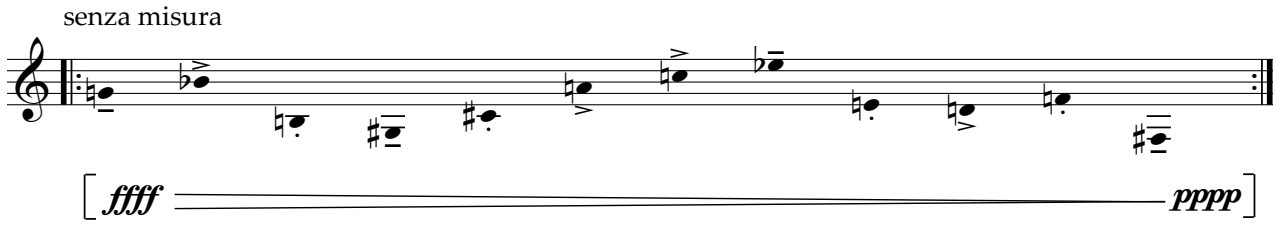
Play pitches in their original order. Begin slow and progressively speed up with each iteration. The sequence may be repeated as many times as the performer wishes. Articulation must be strictly adhered to. Duration: no longer than 5 minutes.



Gradually progress from the quietest to the loudest dynamic with each repetition

Text Piece 4

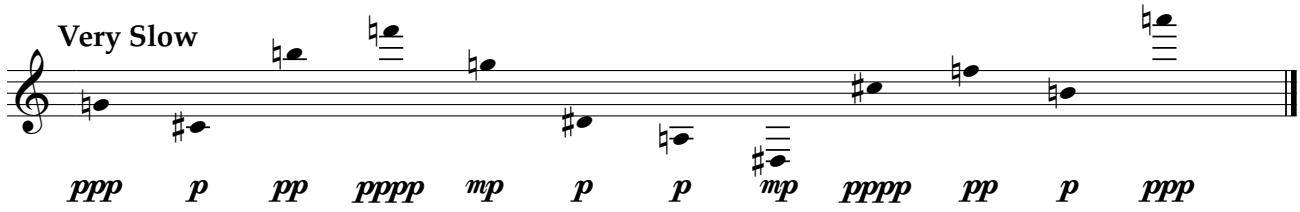
Play pitches in their original order. Begin fast and progressively slow down with each iteration. The sequence may be repeated as many times as the performer wishes. Articulation must be strictly adhered to. Duration: no longer than 5 minutes.



Gradually progress from the loudest to the quietest dynamic with each repetition

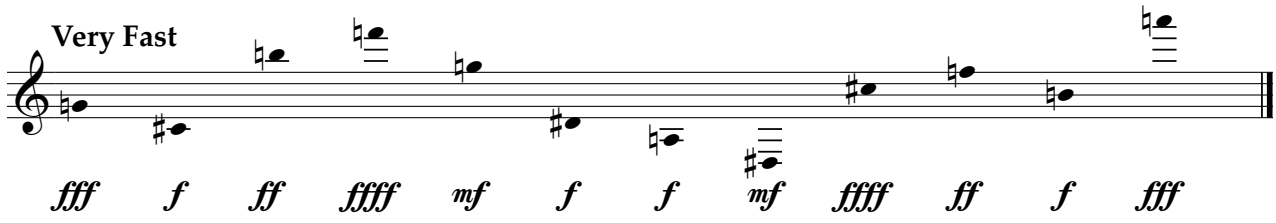
Text Piece 5

Start at the beginning of the pitch sequence (G) or choose another alternative pitch sequence from another exercise. Gradually progress through the sequence (in order) adding on a pitch each time. For example: G-C#-G-C#-B-G-C#-B-F-G etc. However, the performer may wish to repeat a selection of pitches several times before moving onto the next pitch: G-G-G-G-C#-G-C#-B-G-C#-B-G-C#-B-F etc., for example. Articulation is at the performer's discretion. Dynamics must be strictly adhered to. Duration: no longer 3'.



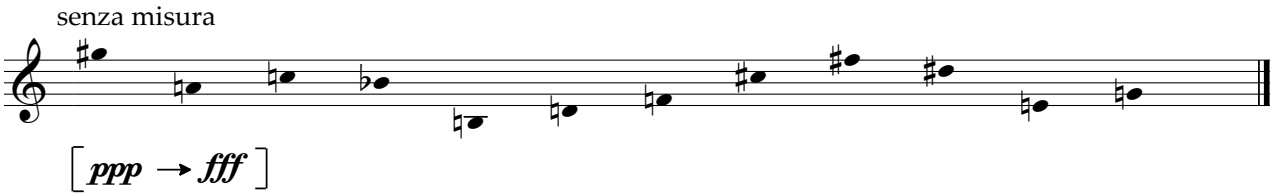
Text Piece 6

Play pitches in their original order. On the first iteration state the entire pitch sequence, then with each subsequent iteration gradually subtract pitches, starting from the 12th pitch inwards. The performer may not repeat the same number of notes again. For example, repeating pitches 1-12 or 1-6 is not allowed. Instead the performer must play pitches 1-12, then 1-11, then 1-10 etc. Articulation is at the performer's discretion. Dynamics must be strictly adhered to. Duration: as long as the process takes.



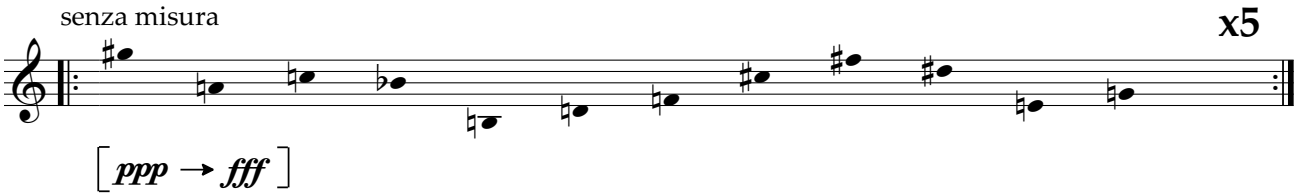
Text Piece 7

Play pitches in their original order. Gradually progress from pure pitch techniques (1 on scale) to noise techniques (5 on scale). The pitch sequence may only be played once. Articulation is at the performer's discretion. Duration: as long as it takes to play the sequence once through at the chosen tempo. The tempo may also fluctuate.



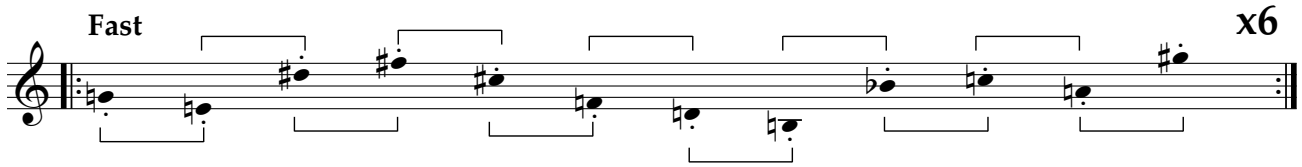
Text Piece 8

Play pitches in their original order. Gradually progress from noise techniques (5 on scale) to pure pitch techniques (1 on scale) with each iteration. For example, the first iteration of the 12 pitch sequence must only include noise techniques, the second must include mostly noise, some pitch, the third: half noise/ half pitch, the fourth: mostly pitch, some noise, and the fifth: pitched techniques only. Articulation is at the performer's discretion. Duration: as long as the process takes at the chosen tempo. The tempo must not fluctuate.



Text Piece 9

Play pitches in their original order. First play all 12 pitches as singular notes. Next play all the possible dyads harmonically (as block chords), and in order by stacking the previous pitch above or below the following pitch (see the brackets below). Repeat this process by playing all of the possible trichords, then tetrachords, pentachords, and hexachords. The dynamic sequence must be strictly adhered to: apply one dynamic to each pitch, starting from the first dynamic, once you reach the end of the sequence, repeat the sequence again (as in an isorhythm). Articulation: add an accent after every 3-6 pitches. All noteheads should be equal to a quaver. Duration: as long as the process takes.

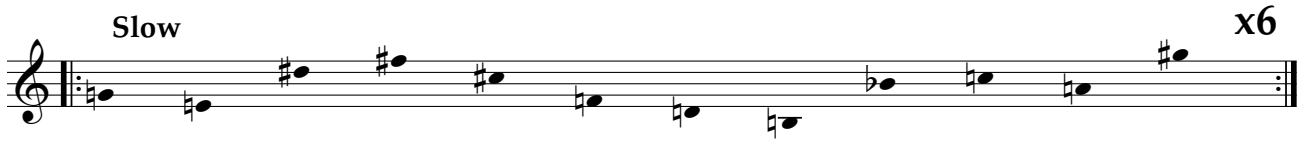


Dynamic Sequence:

fff → ***f*** → ***ff*** → ***ffff*** → ***f*** → ***ff*** → ***f*** → ***mf***

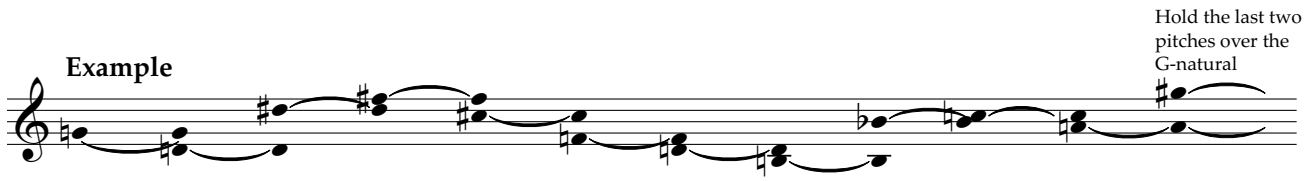
Text Piece 10

Play pitches in their original order. First play all 12 pitches as singular notes. Next play all the possible dyads melodically, by holding the previous pitch whilst playing the following pitch so that they overlap (see the example below). Repeat this process by playing all of the possible trichords, then tetrachords, pentachords, and hexachords. The dynamic sequence must be strictly adhered to: apply one dynamic to each pitch, starting from the first dynamic, once you reach the end of the sequence, repeat the sequence again (as in an isorhythm). Articulation: the entire exercise should be played legato. All noteheads should be equal to a semi-breve. Duration: as long as the process takes.



Dynamic Sequence:

ppp → ***p*** → ***pp*** → ***pppp*** → ***p*** → ***pp*** → ***p*** → ***mp***

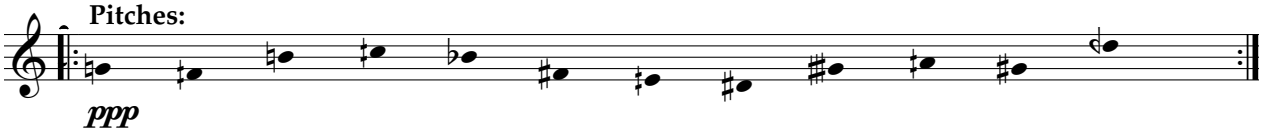


Text Piece 11

Play pitches in their original order. With each iteration, gradually progress from the shortest duration to the longest. The pitch sequence may be repeated as many times as the performer wishes. Durations may be used more than once. The performer may choose to progress through the durations from shortest to longest in their strict order, for example, one iteration of demi-semi-quaver, a second iteration of semi-quavers, then a third iteration of all quavers etc. They may choose to create a less straightforward path: one iteration of a mixture of demi-semi-quavers, semi-quavers, and quavers, then a second iteration comprising a mixture of quavers, crotchets and minims etc. Only use the articulations provided. Duration: as long as the process takes.

Quite Fast

Pitches:



Durations:

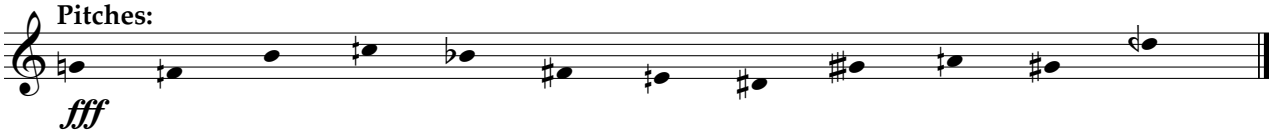
Articulations:

Text Piece 12

Play pitches in their original order. The pitch sequence may only be played once. Gradually progress from the longest duration to the shortest. Durations may be used more than once. The performer may choose to progress through the durations from the longest to shortest in their strict order, for example starting at the breve, then playing the semi-breve, then the minim etc. or they may choose to create a less straightforward path: breve to semi-breve, then go back one step to the breve, then semi-breve, semi-breve, minim, crotchet, quaver, quaver etc. Only use the articulations provided. Duration: as long as it takes to play all 12 pitches once with your chosen durations.

Quite Slow

Pitches:



Durations:

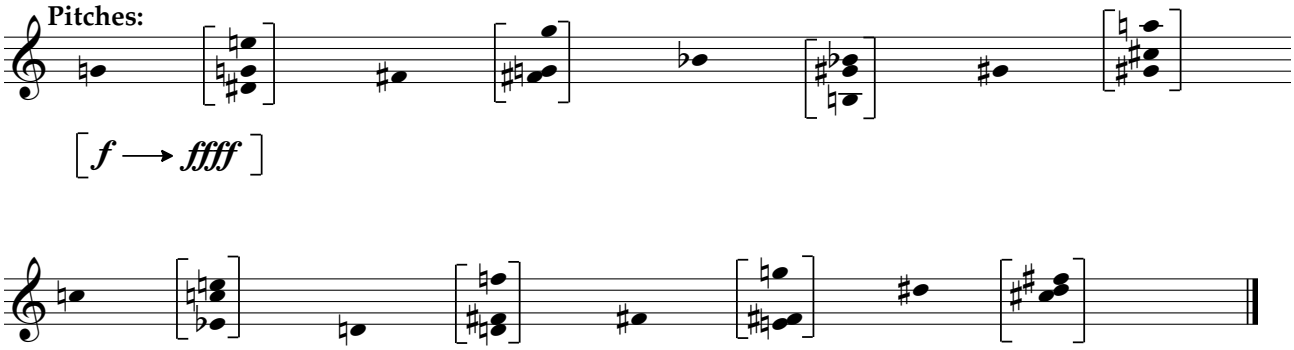
Articulations:

Text Piece 13

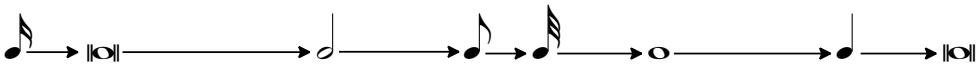
Begin on the opening G and glissando to one of the three pitches provided in brackets. If the chosen bracketed pitch is the same as the previous pitch then just sustain the pitch that you are currently playing. If there are 2-3 players, then each player must choose a different pitch to either glissando to or to sustain. If more than 3 players, then the duplication of pitches is allowed. Durations of the glissandi: follow the duration sequence from left to right, repeat the sequence as many times as needed. If 2 or more players, all players should start at a different point within the sequence. Once you reach your chosen bracketed pitch, sustain your pitch until all the other players have reached their pitch. These same rules apply to when a player reaches a unison pitch (e.g. all players must reach the F# after the first bracket of pitches before the players start to glissando to their next bracketed pitch, and so on). Articulation is at the performer's discretion. Duration: as long as the process takes.

Very Slow

Pitches:

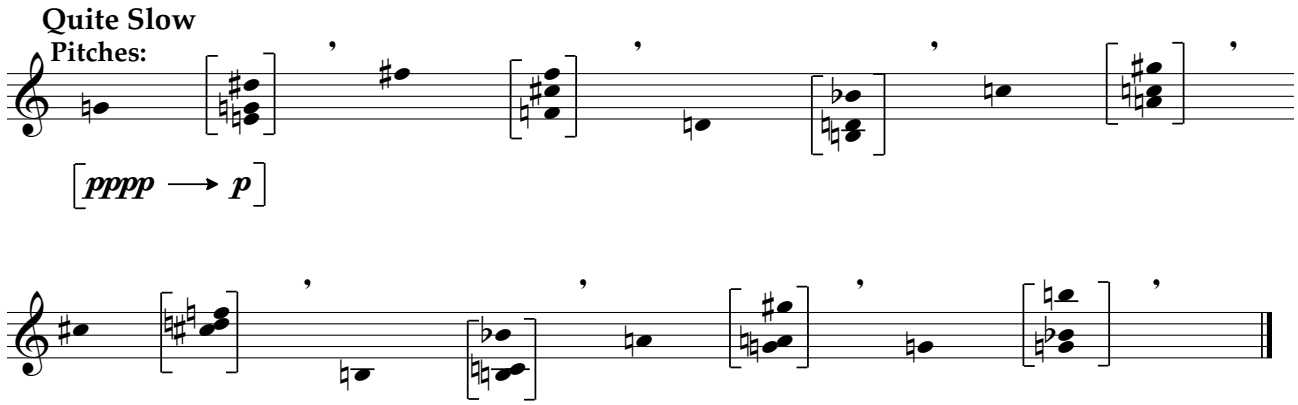


Duration Sequence:

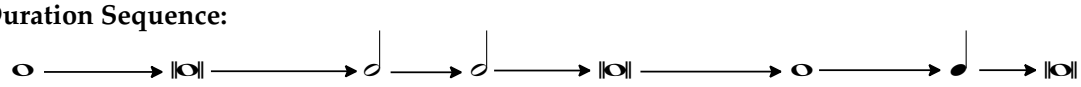


Text Piece 14

Begin on the opening G and glissando to one of the three pitches provided in brackets. Rest for 3-8" between each set of pitches (see commas). If the chosen bracketed pitch is the same as the previous pitch then just sustain the pitch that you are currently playing. If there are 2-3 players, then each player must choose a different pitch to either glissando to or to sustain. If more than 3 players, then the duplication of pitches is allowed. Durations of the glissandi: follow the duration sequence from left to right, repeat the sequence as many times as needed. If 2 or more players, all players should start at a different point within the sequence. Once you reach your chosen bracketed pitch, sustain your pitch until all the other players have reached their pitch, then stop playing. Articulation is at the performer's discretion. Duration: as long as the process takes.



Duration Sequence:

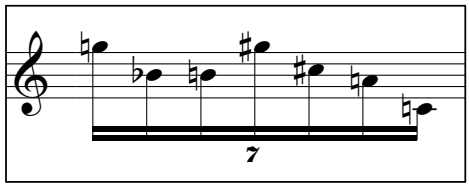


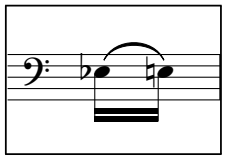
Open Form 1

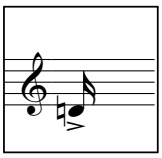
Slow

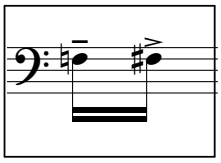
Play boxes in any order. Boxes may be repeated. Leave 1-3" between each one. Duration 30"-1'30".

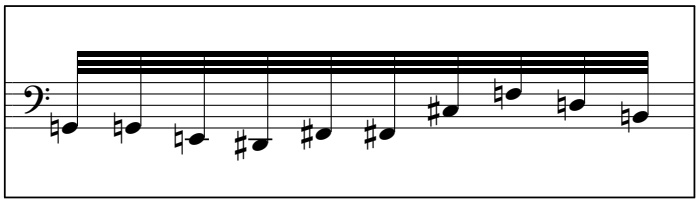
Dynamics: [*ppp* ⟶ *fff*]

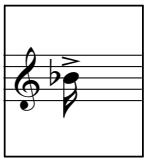


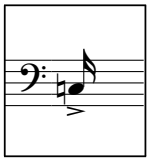


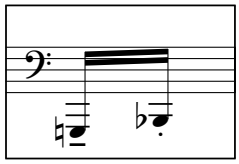


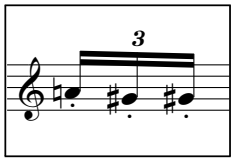


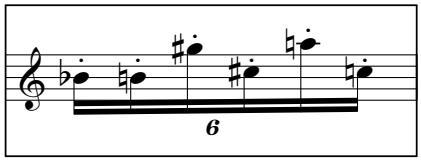


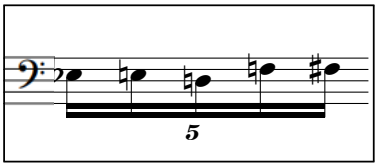


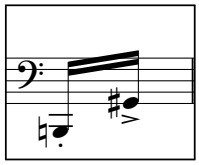


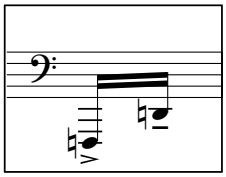


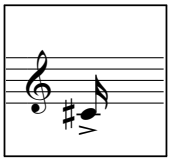


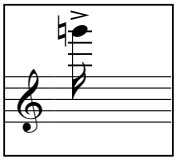










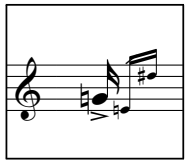
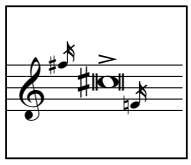
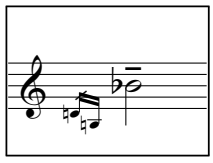
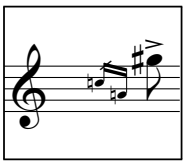
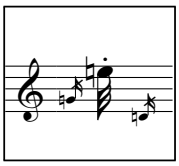
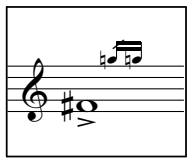
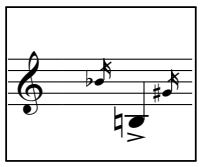
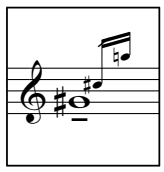
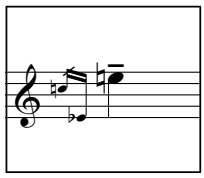
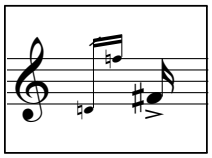
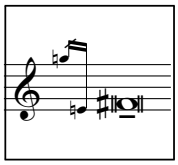
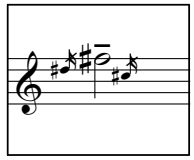
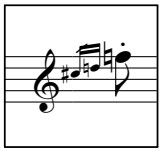
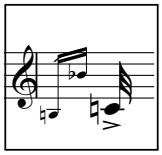
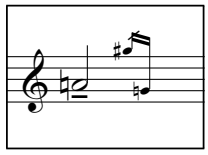
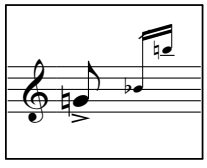


Open Form 2

Slow

Play boxes in any order. Only play each box once. Leave 3-6" between each one. Duration: as long as it takes to play all boxes.

Dynamics: [***ppp*** → ***fff***]

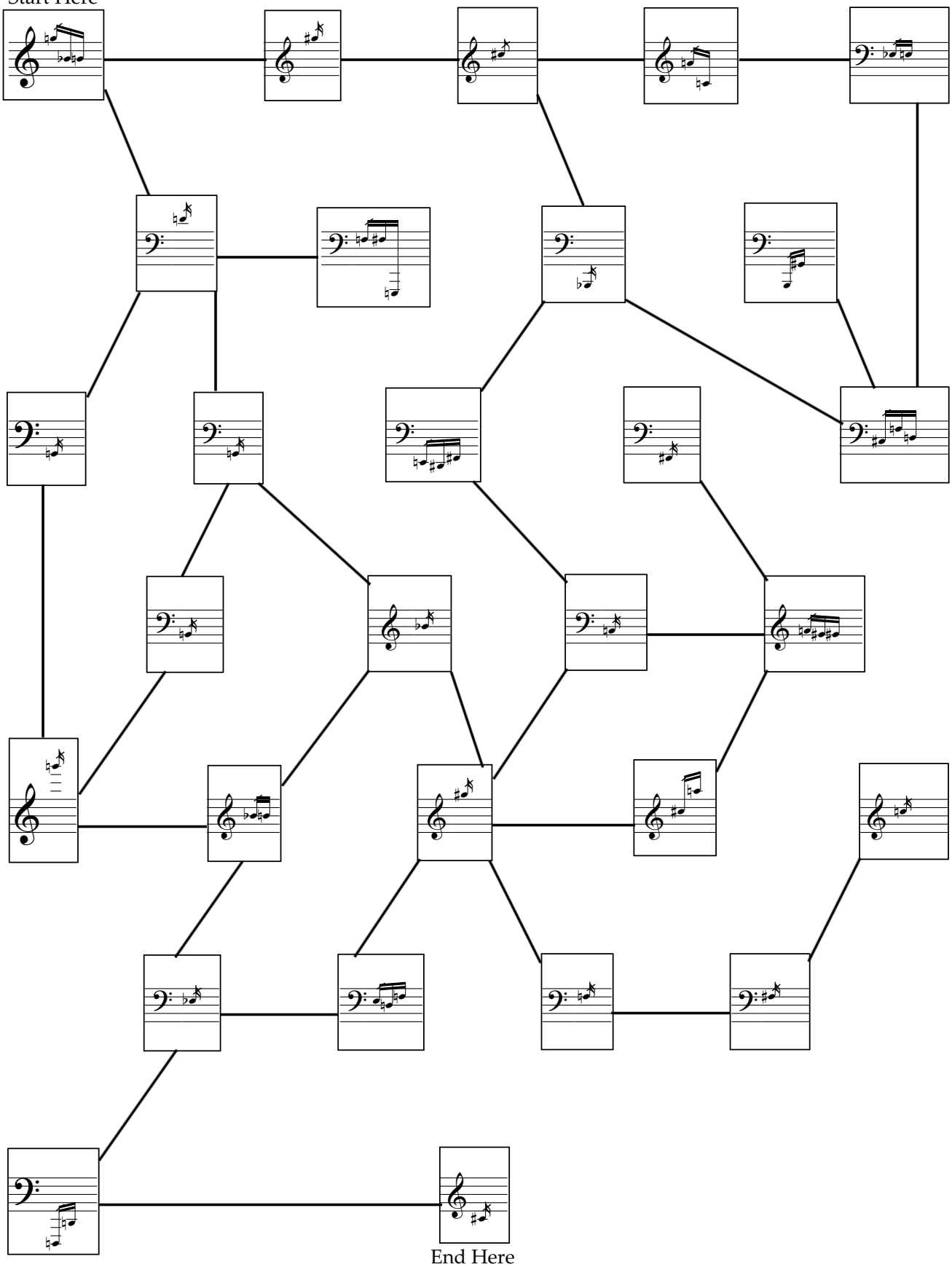
Open Form 3

Moderate

Start where indicated. Choose and follow the available paths until the end box is reached. You may only work backwards if you reach a dead end. Gaps may be left between each box while paths are chosen. Duration: as long as it takes to reach the end box.

Dynamics: [*mf* → *fffff*]

Start Here



End Here

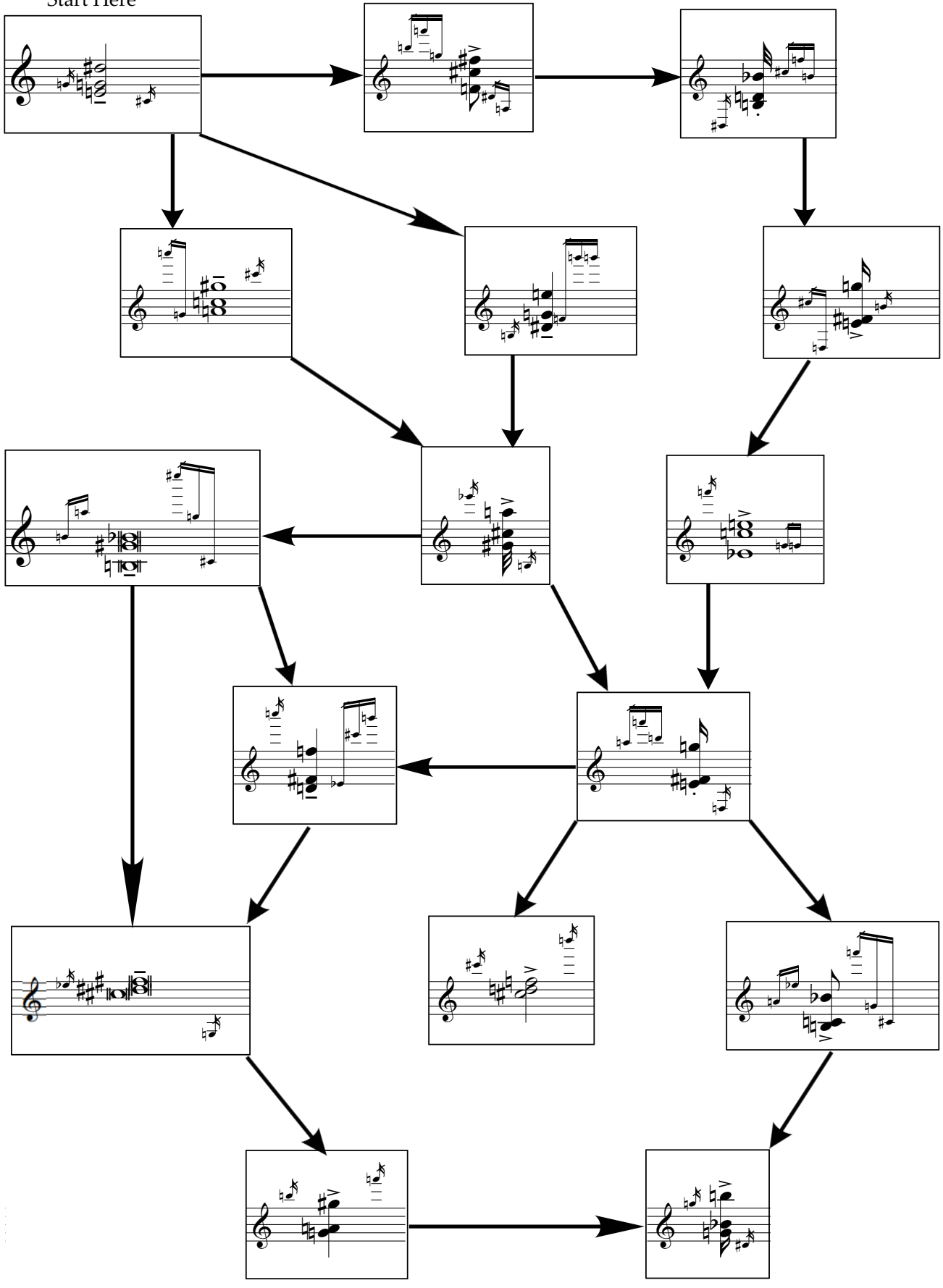
Open Form 4

Quite Slow

Start where indicated. Follow the direction of the arrows. If you land on a dead end you must stop there. Gaps may be left between each box while paths are chosen. Duration: as long as it takes.

Dynamics: [*mf* ⟶ *fffff*]

Start Here

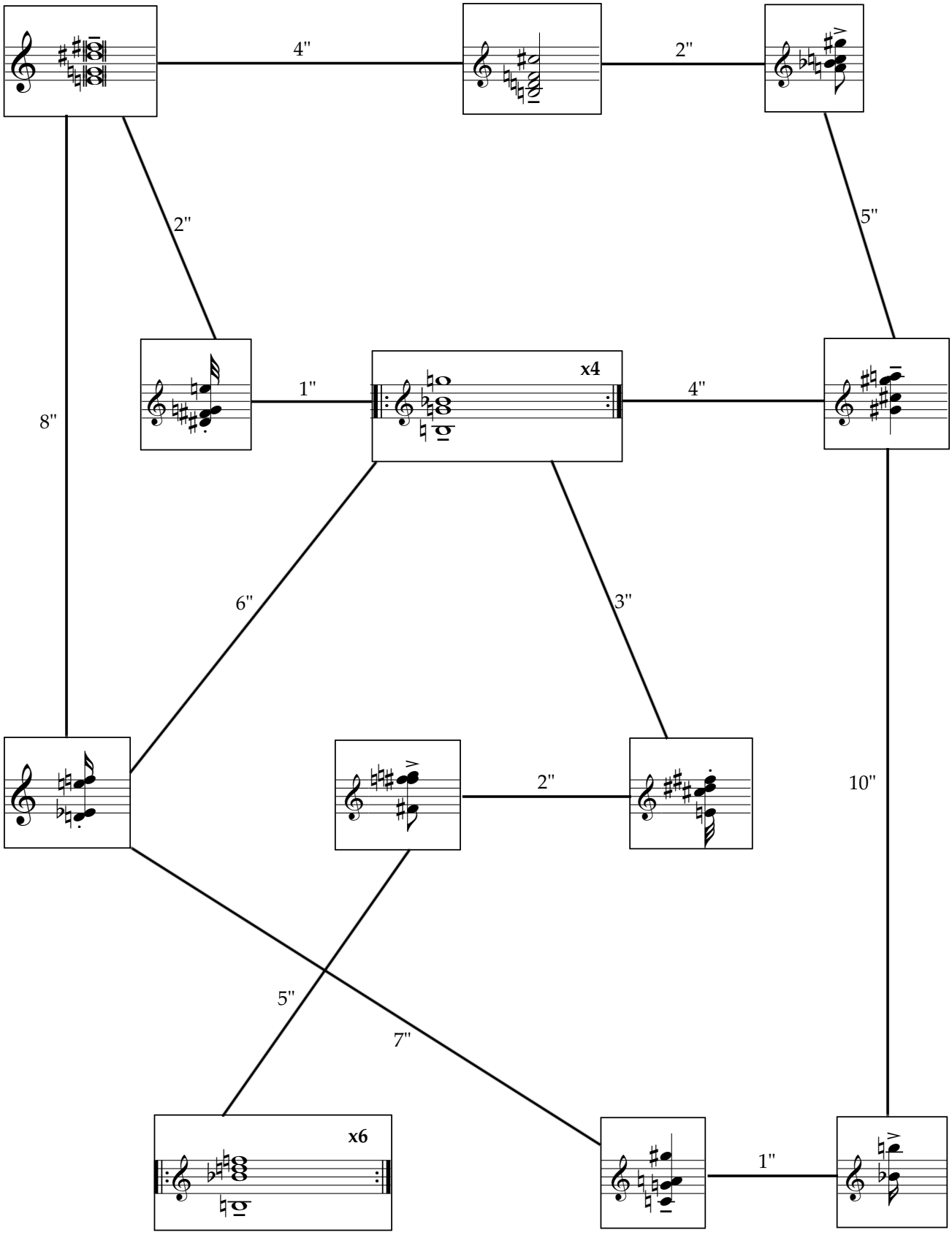


Open Form 5

Moderate

Start on any box. Follow the path/s that the box offers. Leave the indicated amount of seconds between boxes. Boxes may be repeated. Duration: 1-3'.

Dynamics: [*pppp* → *mp*]

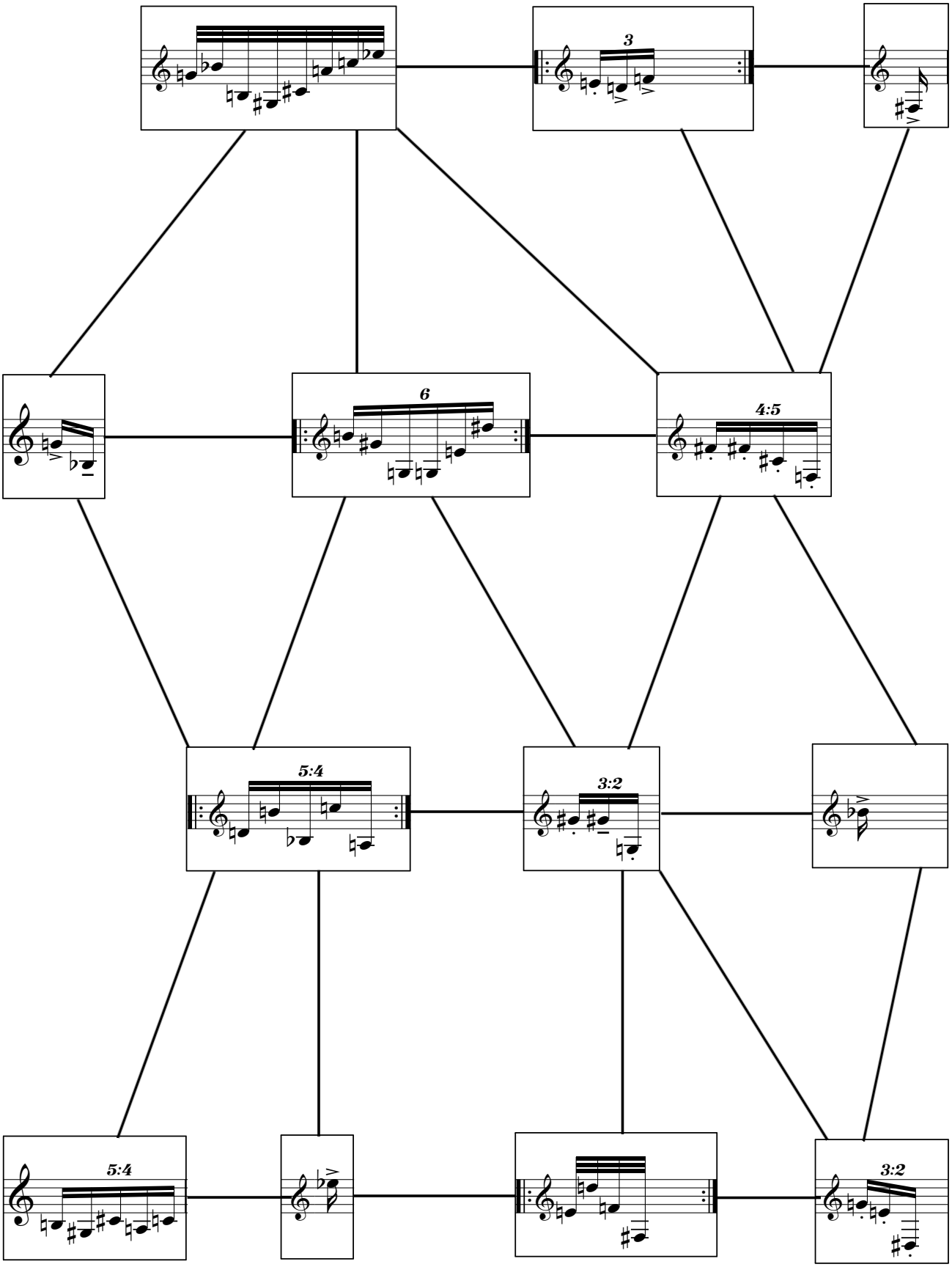


Open Form 6

Slow

Start on any box. Follow the path/s which that box offers. Boxes may be repeated. No rests between boxes. Any boxes that include repeat marks can be repeated as many times as the performer wishes. Duration: 1-3'

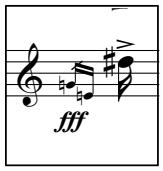
Dynamics: [*pppp* ⟶ *mp*]

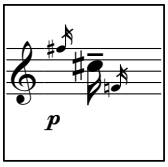


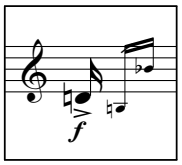
Open Form 7

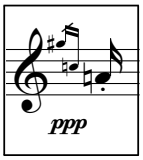
Moderate

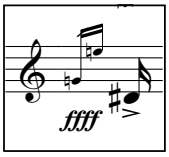
Draw in lines to create a path through the boxes. Play boxes in this order. Leave 1-10" between each one.
Duration: as long as it takes to play all boxes.

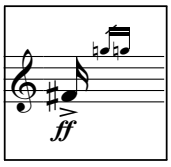


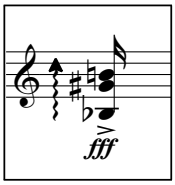


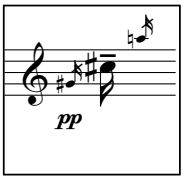


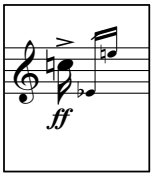


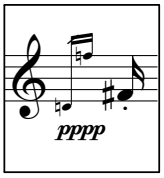


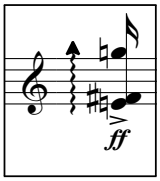


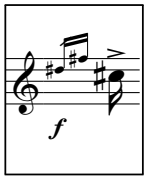


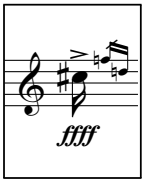


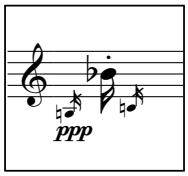


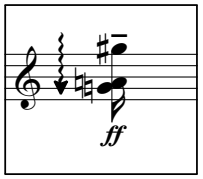


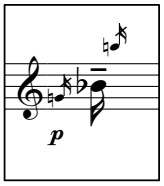








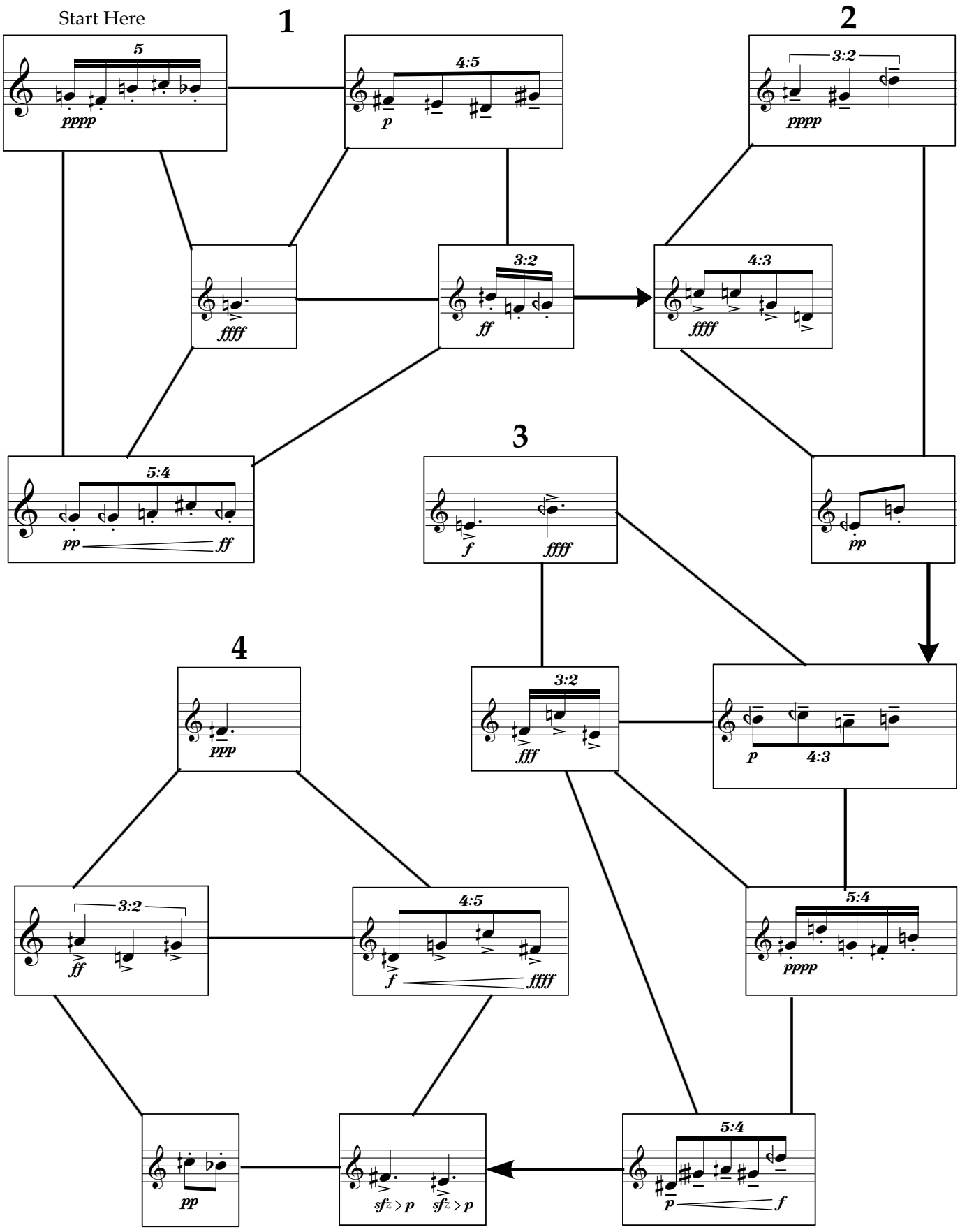




Open Form 8

Quite Slow

There are 4 aggregates of boxes. Start where indicated and move freely between the boxes within the aggregate. However, once you've followed the arrow to the next aggregate, you may not go back to the previous one. No rests between boxes. Duration: 1-3'

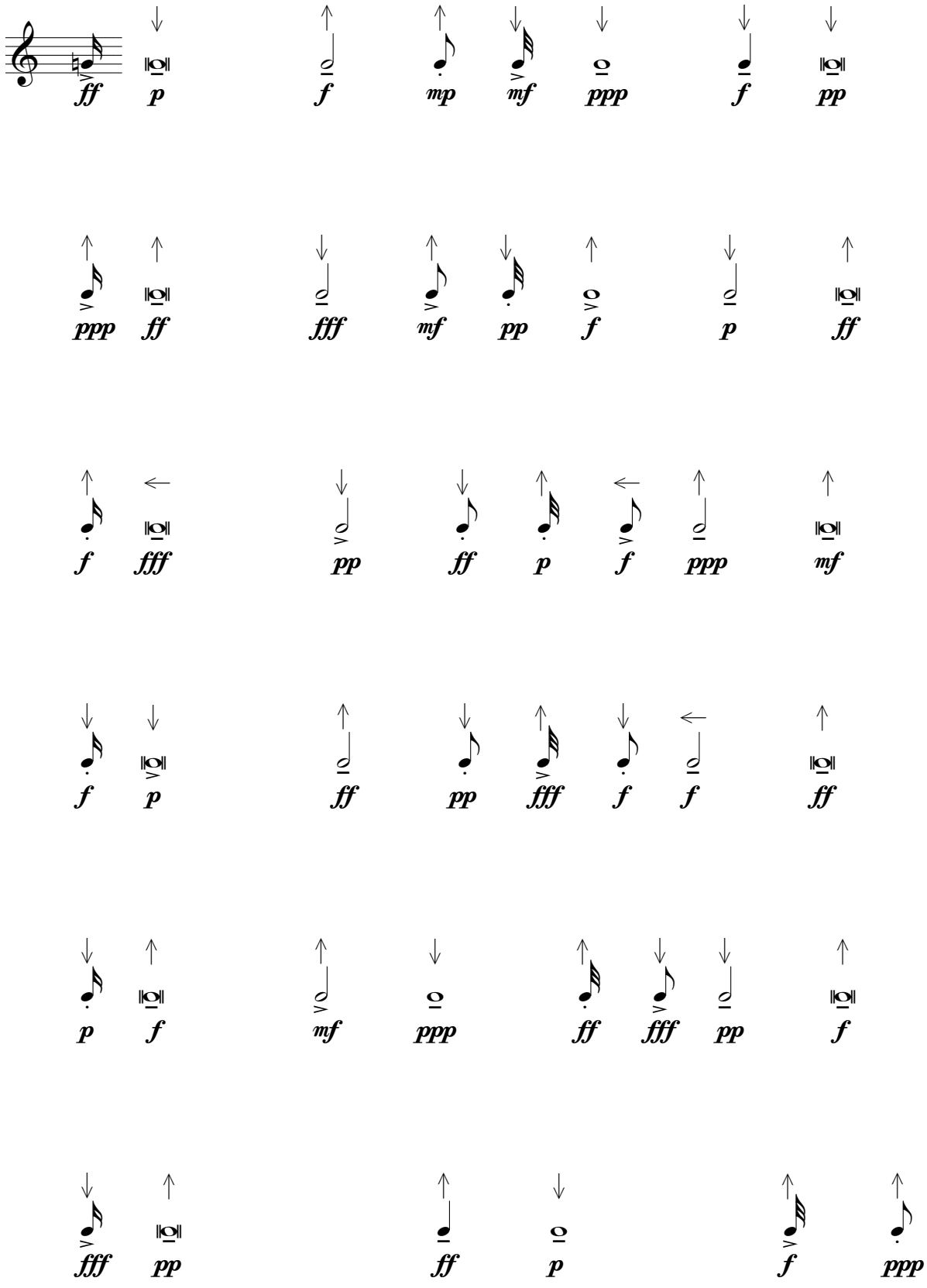


Arrow Contour

Fast

Follow the contour of the arrows. Exact pitches are indeterminate. Durations are provided.

↑ = up in pitch; ↓ = down in pitch; ← = same as previous pitch

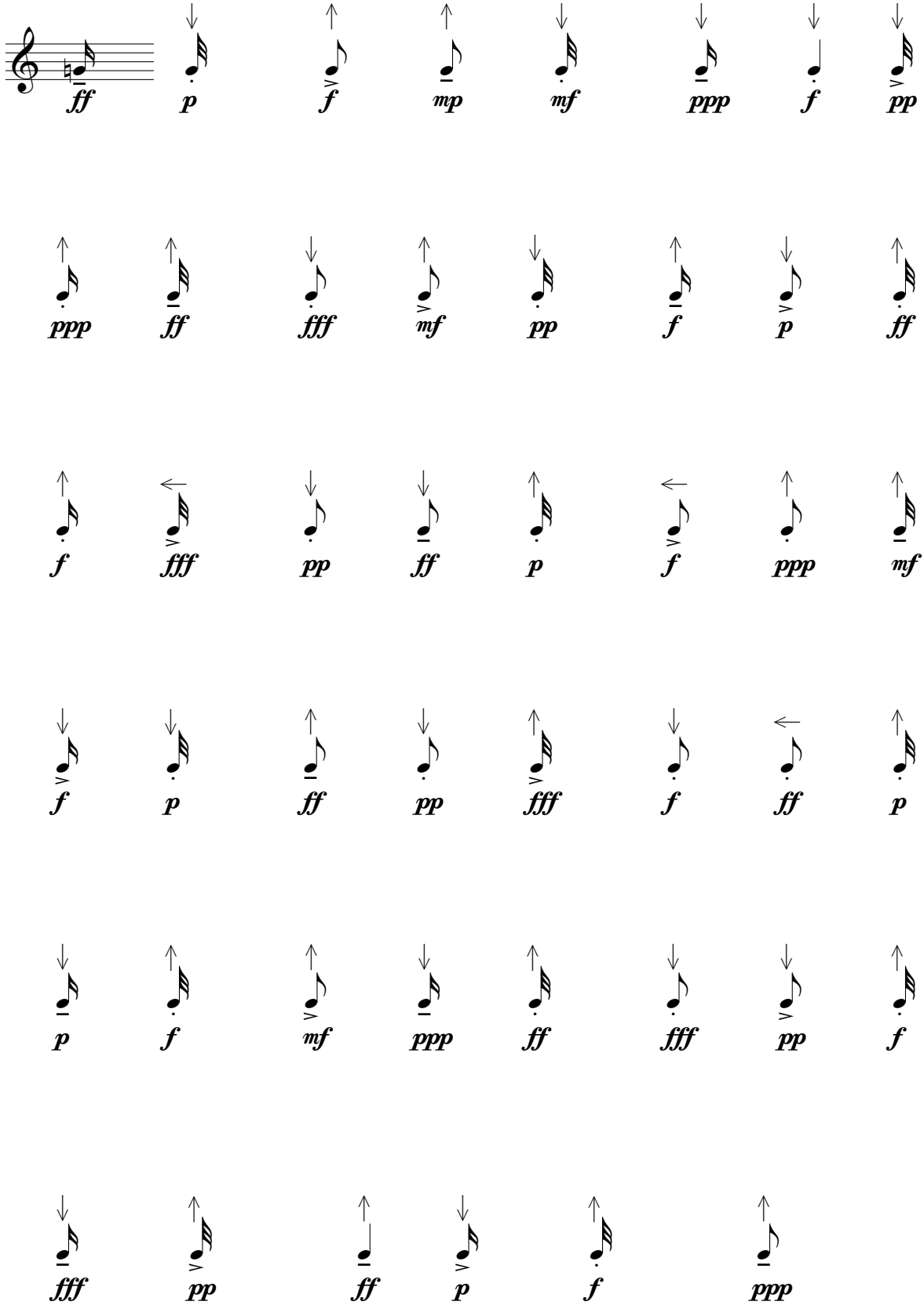


Arrow Contour; All Short Durations

Quite Slow

Follow the contour of the arrows. Exact pitches are indeterminate. Durations are provided.

↑ = up in pitch; ← = same as previous pitch; ↓ = down in pitch

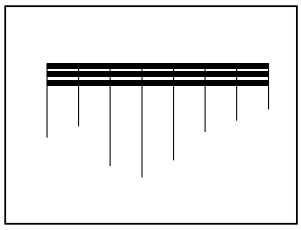


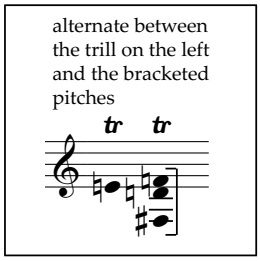
Graphic Notation

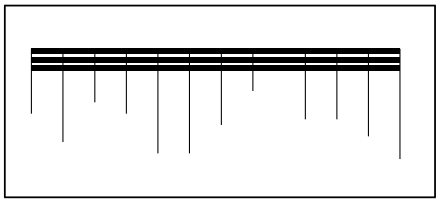
Play boxes in any order. Boxes may be repeated and may last between 3-12" each. Leave 1-3" between each box. Duration: 20-30".

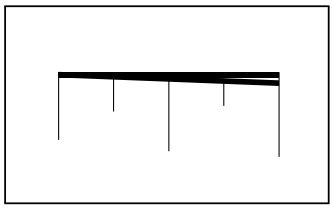
senza misura

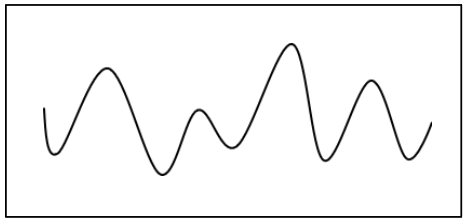
Dynamics: [*ppp* ⟶ *fff*]

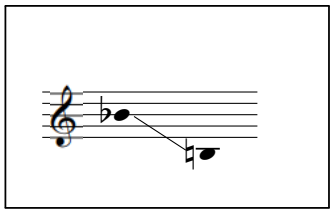


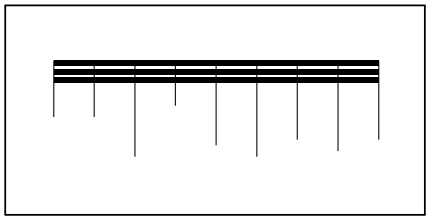


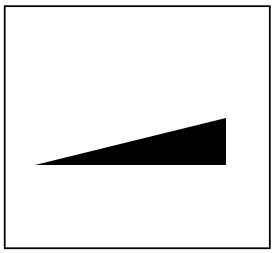


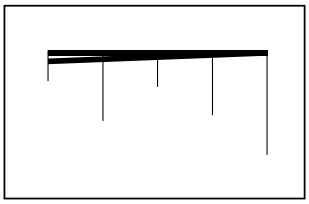


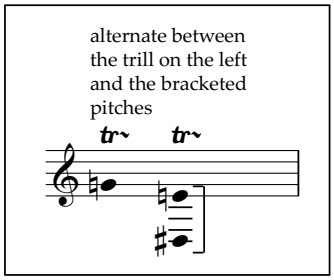


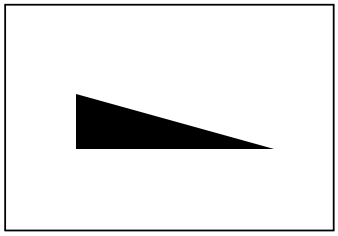


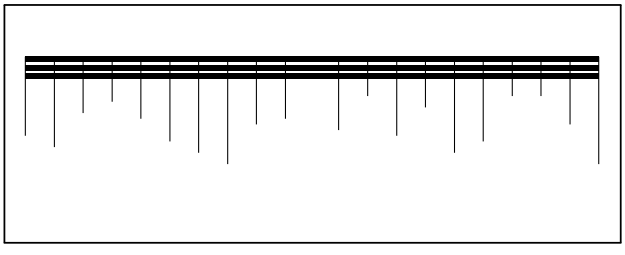








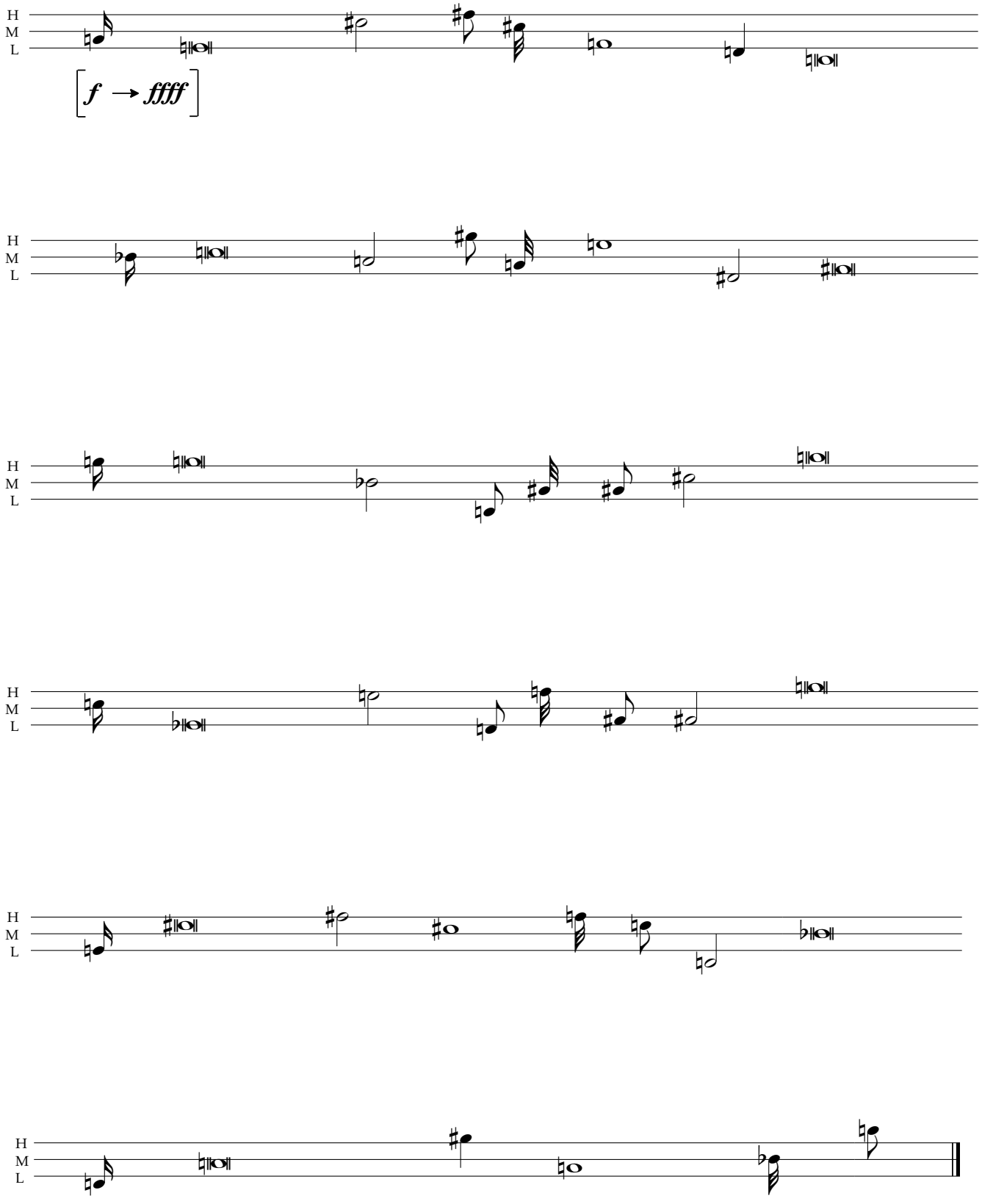




Relative Pitch Notation 1

Play all pitches in a range relative to their position on the stave below.
H (top line) = highest register of instrument; M (middle line) = middle register of instrument;
L (bottom line) = lowest register of instrument.

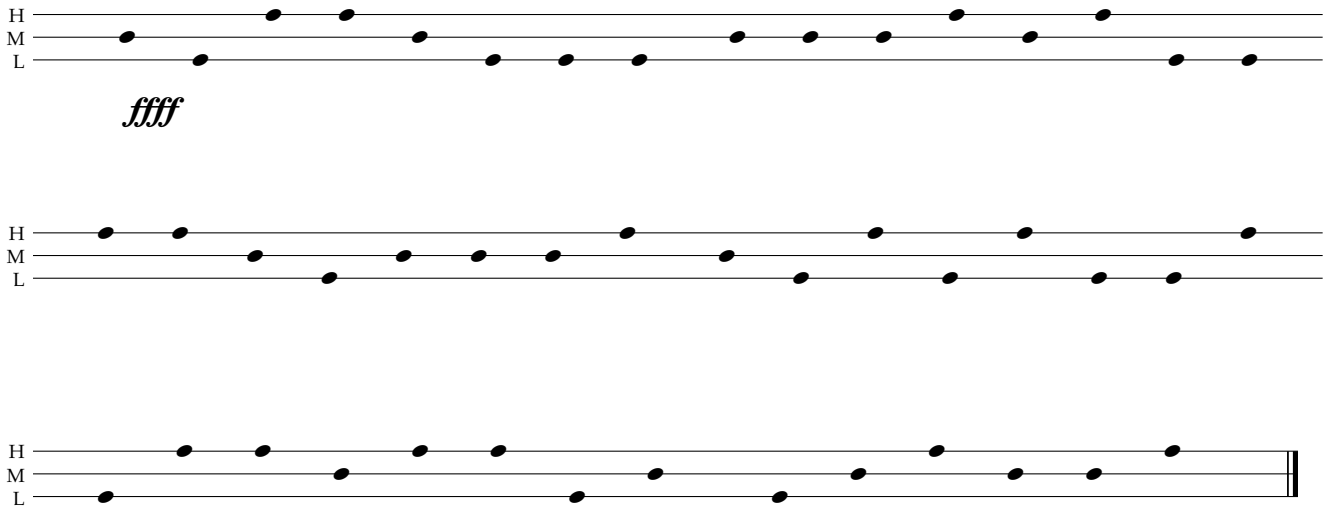
Quite Fast



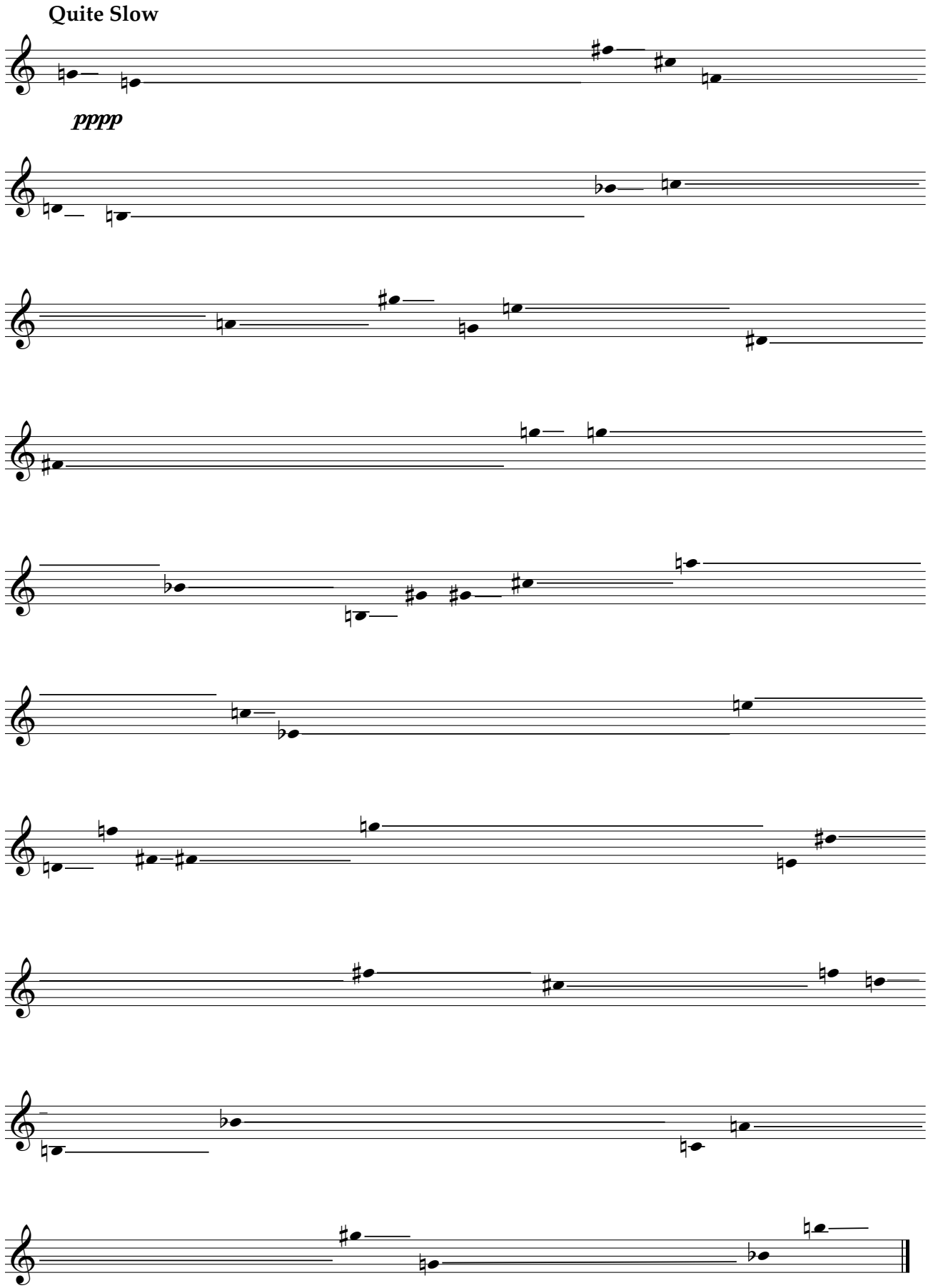
Relative Pitch Notation 2

Pick three pitches: one in each register of your instrument and apply them to the pattern below.
All pitches should be the same duration (e.g. quavers, semiquavers).
H (top line) = highest register of instrument; M (middle line) = middle register of instrument;
L (bottom line) = lowest register of instrument.

Fast

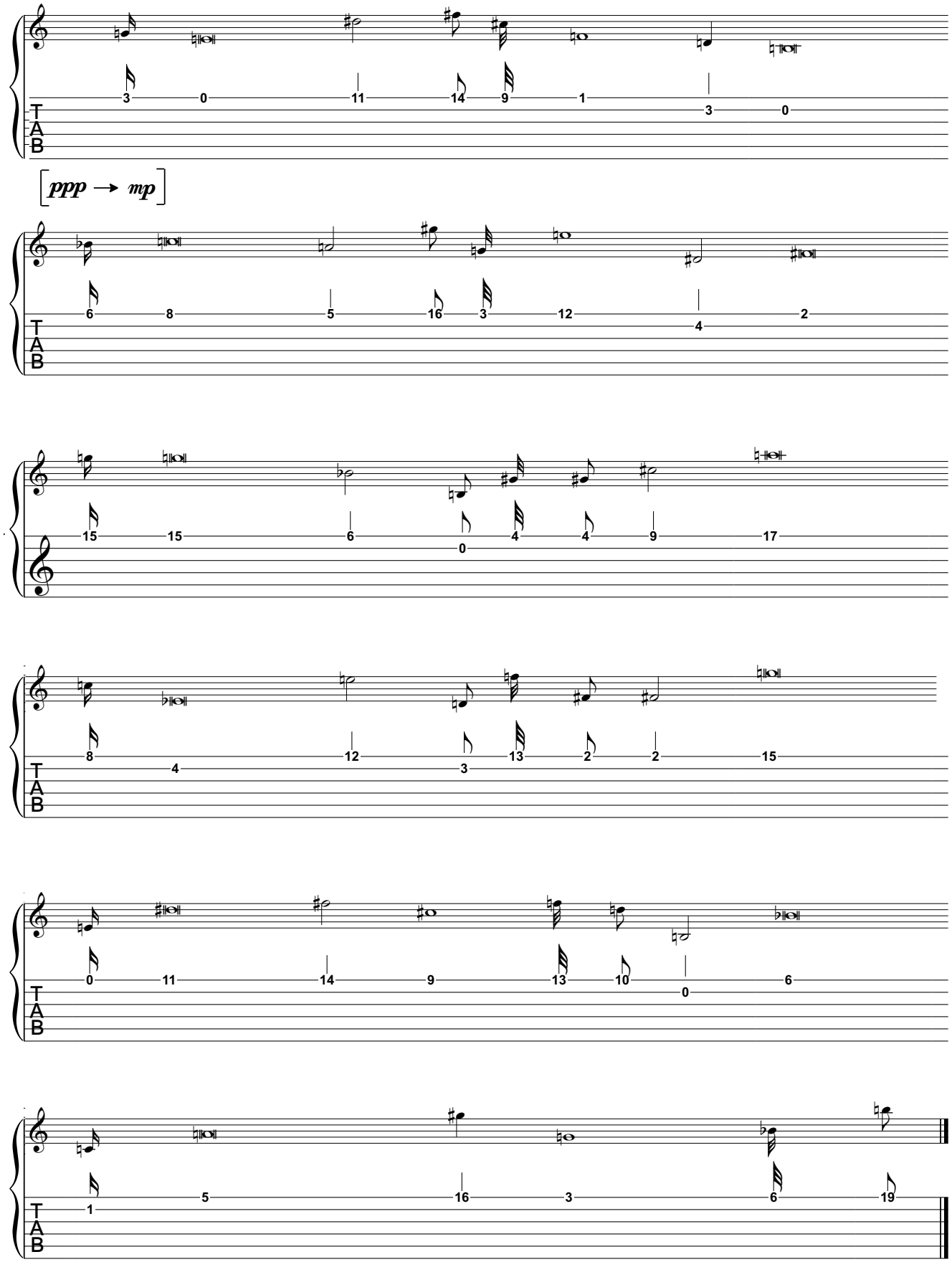


Space-Time Notation



Guitar Tab

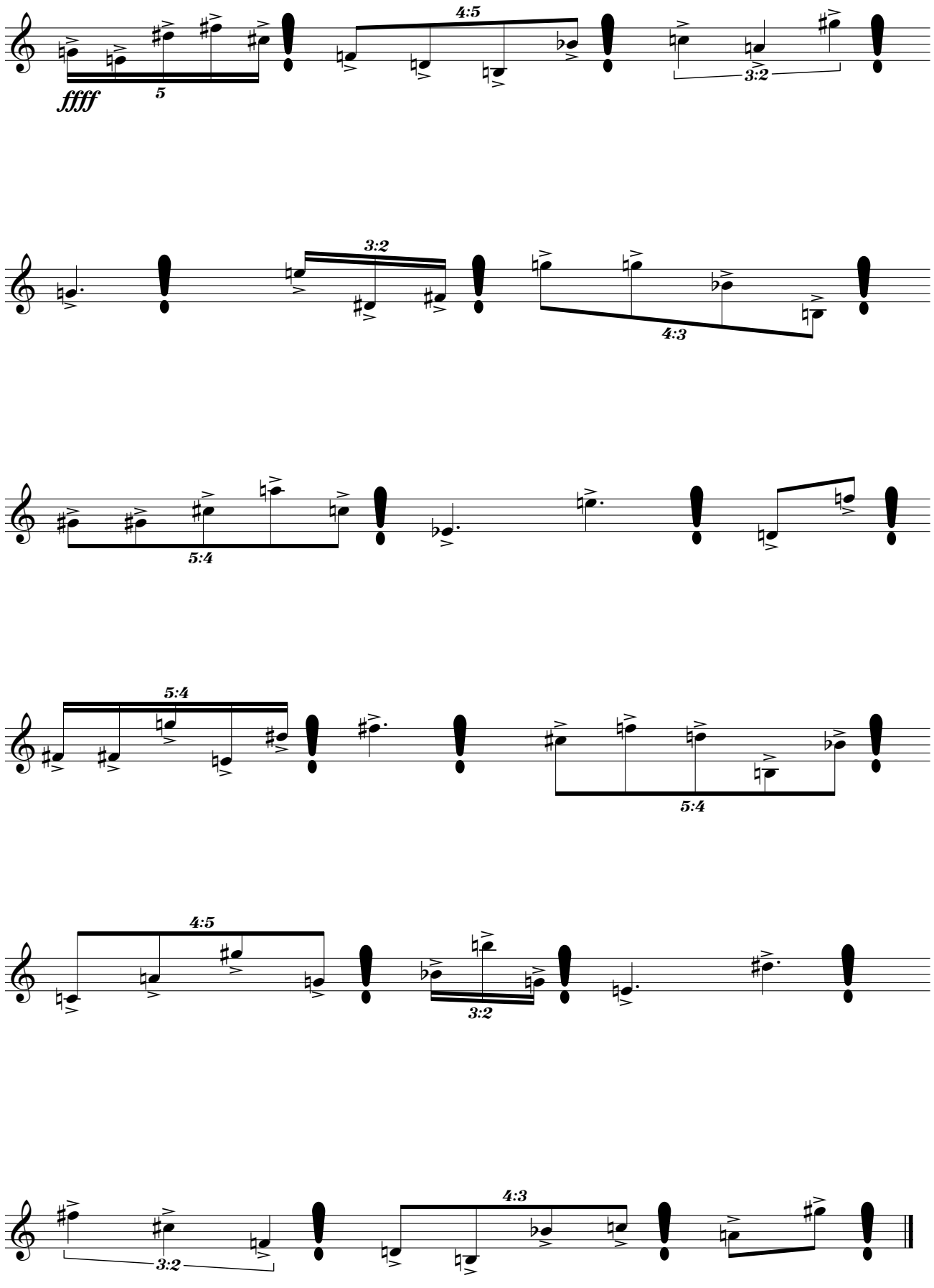
Quite Fast



Exclamations

Very Fast

Play short gestures abruptly and disconnected from one another, leaving a short gap in between each one.

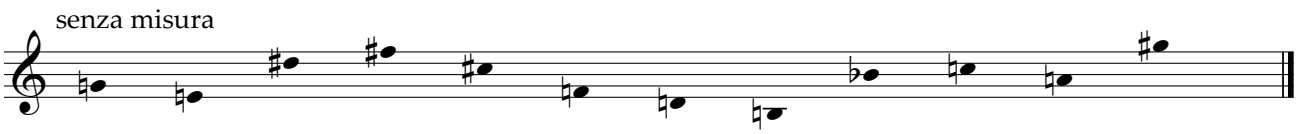


Wordsearch

This wordsearch comprises 26 musical directions regarding tempo, dynamics, range, and playing technique (e.g. Quiet/Loud, Legato/Staccato). The word 'highest' would indicate to play the provided musical passage in the instruments highest register. Similarly, the word 'fastest' would indicate that the passage be played as fast as possible. Here are three possible ways to perform this exercise, although you may choose to do a variation of these suggestions: 1) find all words prior to the performance and then apply the directions to the musical passage in the order which you found them, repeating the short passage with each new direction; 2) find the words during the performance, performing the short musical passage with each new direction as and when you find them; 3) play the musical passage as a continuous loop throughout the entire performance, applying each direction as you find them. You may also wish to combine directions at any point.

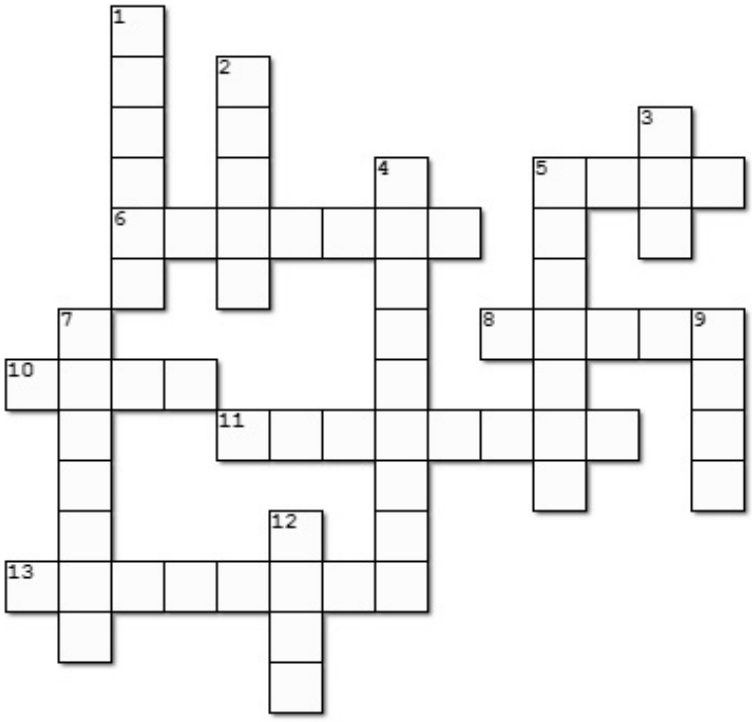
V G V V X U W L H M O H S O Y H D I K W S D E H
F C V I G X E B I E D L C T Y H L Y I U Z Z J O
Y M P U Y H R A G Y O W D A Q P K Y H N B Q K T
A S H H I I E I H W B Q T R U J E V H S S W A A
C F T F C G O X E I Y L H B I Z N T H F L M U R
I P S W Y H K R L N I X N I E G Q P G H U Y X B
N N E O M E C G E X E Z S V T D E F B T R P B I
R M W T Z S S H G A I F N N E M A N Y S R I K V
W S O A I T L O A W J S O O R S X C Y M E V O A
O J L R M F O N T C U Z O C T B Q M P L D F M Z
Q V S B Y D W P O R S A V Q G S F A S T E S T N
D L G I K R R M U H F M P D U P S Q L R Y B Y E
E U X V A P E W T S U B A O R I H Y L E I B H S
T Z W O V E E D H S P I F E P V E T P W F E H G
A J E T R F T P U G E X B N O A O T U O G U M N
C T G L N C C U Y O P W W O C R T D E L N V Y V
H J X O M R K W O L L H O D O K A C P S T O F M
E B C M I G E B R W X M B L V P C K P O T H A R
D N S R T Y B E J J R C M F I U C Z D B H P E W
L L R E Q E H M Y N S M K W B J A D W K L T O L
T D Q H E G I E N P Q U S Y R Z T S M G S M D D
Y Q H O I K M U C H M Z L Q A T S P L A Q E Y U
S A R H Z A W N Q V F D T V T S G J F Y W O D O
S T S E D U O L W P T I J P O I N X S R J J Y L

Fast	Slow	Slurred
Faster	Slower	Detached
Fastest	Slowest	Legato
High	Low	Staccato
Higher	Lower	Molto Vibrato
Highest	Lowest	Poco Vibrato
Loud	Quiet	Con Vibrato
Louder	Quieter	Senza Vibrato
Loudest	Quietest	



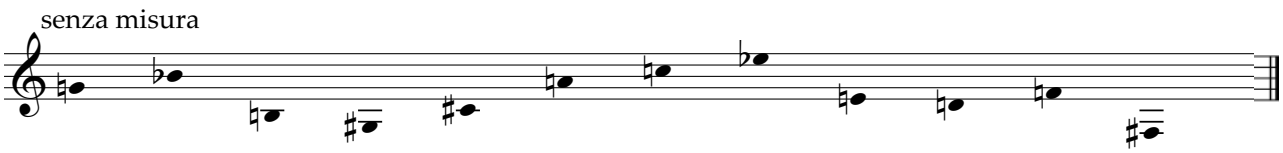
Crossword

This crossword comprises 14 musical directions regarding tempo, dynamics, range, and playing technique (e.g. Quiet/Loud, Legato/Staccato). The word 'loud' would indicate to play the provided musical passage loudly. Similarly the word 'fast' would indicate that the passage be played at a fast tempo. The word 'trill' or 'glissando' would indicate that the passage be played with trills or glissandi on every pitch. Here are three possible ways to perform this exercise, although you may choose to do a variation of these suggestions: 1) find all words prior to the performance and then apply the directions to the musical passage in the order which you found them, repeating the short passage with each new direction; 2) find the words during the performance, performing the short musical passage with each new direction as and when you find them; 3) play the musical passage as a continuous loop throughout the entire performance, applying each direction as you find them. You may also wish to combine directions at any point.



Across
5. Snail's pace
6. Vibrato effect
8. Quavering Sound
10. Opposite of low
11. Separate, disconnected
13. Short and sharp

Down
1. To be played smoothly
2. Be silent!
3. Deep, as a voice
4. A slide between notes
5. Uttered indistinctly
7. Pulsating vocal tone
9. Easily heard
12. At high speed



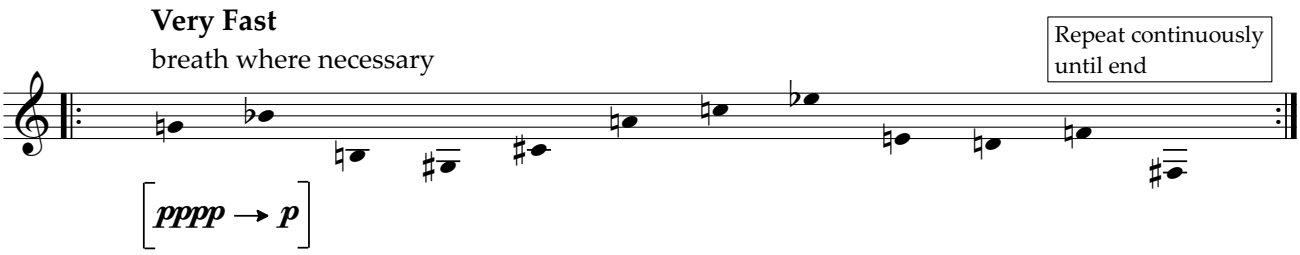
Sudoku

Complete Sudoku. Each number from 1-9 is attached to a duration (see key below). You may choose to: 1) play the rows from left to right or vice versa; 2) play the columns from top to bottom or vice versa; 3) to read the square diagonally; 4) focus on one of the 9 smaller squares and then gradually make your way through the other squares. Apply one of these paths to the repeated pitch sequence below. You may fully notate your path through the grid or improvise within the performance.

	9				8	4		6
		2			6	3	1	8
					3	5		
		3						4
	8		3		1		6	
6						2		
		9	7					
2	3	5	9			6		
4		8	1				5	

1= 2= 3= 4= 5=

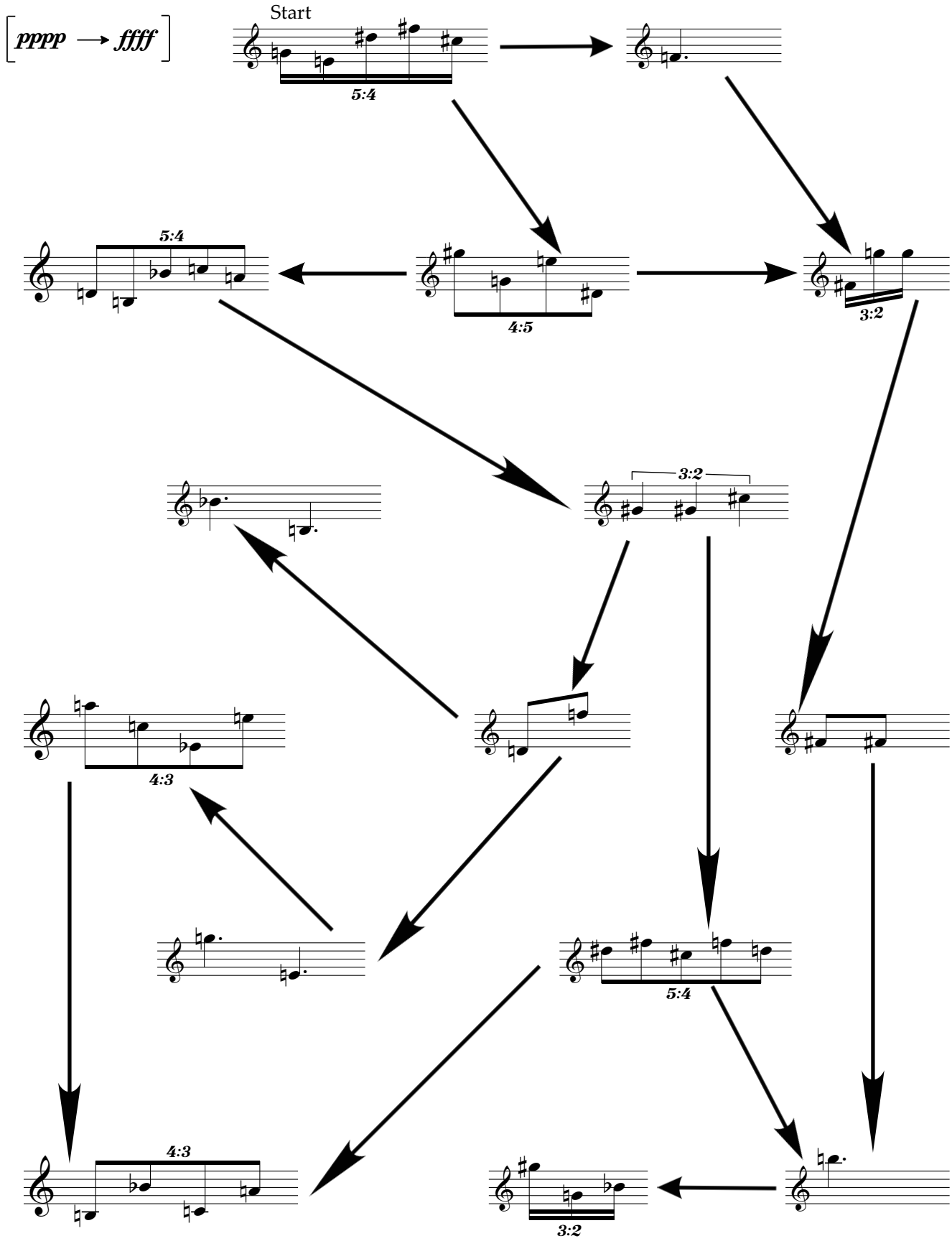
6= 7= 8= 9=



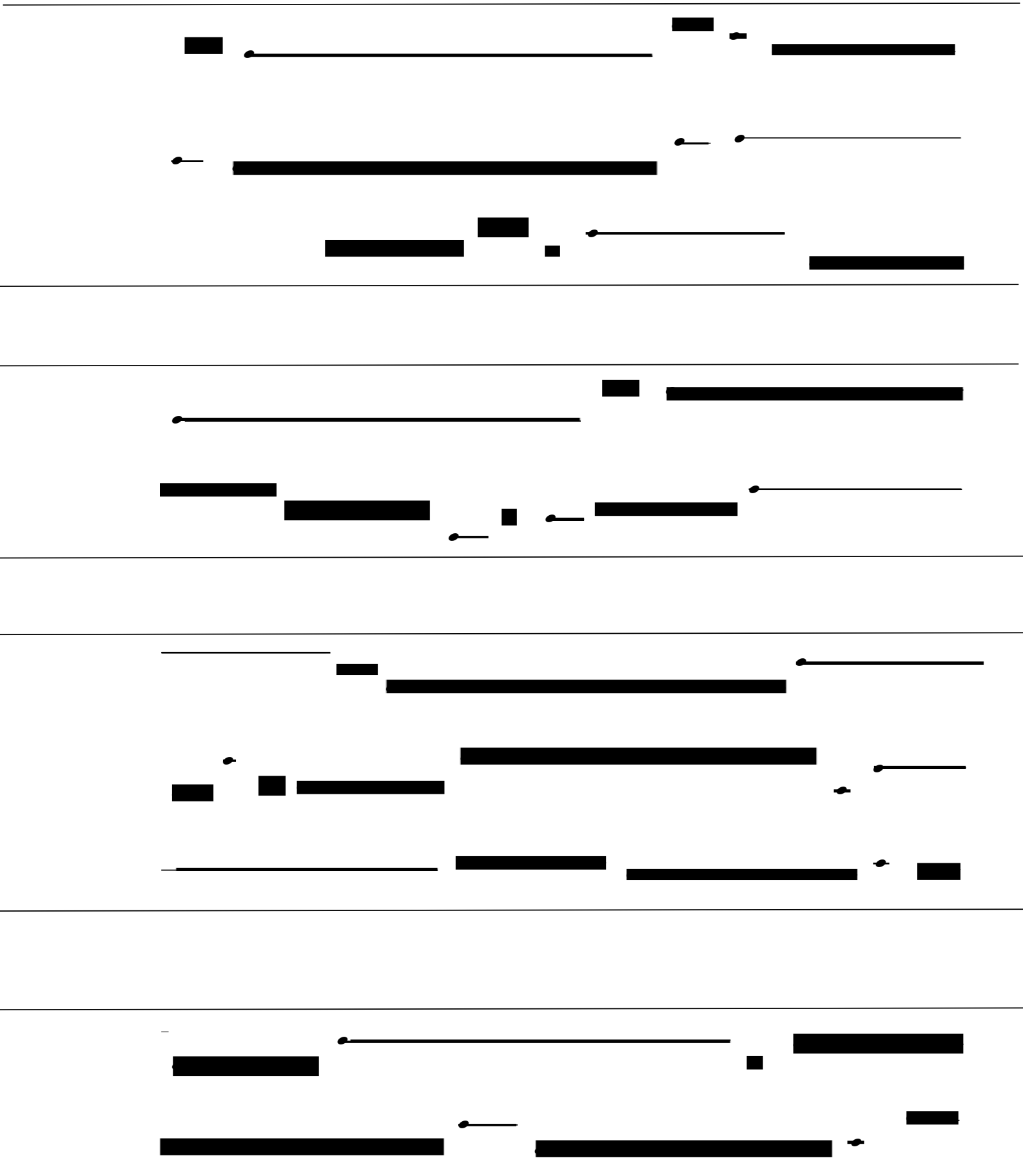
Consequences

Quite Fast

Start where indicated. Follow the directions of the arrows to the following gestures. Where there are two options, choose one. If you reach a box with no arrows pointing to another short gesture, play the gesture that you are on and then stop playing.



In the style of Earle Brown's *4 Systems*



Play the systems in any sequence, either side up. Pitch is relative to the shapes position within the system (high, middle, low). The length and thickness of the shapes may determine the duration, density, dynamic, and timbre of each pitch.

In the style of Christian Wolf's *Changing the System*

Instructions

There are 3 players: 1 = player 1, 2 = player 2 etc.

Open noteheads = any duration.

The diagonal and vertical lines connecting the noteheads together indicate that each performer is to play each pitch directly after the previous performer, creating a hocket. For example, in the first phrase player 2 plays a pitch for a duration of their choice, then player 3 comes in directly after player 2's pitch has ended, and so on.

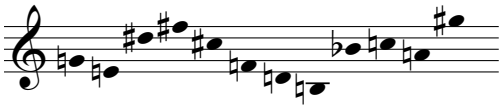
There are 8 phrases in total (e.g. un-interrupted groups of pitches joined together by connecting lines).

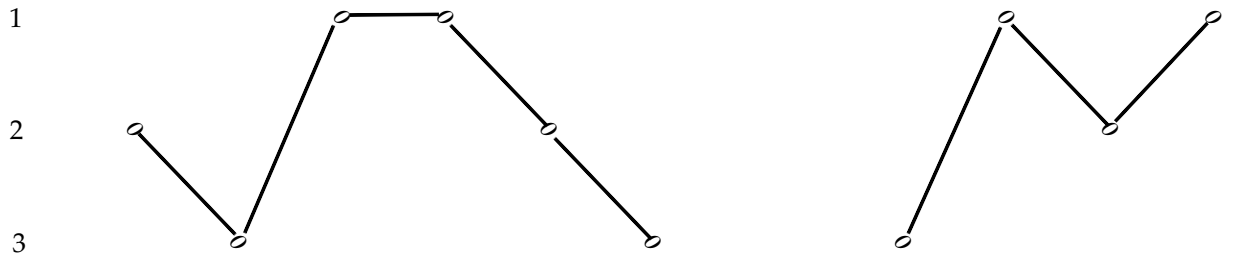
Each phrase may be repeated any number of times in succession. On phrase repetitions the performer may wish to attach the phrases ending pitch to its beginning pitch. For example, on the first phrase player 2 may decide to instigate a repetition of this first phrase by playing their pitch directly after player 3 has finished their pitch. Similarly, player 3 may initiate a repetition of phrase 2 by playing their starting pitch directly after player 1 has finished playing their pitch.

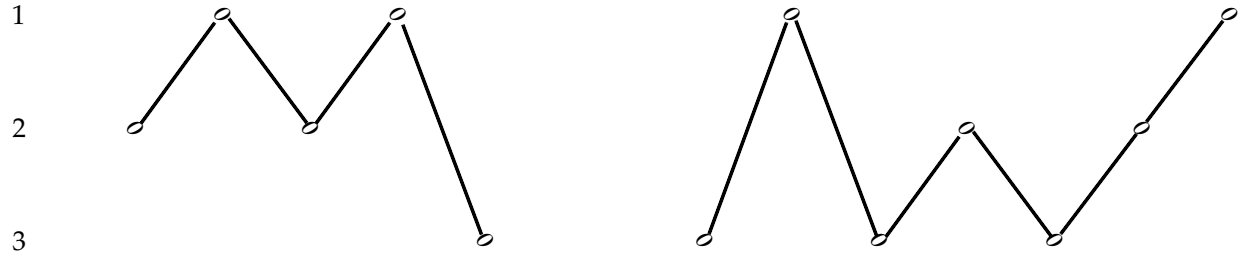
Begin the piece with the first phrase (top left of the page), repeat as often as desired, however, once progressing to the second phrase don't return to the previous phrase. Similarly, repeat the second phrase as many times as desired, but once progressing to the third phrase do not return to any of the previous phrases. This same rule applies to all the phrases.

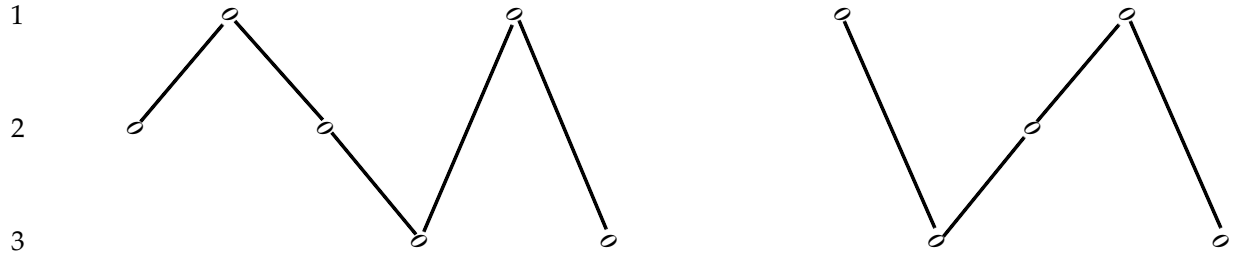
Pitch material is provided at the top of the page. The players should move through this set of pitches from start to finish, each player performing the next pitch in the sequence. For example, in the first phrase player 2 would play pitch 1, then player 3 would play pitch 2, player 1 would then play pitch 3 followed by 4, then player 2 would play pitch 5, and so on. On repetitions the players may wish to also repeat the sequence of pitches that they just played with that particular phrase or continue to progress through the sequence of pitches. When reaching the end of the pitch sequence, go back to the beginning (e.g. after G sharp go back to G natural). If possible, play all pitches in the specified range, however where this is not possible, perform the pitch/pitches down/up the octave.

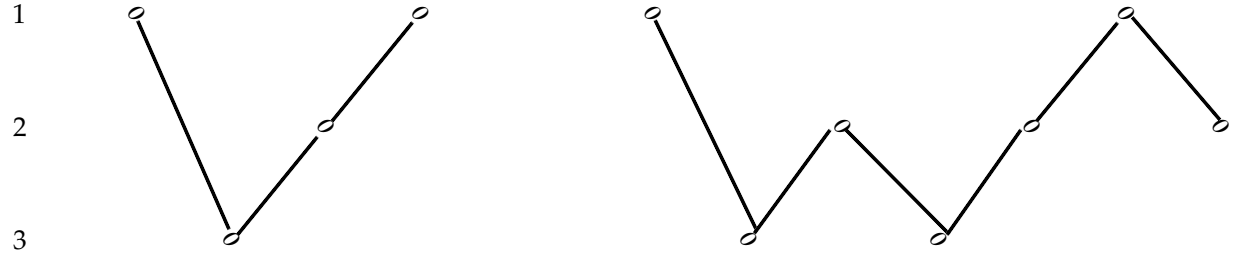
Microtonal variations may be applied.




1
2
3

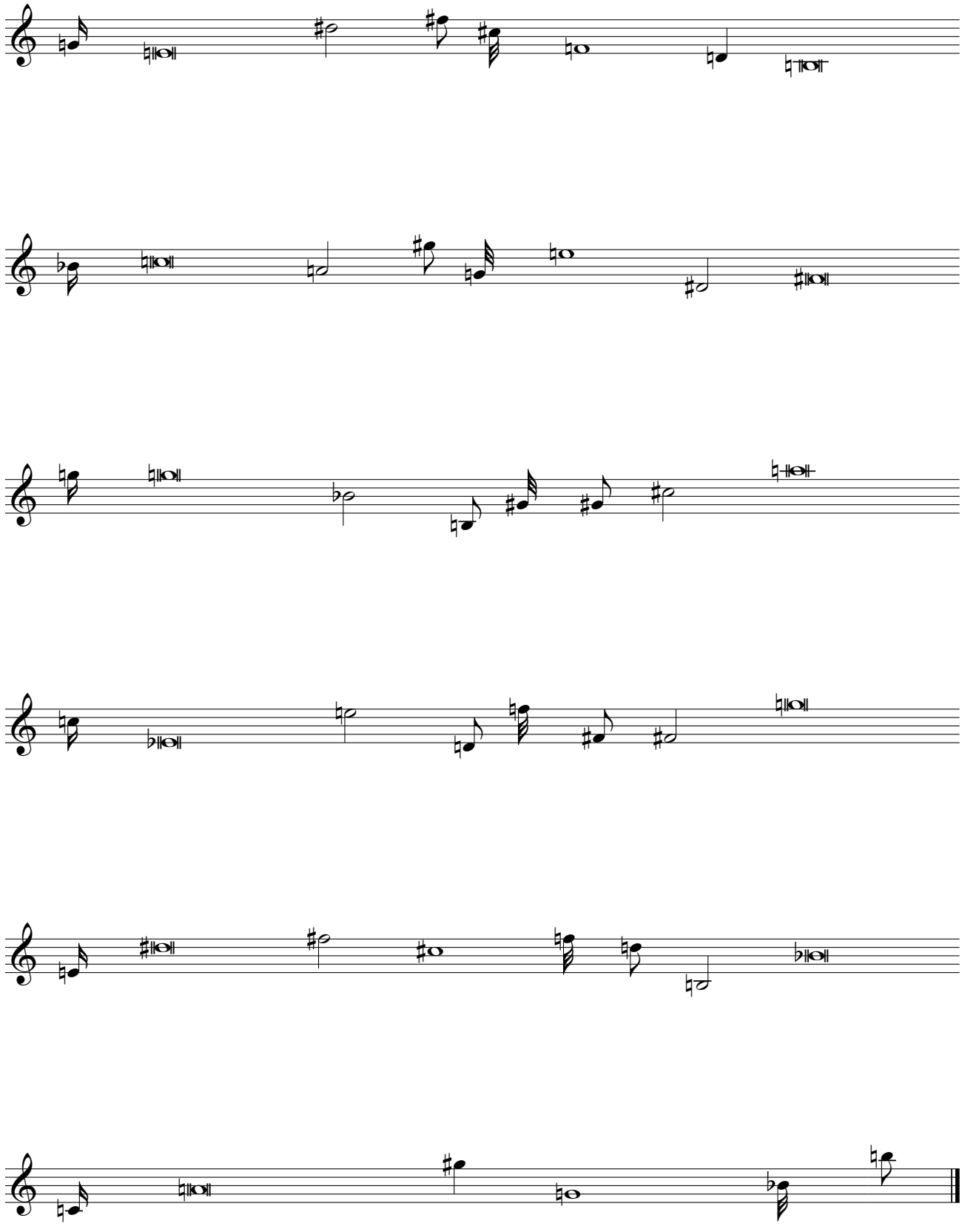

1
2
3


1
2
3


1
2
3

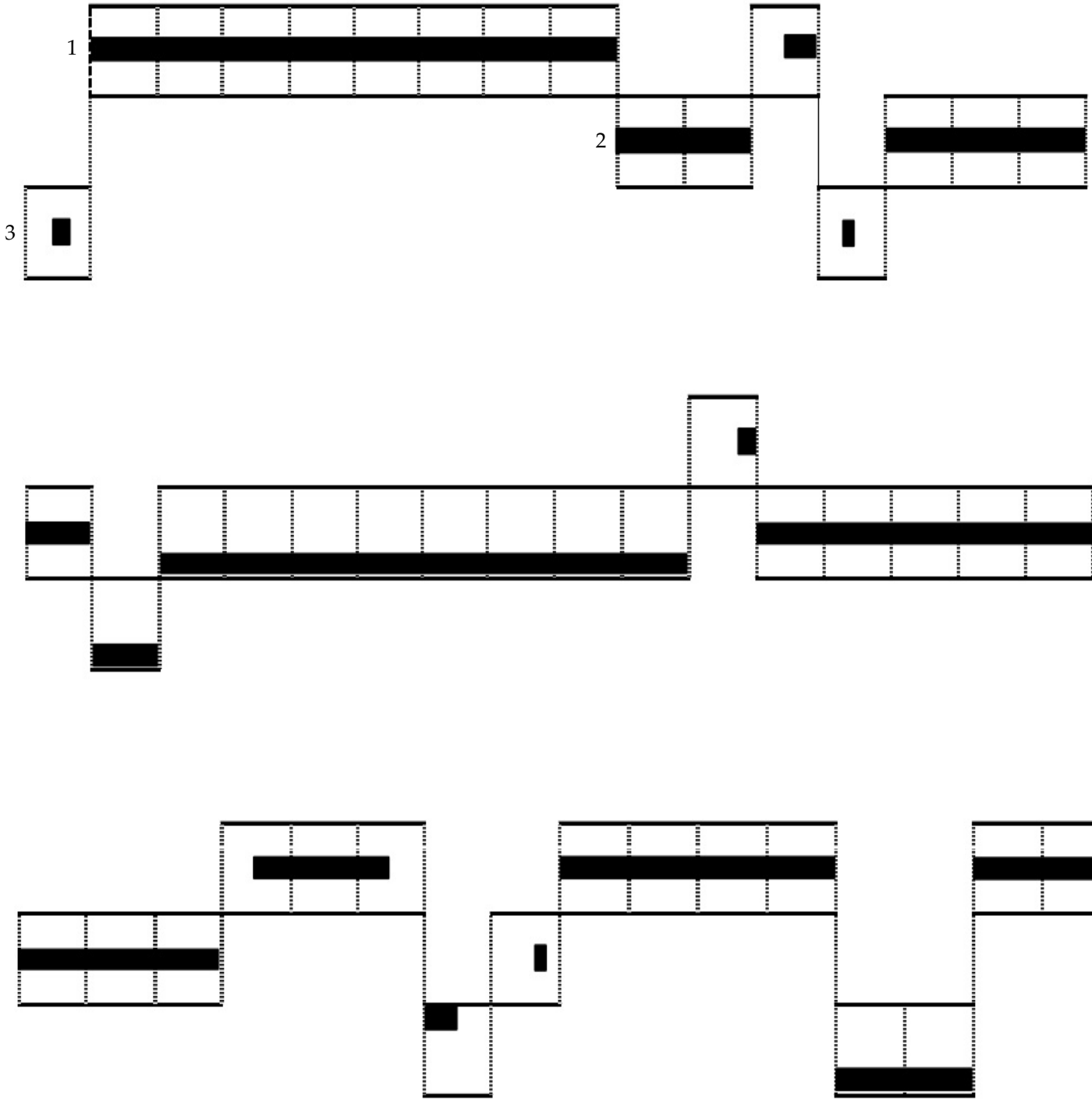
In the Style of John Cage's *4′33″*

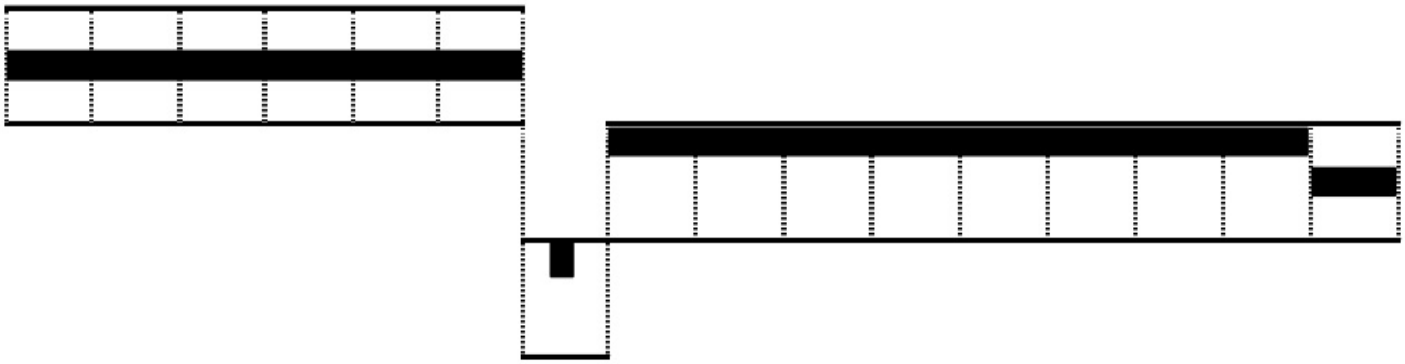
1. Prepare yourself as if you are going to play.
2. Look as if you are going to start playing, and then don't.
3. Play nothing for the entire exercise while silently reading through the exercise in your head.
4. Once you've finished stand up, take a bow, and walk off stage.

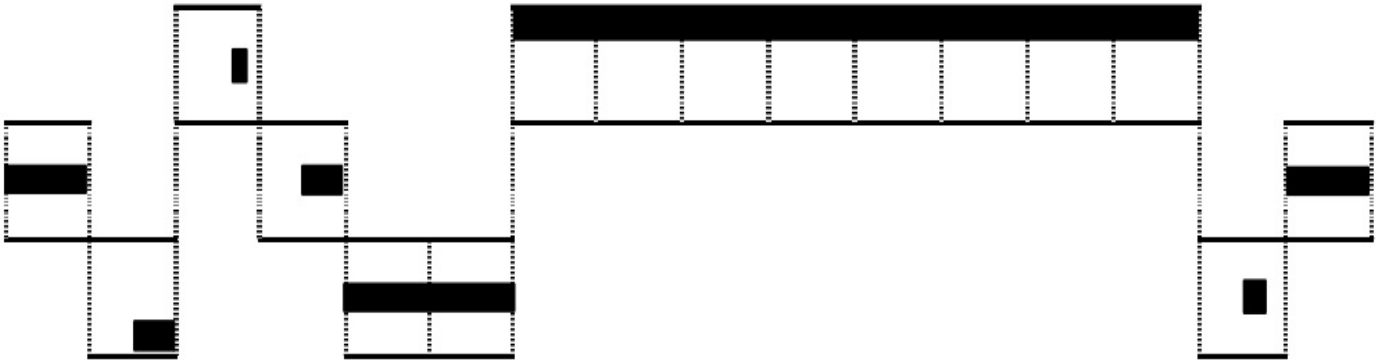


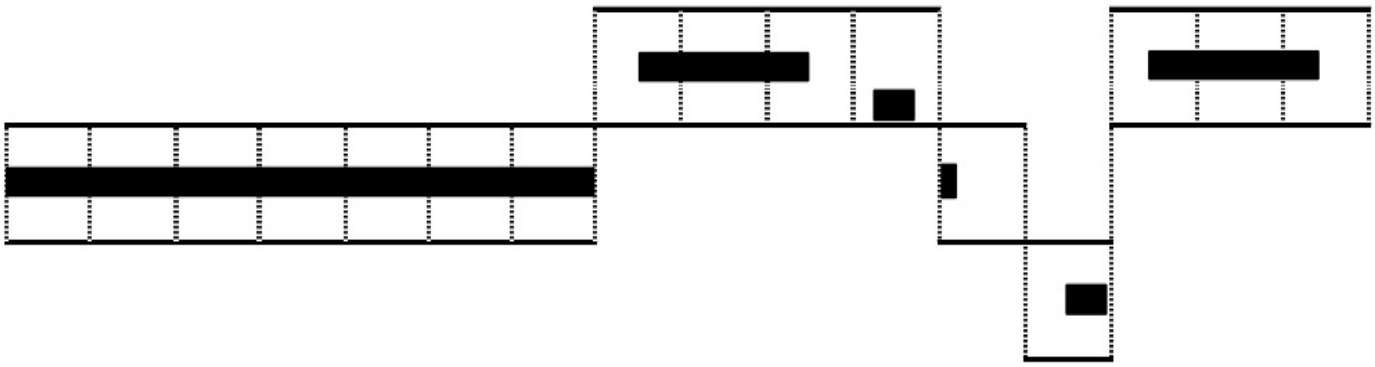
In the Style of Morton Feldman's *Projections*

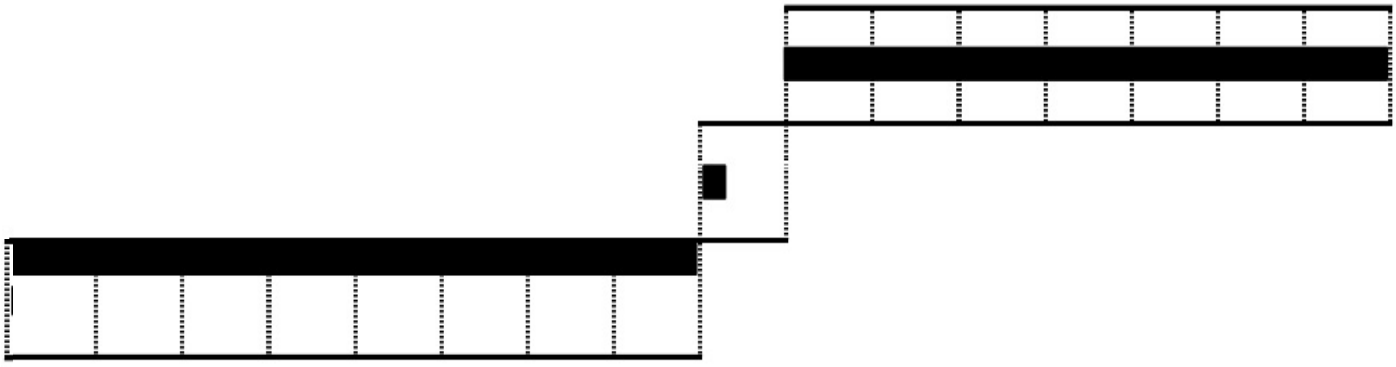
Each dashed line marks off units of a second.
Black boxes indicate the durations. Range is indicated by the placement of the box (e.g. high, middle, low).
The piece has three voices, these can either be played live, or with some voices pre-recorded.
To be played consistently quiet with a pure (non-vibrating) tone.

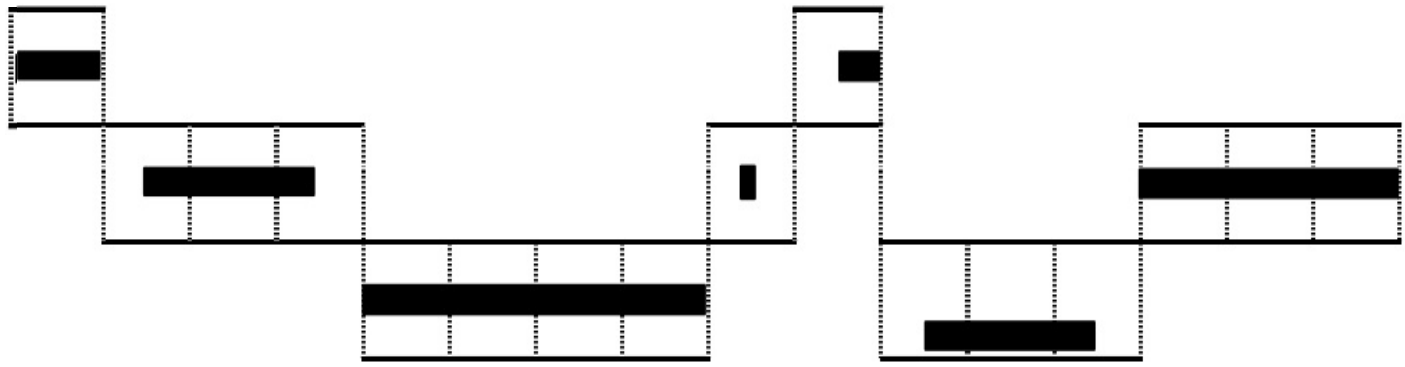


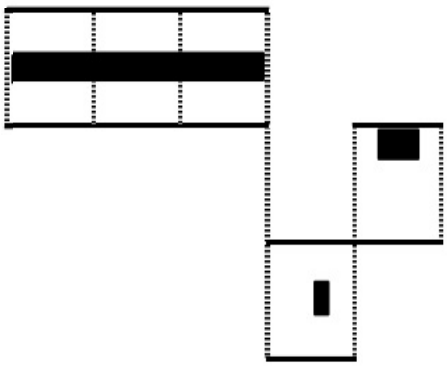












In the style of Terry Riley's *In C*

Instructions

This piece can be performed by any number of players and on any instrument desired.

The work consists of 53 rhythmic patterns that can be repeated an infinite number of times. The players should start at pattern 1 and gradually move through the 53 patterns as and when they like until the end.

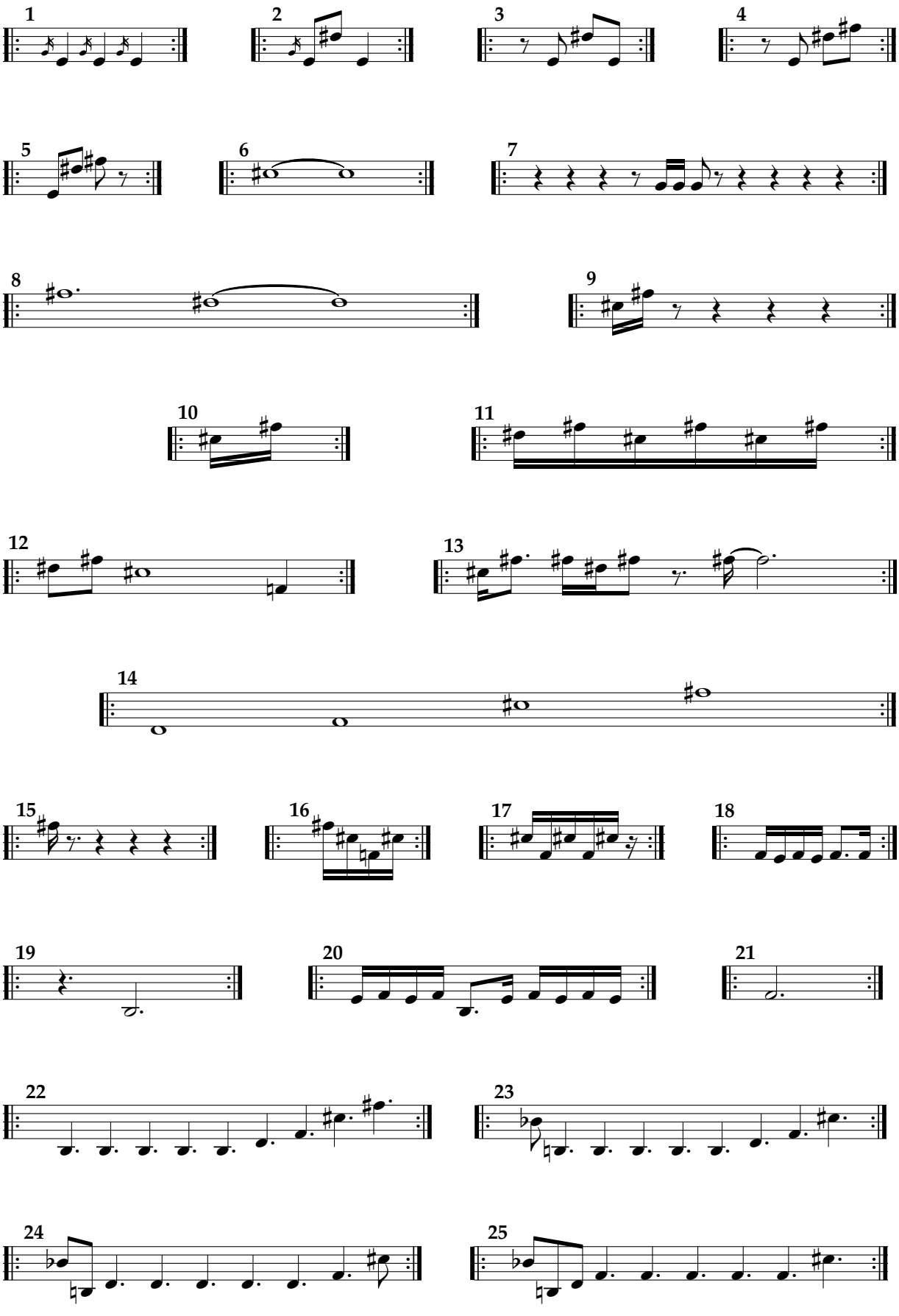
The duration of the piece is entirely left up to the players to decide.

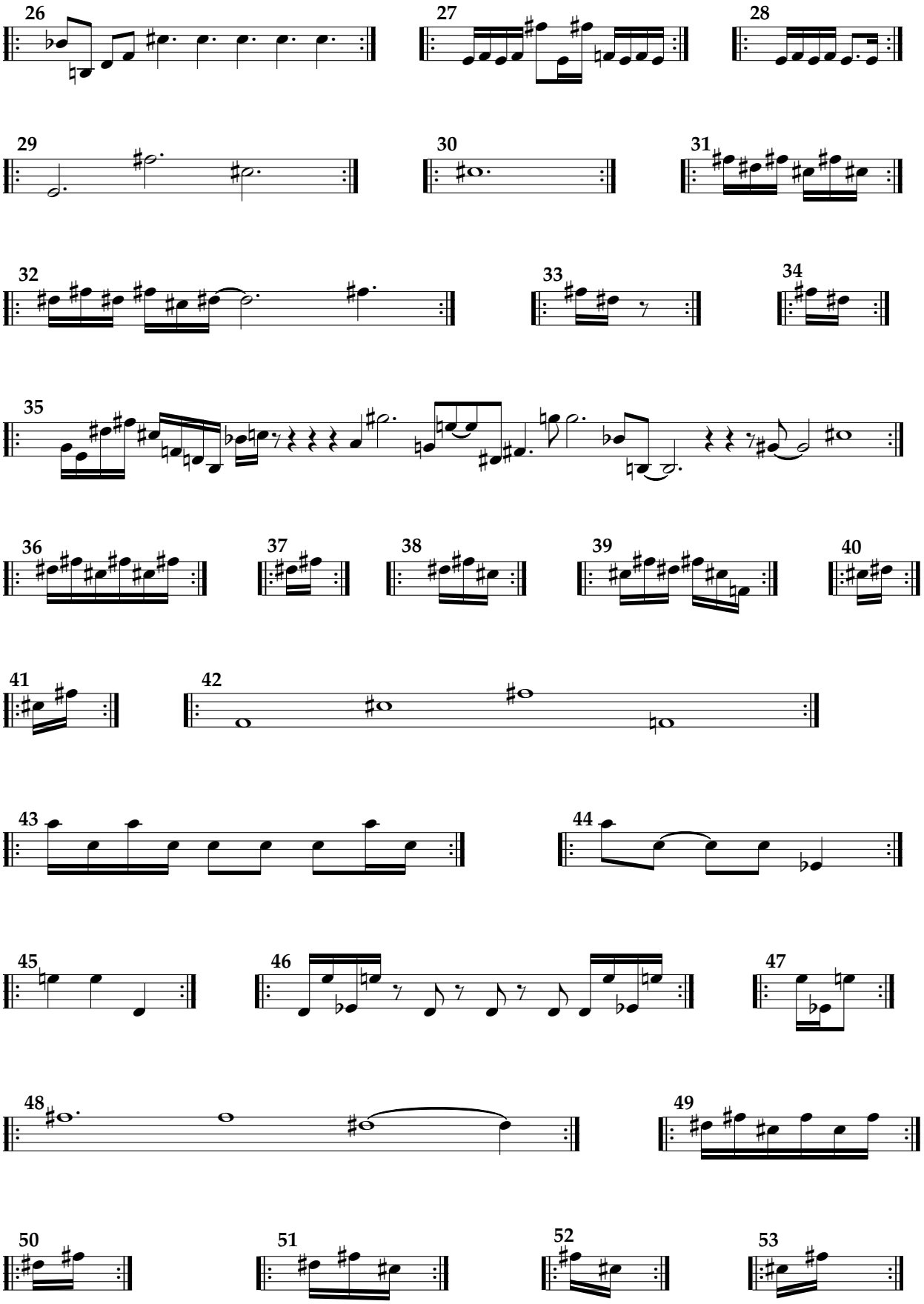
Players should move through the patterns in order, and may not go back to a previous patterns, and should try to stay within 2-3 patterns of the other players.

One player should play a consistent eighth note pulse throughout the entire performance to keep time. Preferably this should be played on piano or on a percussion instrument, but may be played on any instrument. All other players should perform the patterns in relation to this pulse.

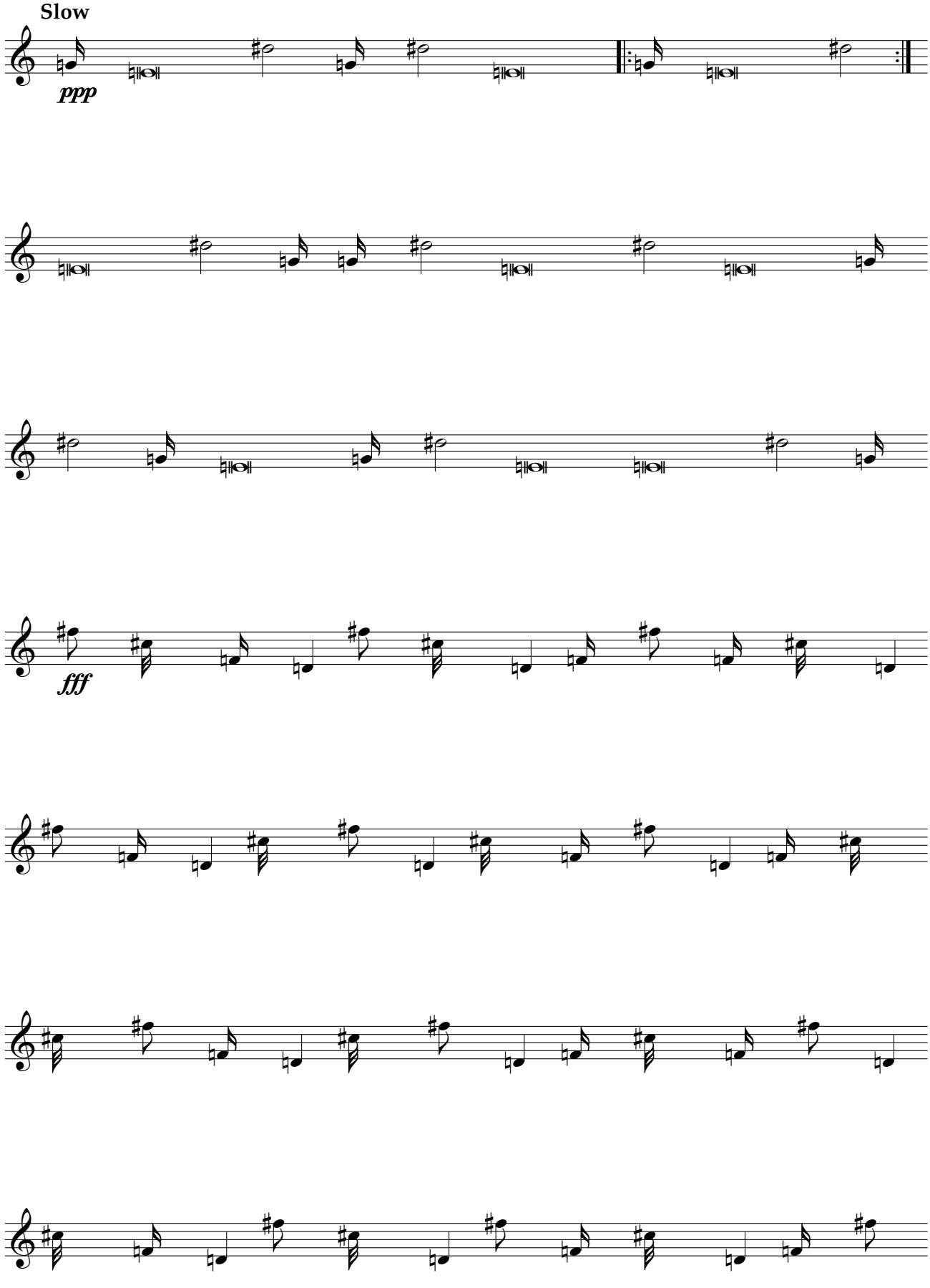
It is important that the players listen to each other throughout the performance.

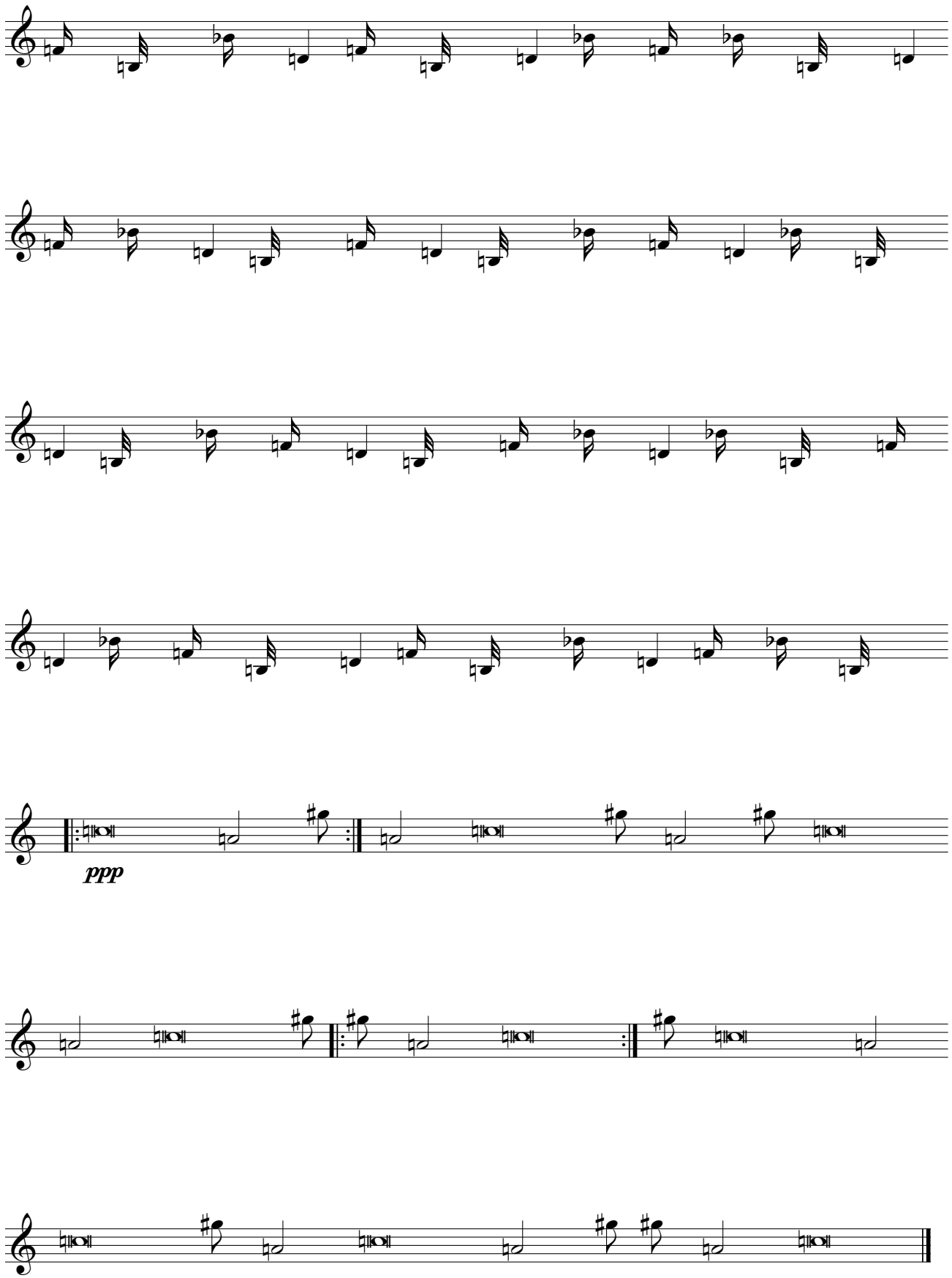
Once you reach the final pattern, continue to play it until all of the other players reach this pattern also. When all players are playing pattern 53, gradually let the music fade away.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25


26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53

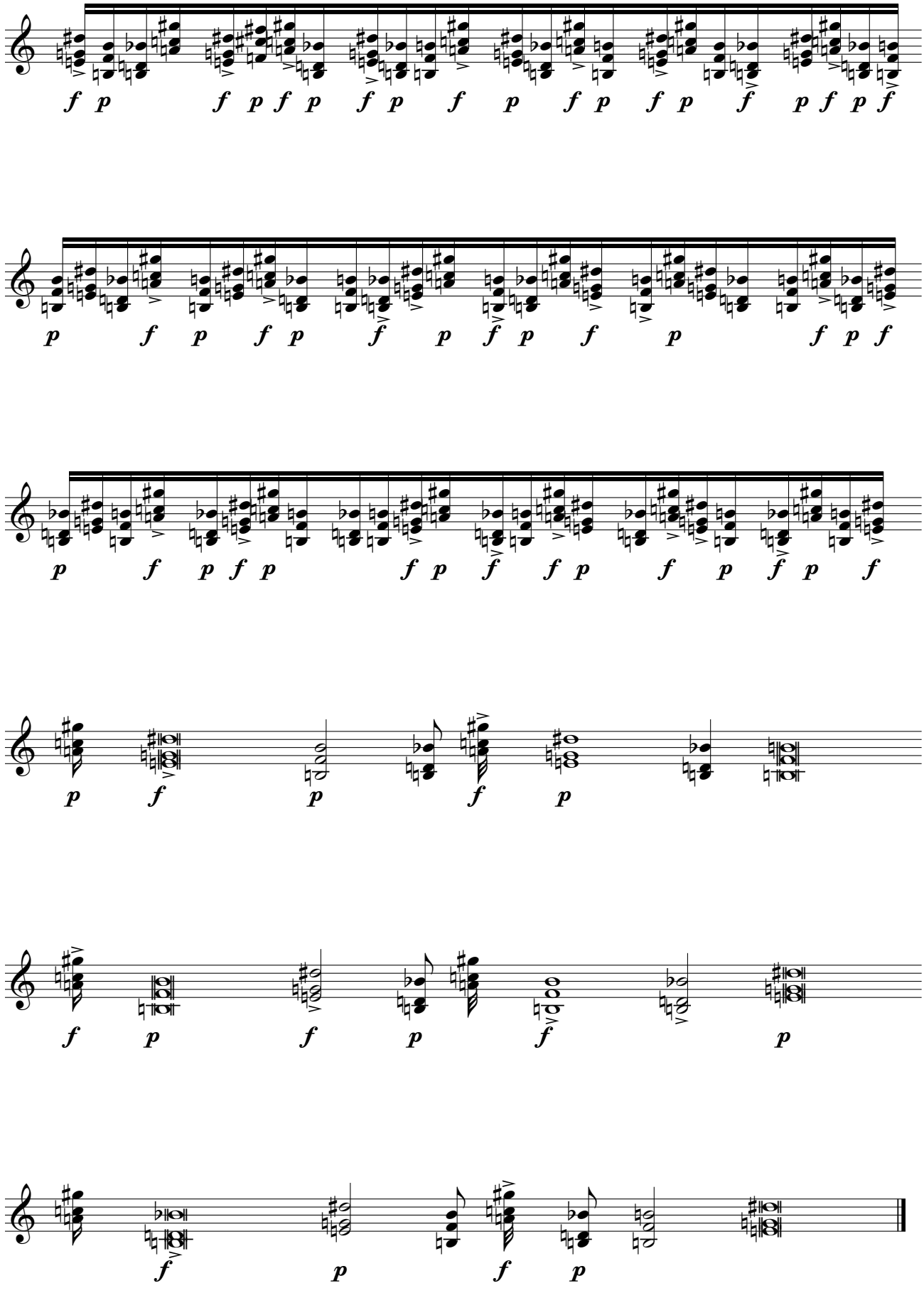
Permutations by Groups of Three and Four Pitches/Durations




ppp

Permutations by Groups of Four Chords

Moderate



Permutations by Groups of Three Phrases

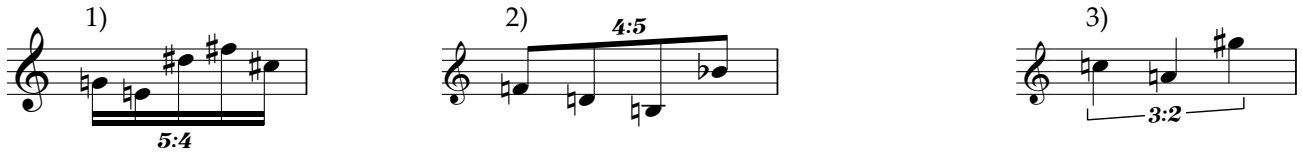
Quite Slow

[*ppp* → *mp*]

123 **132** **213**

231 **312**

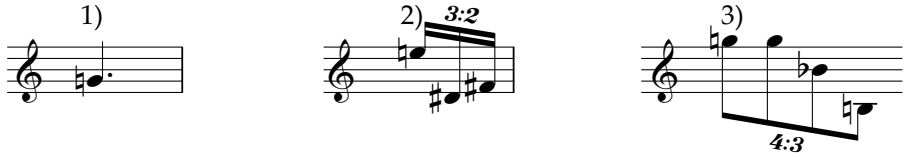
321



123 **132** **213**

231 **312**

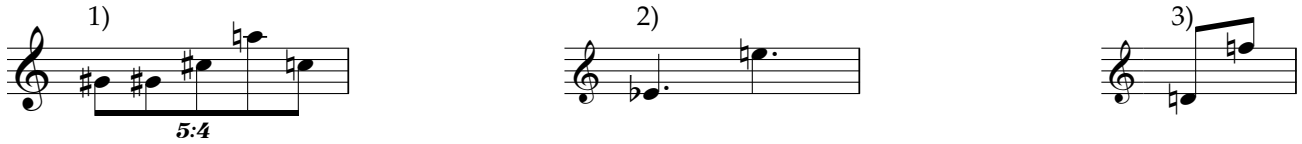
321



123 **132** **213**

231 **312**

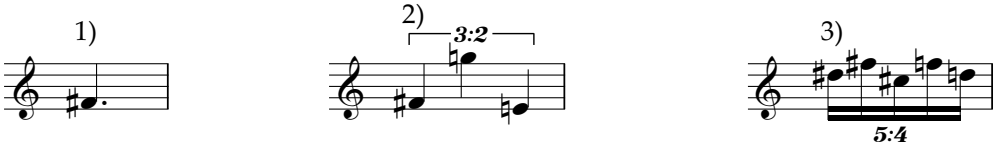
321



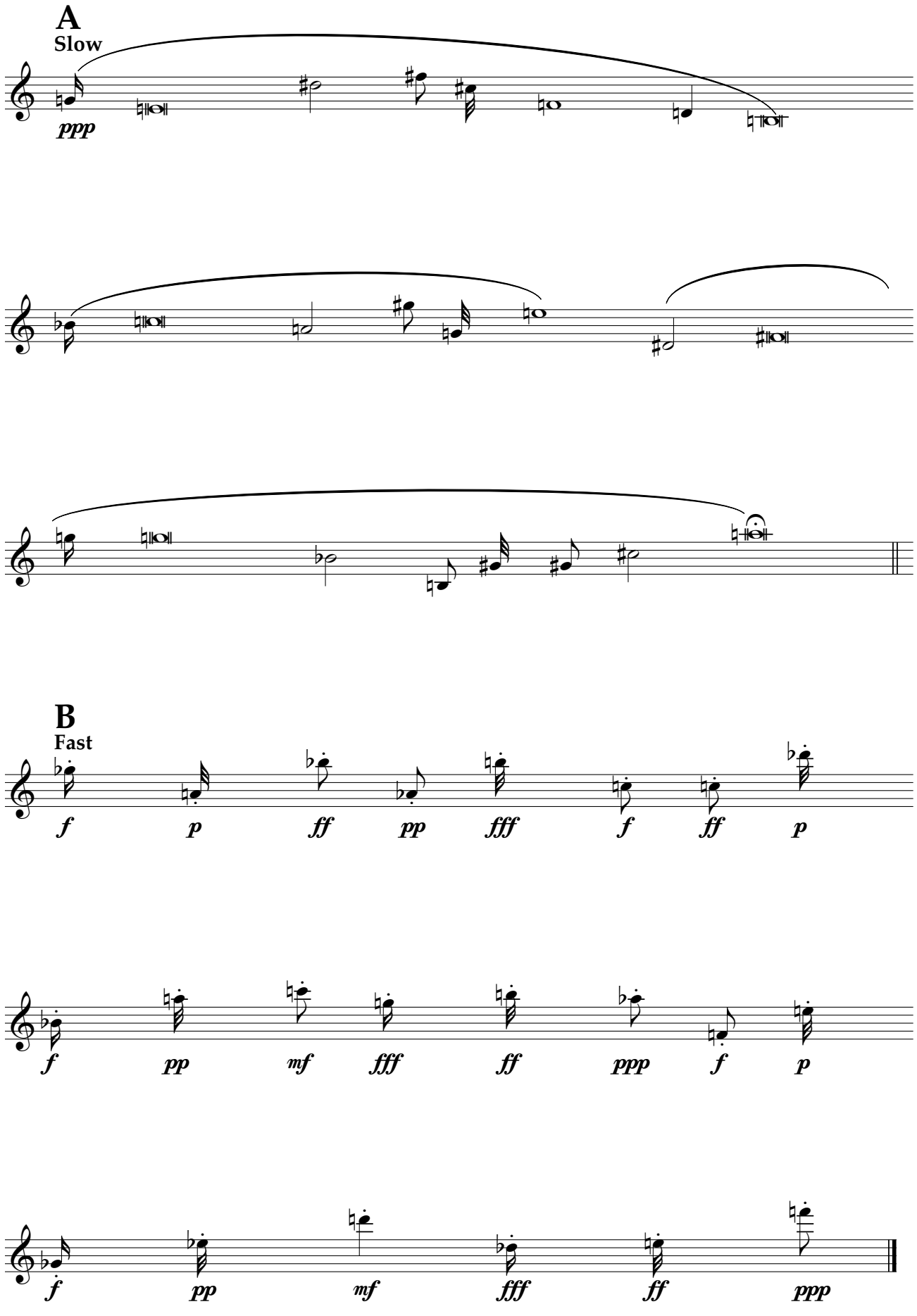
123 **132** **213**

231 **312**

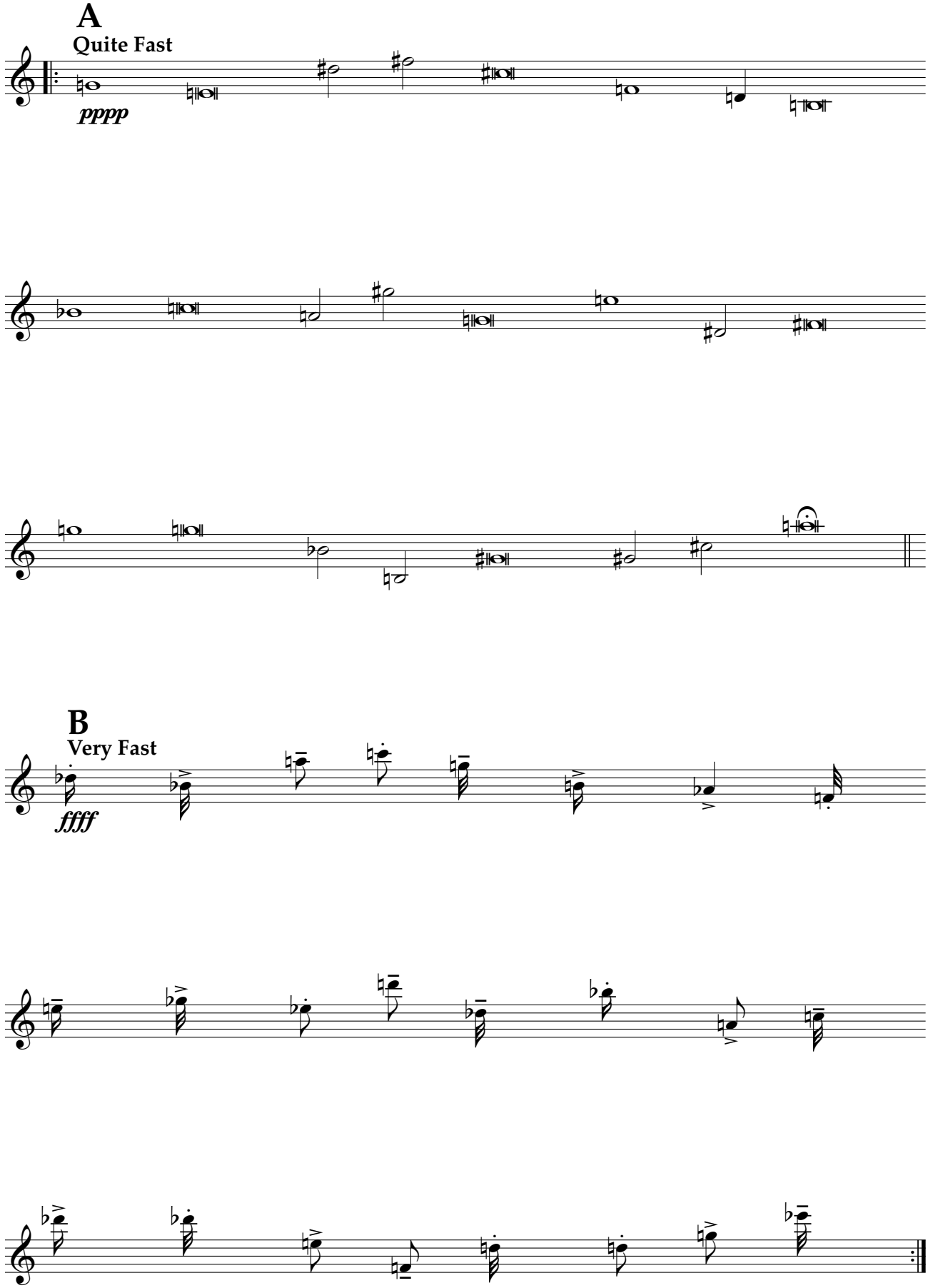
321



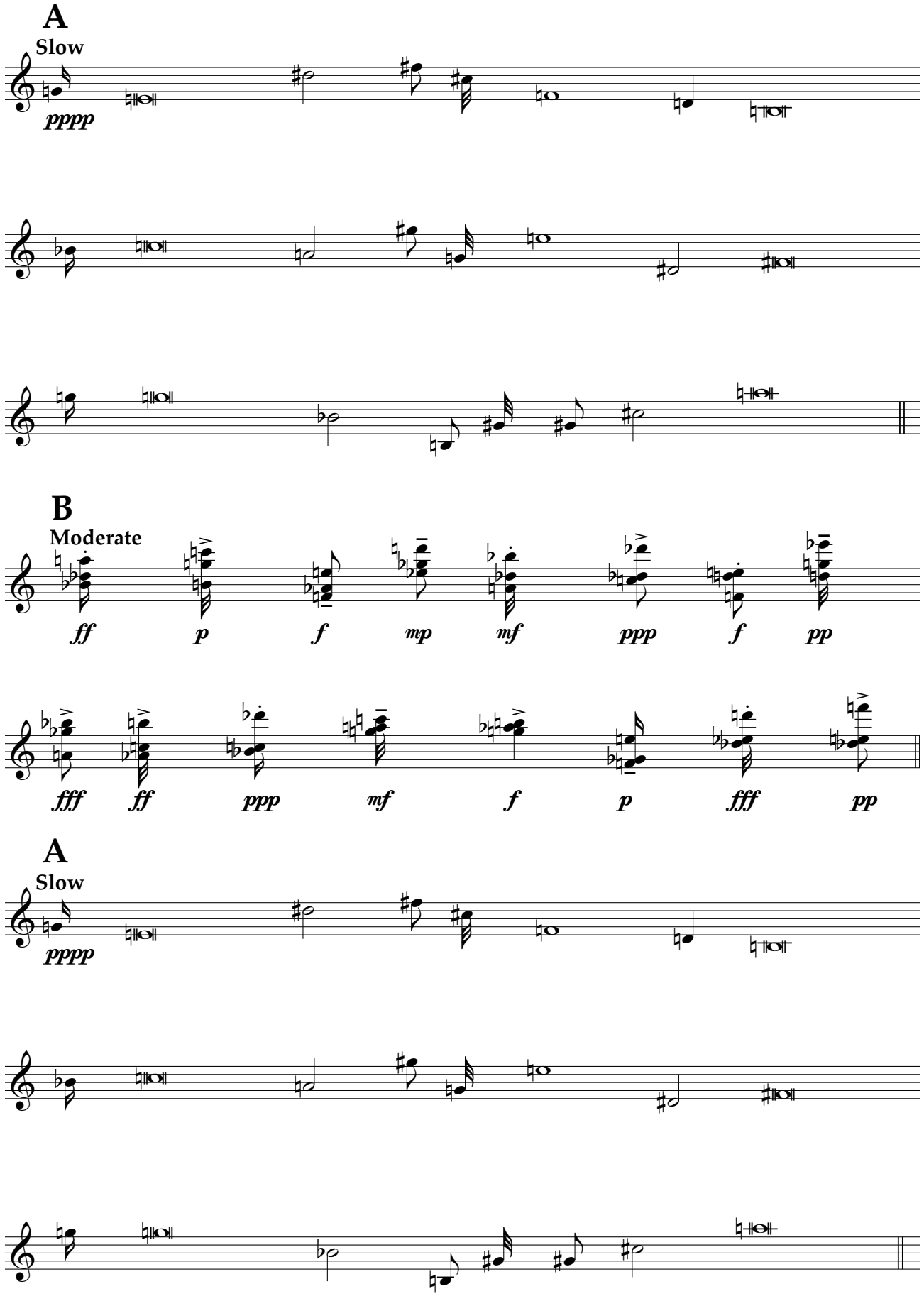
Binary Form

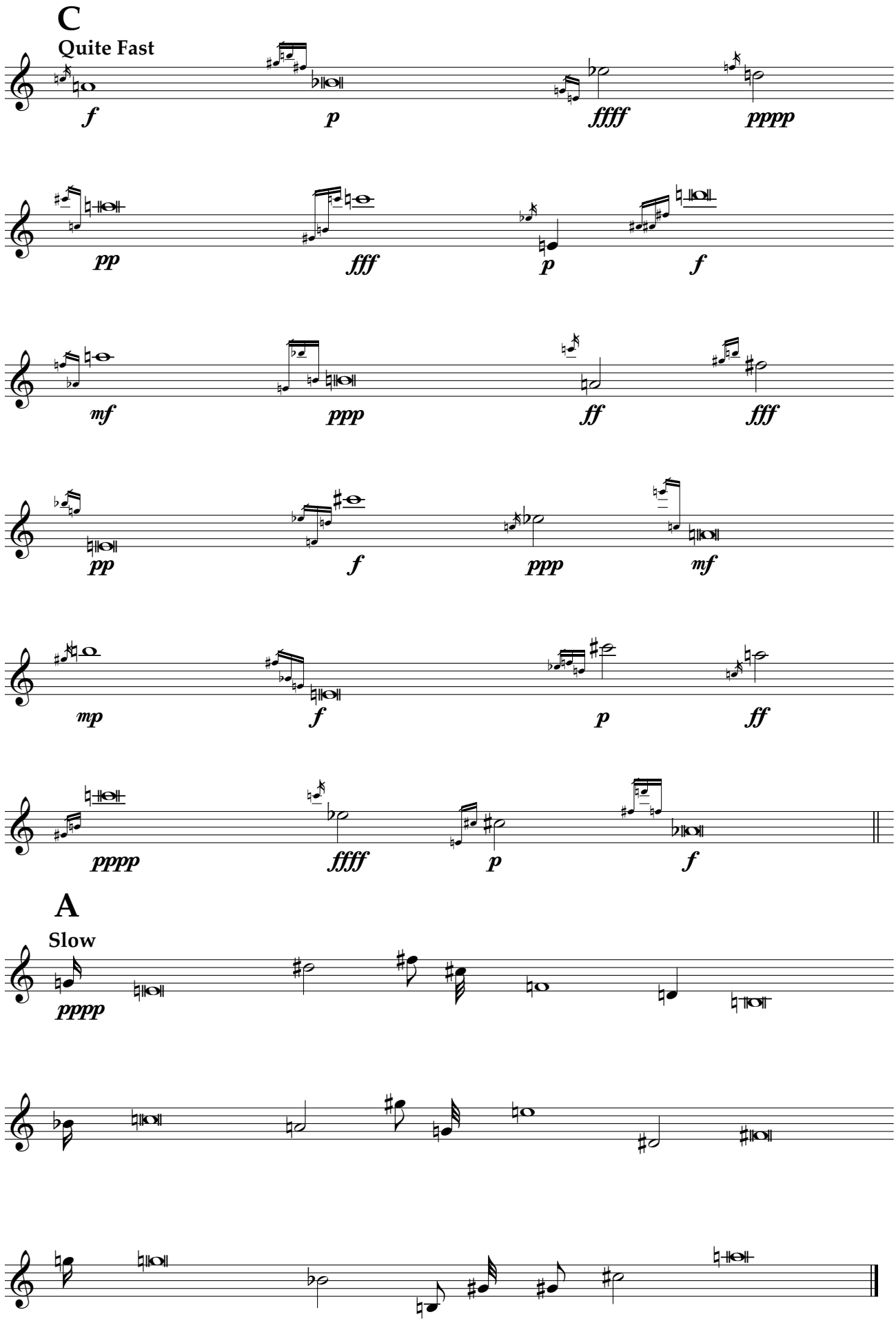

A
Slow
ppp
B
Fast
f
p
ff
pp
fff
f
ff
p
f
pp
mf
fff
ff
ppp
f
p
f
pp
mf
fff
ff
ppp

Ternary Form



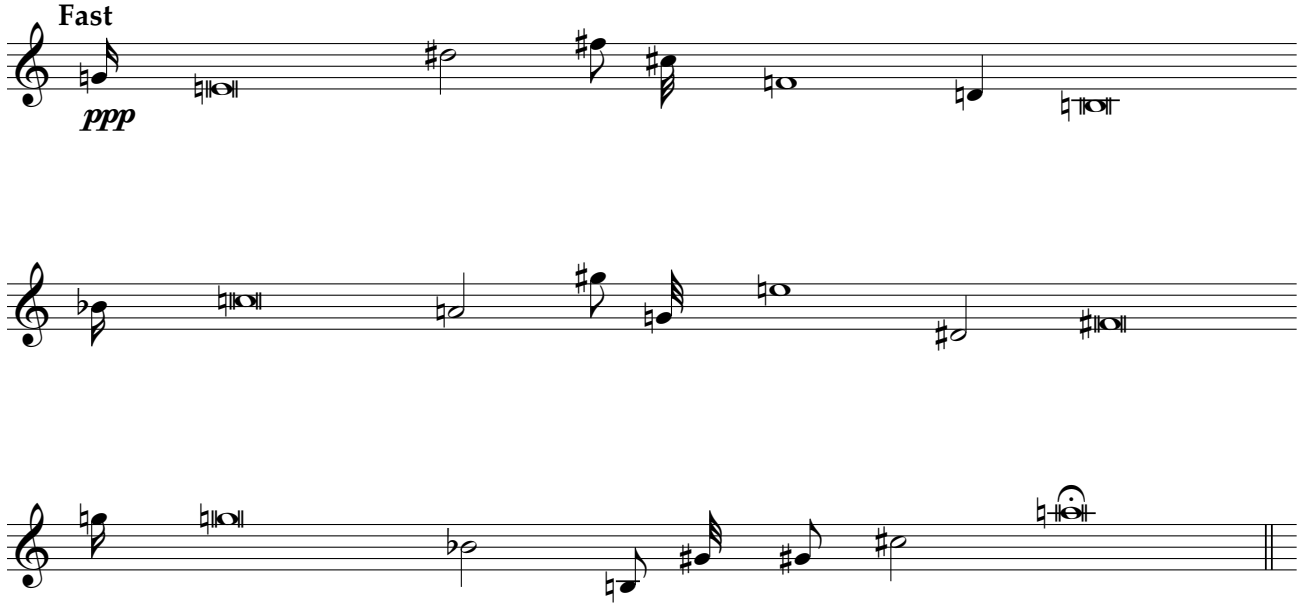
Rondo Form


A
Slow
pppp
B
Moderate
ff
p
f
mp
mf
ppp
f
pp
fff
ff
ppp
mf
f
p
fff
pp
A
Slow
pppp

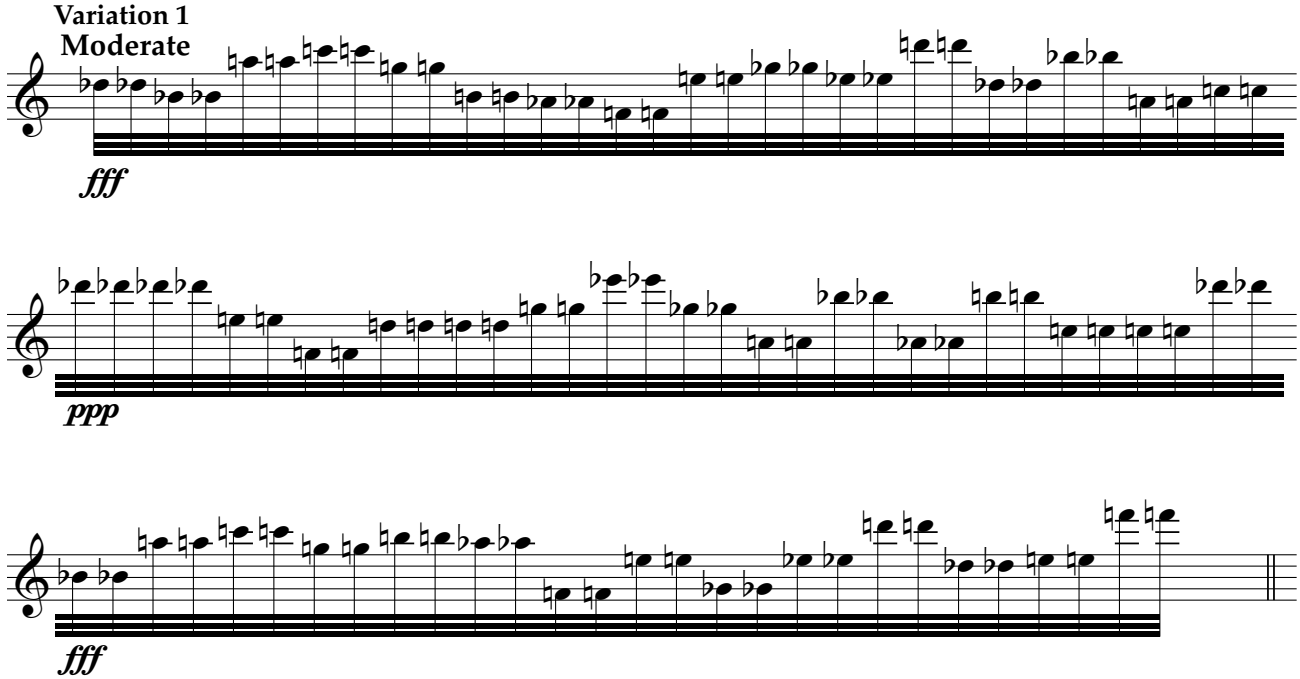

C
Quite Fast
f
p
fffff
pppp
pp
fff
p
f
mf
ppp
ff
fff
pp
f
ppp
mf
mp
f
p
ff
pppp
fffff
p
f
A
Slow
pppp

Theme and Variations

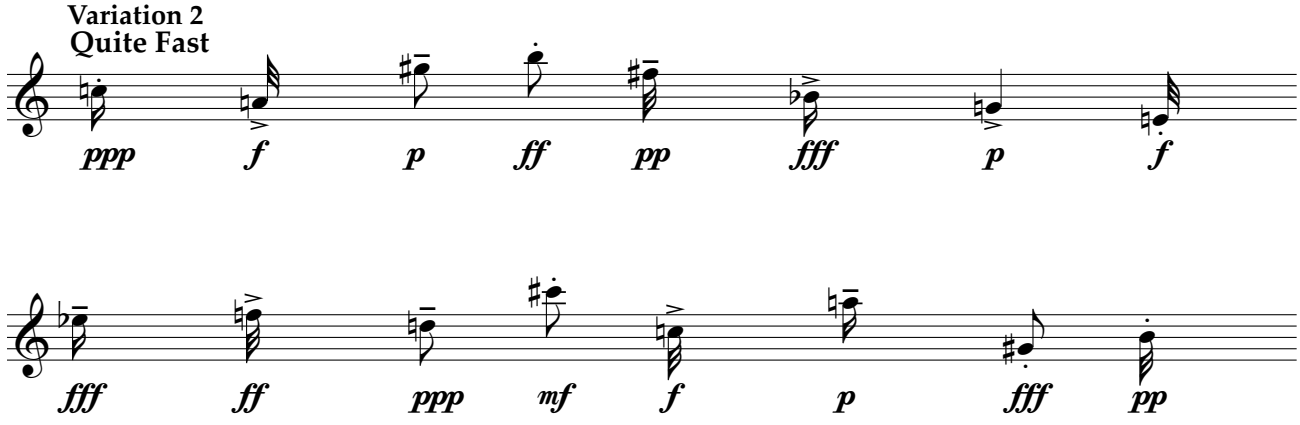
Theme
Fast

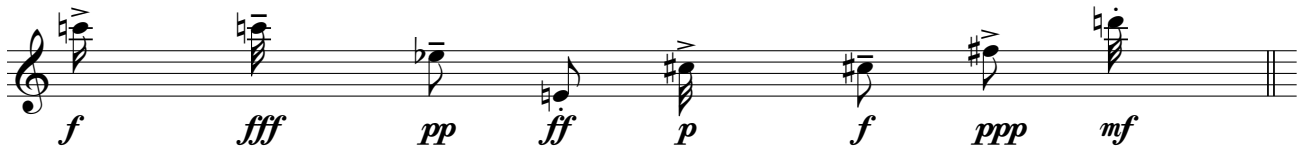


Variation 1
Moderate

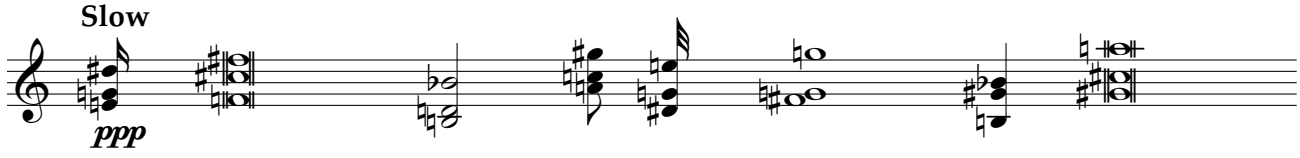


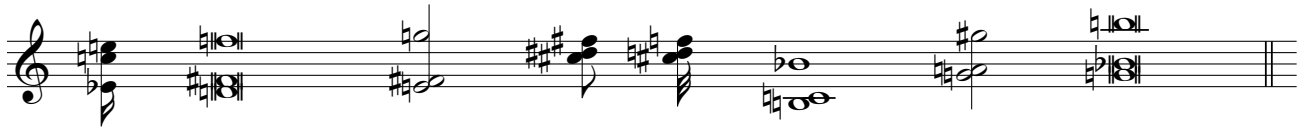
Variation 2
Quite Fast



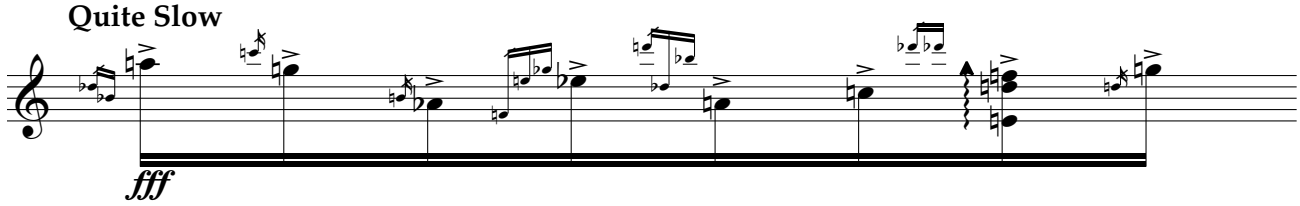


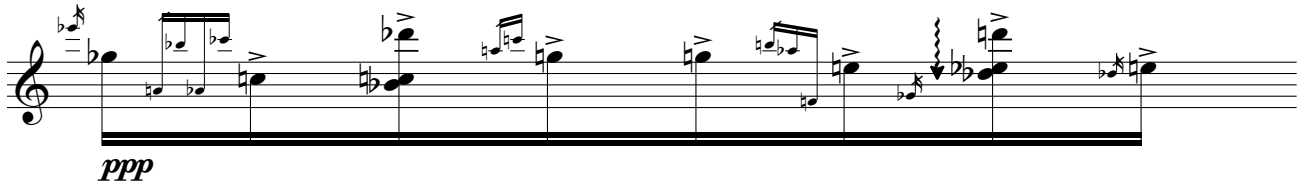
Variation 3
Slow

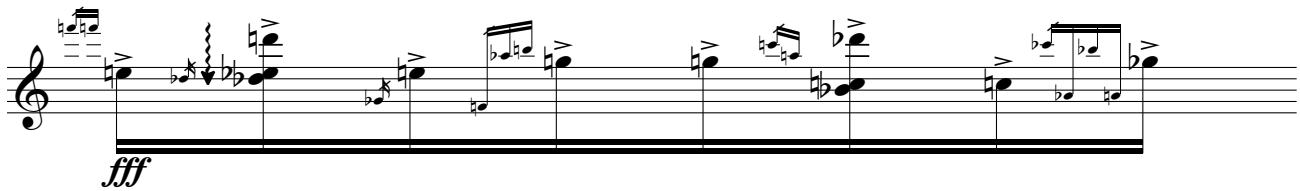


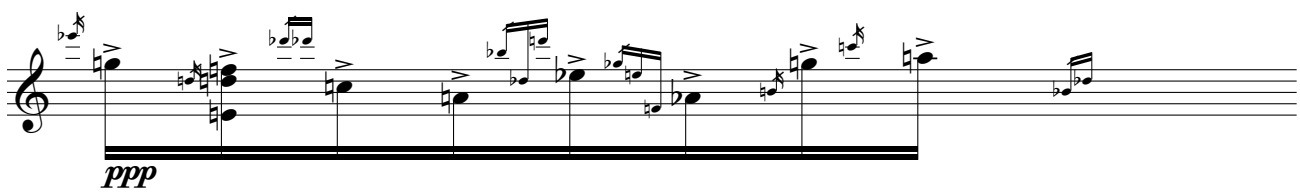


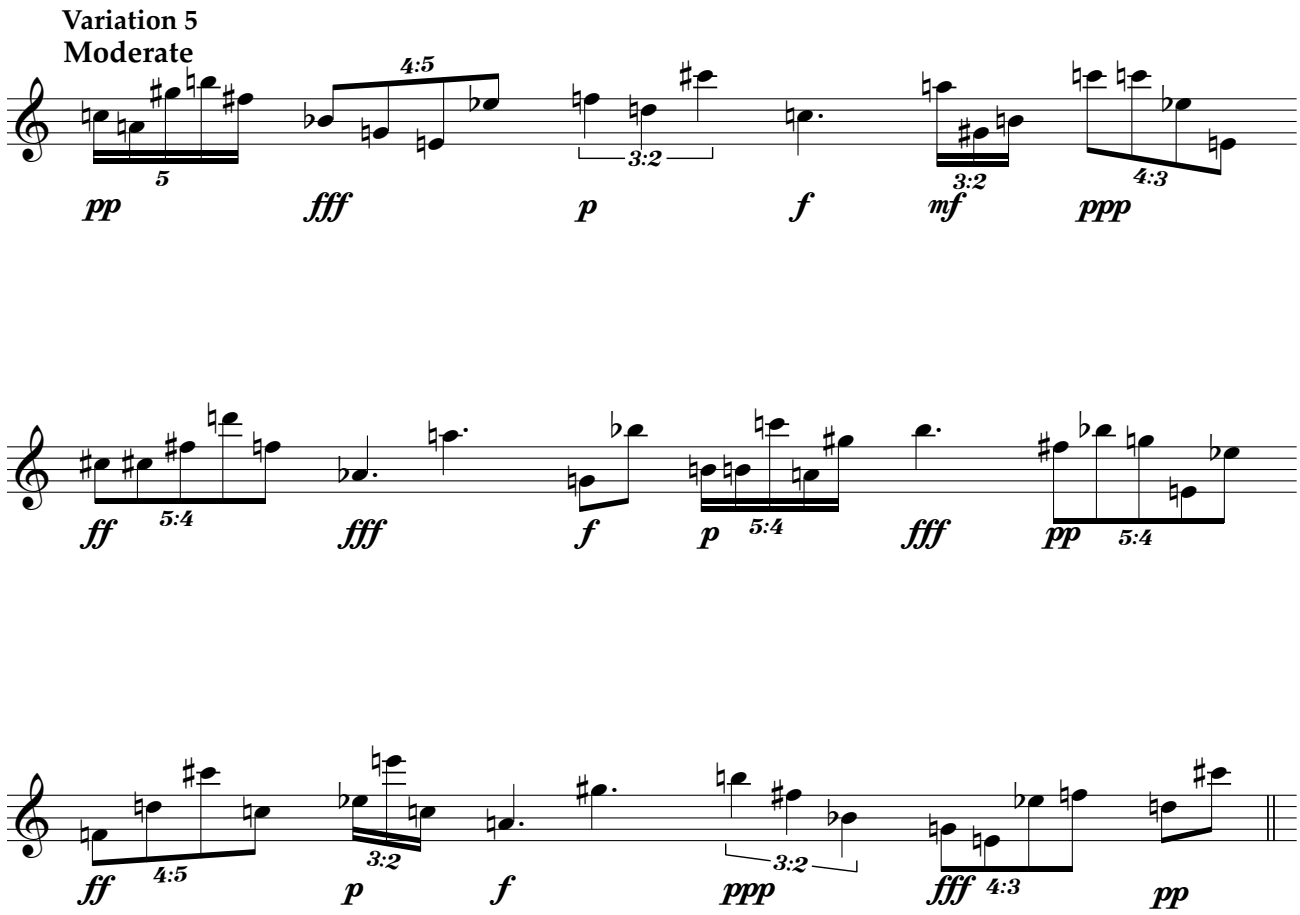
Variation 4
Quite Slow

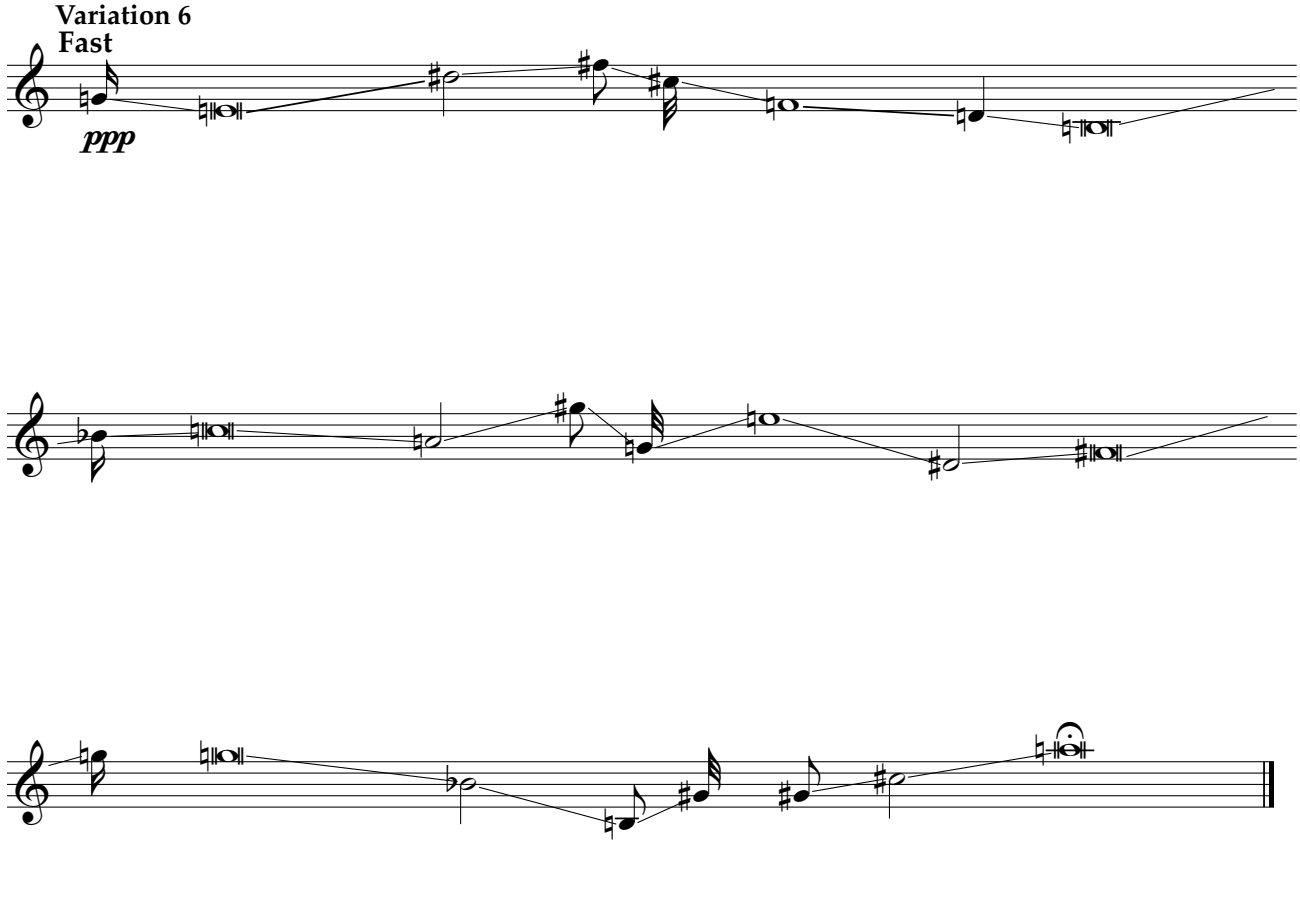






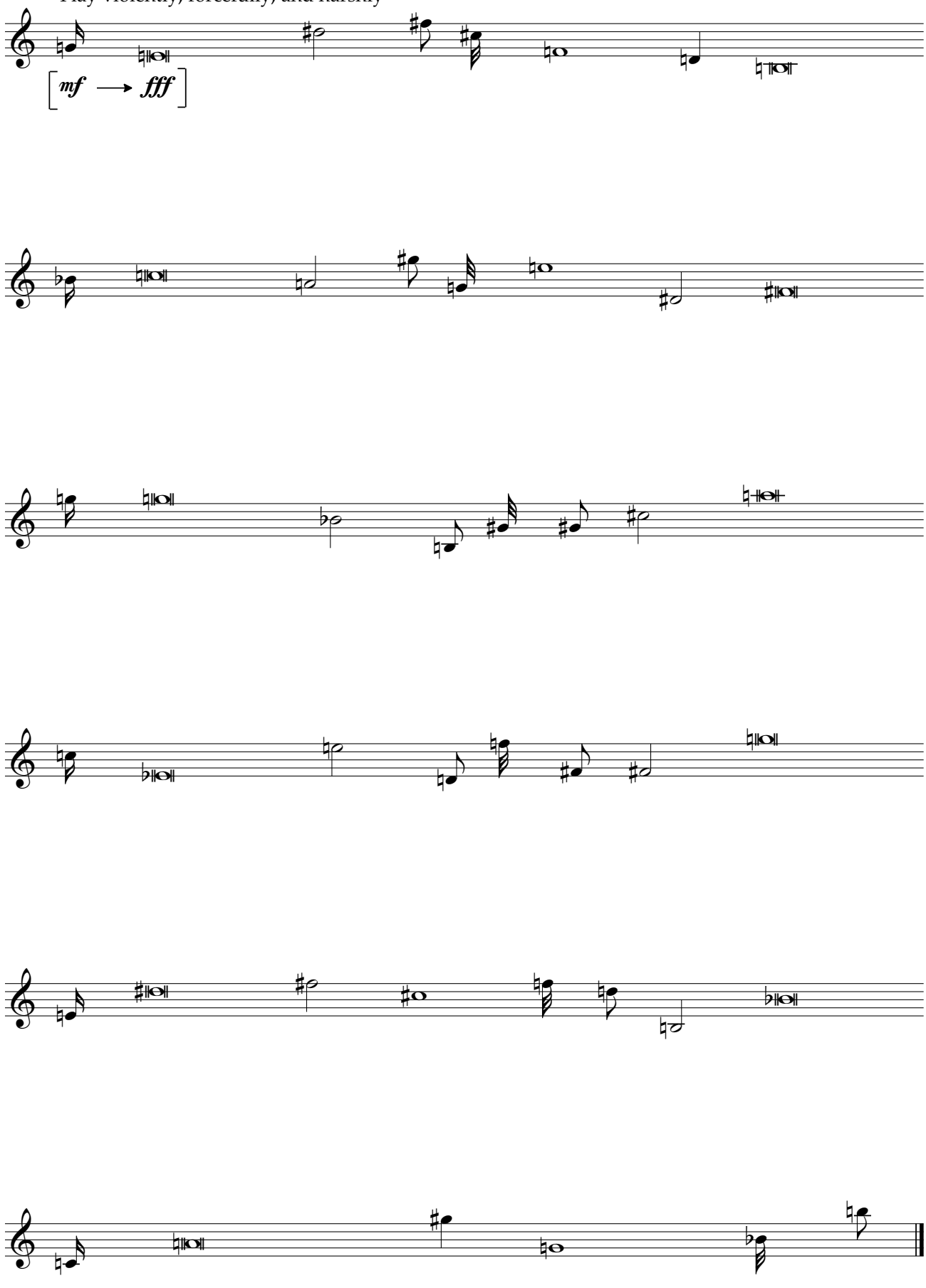



Variation 5
Moderate
pp
fff
p
f
mf
ppp
ff
fff
p
pp
fff
pp
ff
p
f
ppp
fff
pp


Variation 6
Fast
ppp

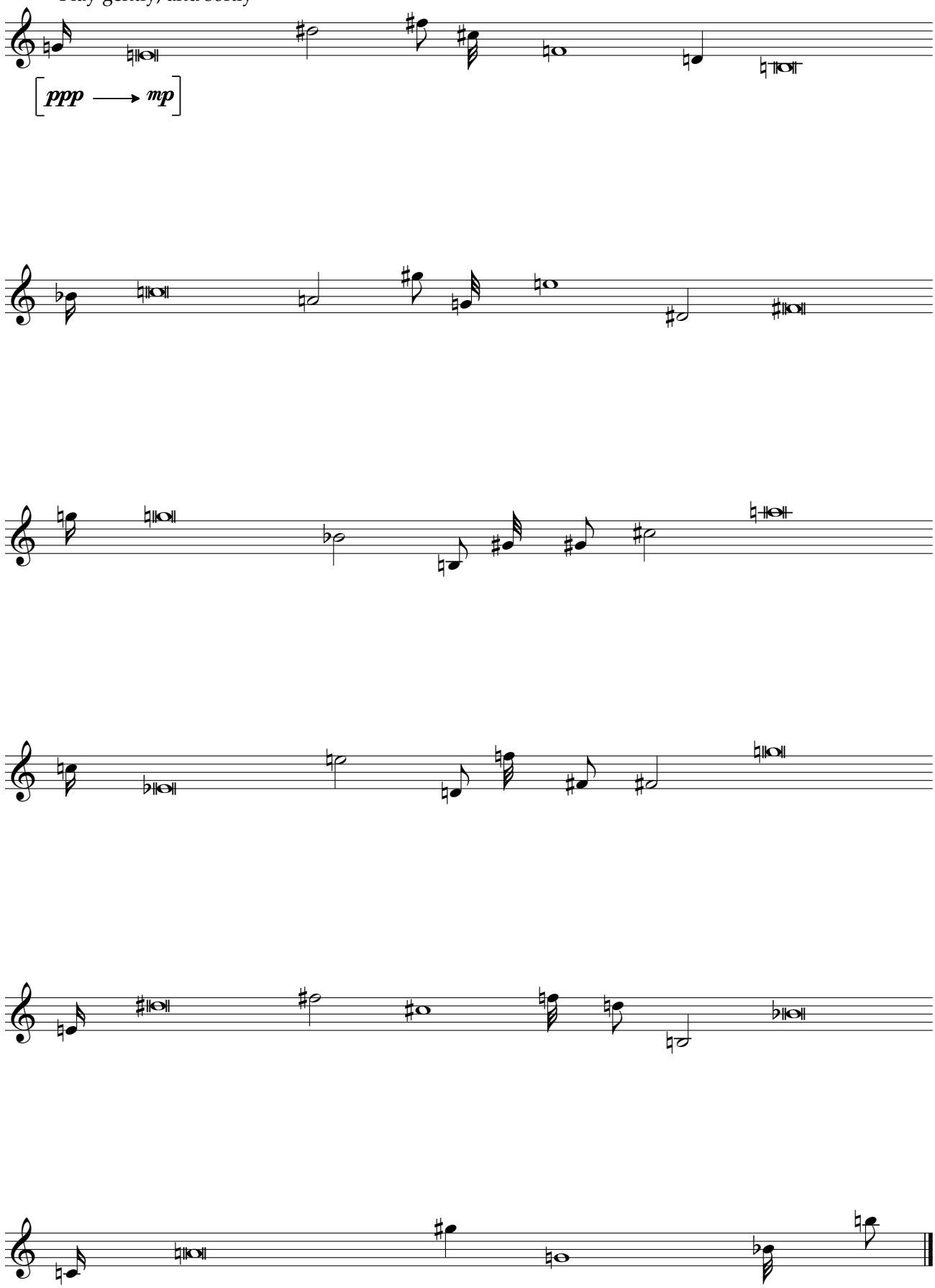
Violent

senza misura
Play violently, forcefully, and harshly



Gentle

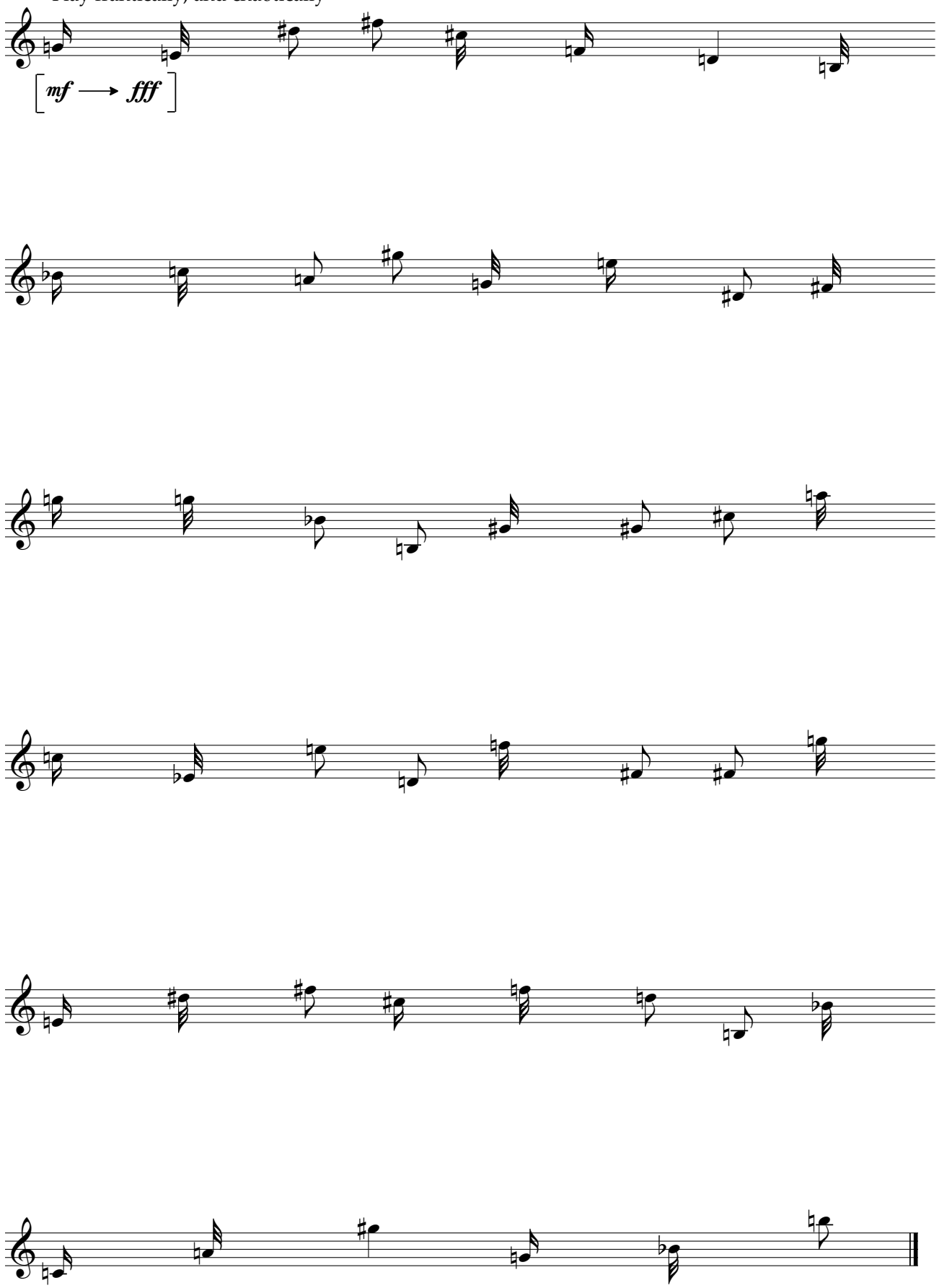
senza misura
Play gently, and softly



Frantic

Very Fast

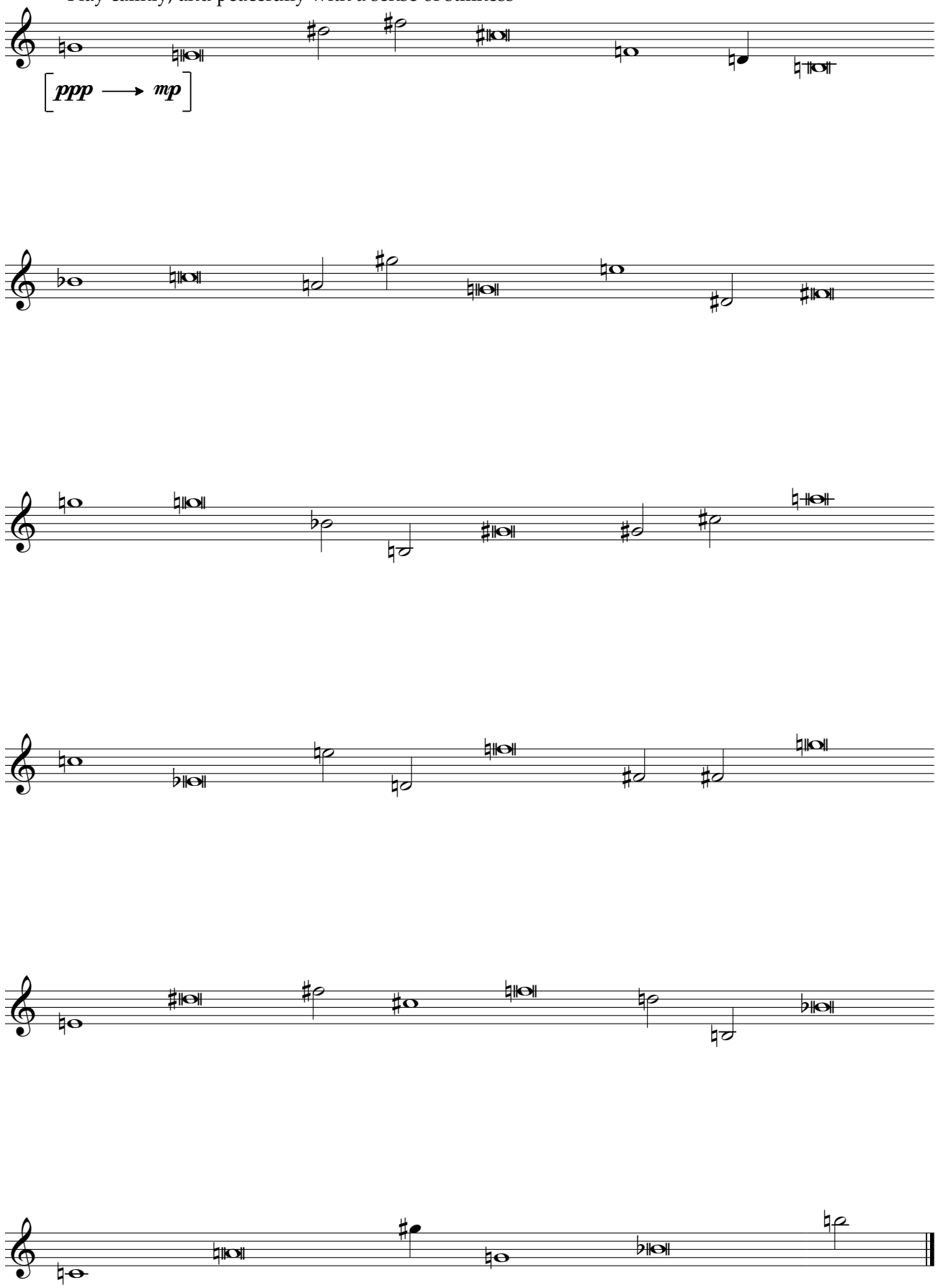
Play frantically, and chaotically



Calm

Very Slow

Play calmly, and peacefully with a sense of stillness



Mathematical

Quite Slow [***pppp***]

Work out the durations for the pitches (see key in performance notes), once you have worked out the duration, play it.

1 ÷ 4 = G	4 x 2 = E	10 - 8 = D#	1 ÷ 2 = F#
0.25 ÷ 2 = C#	1 + 3 = F	1 + 1 = D	64 ÷ 8 = B
0.125 + 0.125 = Bb	2 + 6 = C	8 ÷ 4 = A	1 - 0.5 = G#
0.25 - 0.125 = G	0.25 + 0.25 = E	2 x 1 = D#	40 - 32 = F#
0.5 ÷ 2 G	2 x 4 = G	30 - 28 = Bb	2 x 0.25 = B
2 x 0.0625 = G#	4 ÷ 8 = G#	16 ÷ 8 = C#	128 ÷ 16 = A
0.5 - 0.25 = C	5 + 3 = Eb	1 x 2 = E	20 - 19.5 = D
0.0625 + 0.0625 = F	-1 + 1.5 = F#	-10 + 12 = F#	102 - 94 = G
1 - 0.75 = E	1 x 8 = D#	105 - 103 = F#	32 ÷ 8 = C#
1 ÷ 8 = F	16 ÷ 32 = D	64 ÷ 32 = B	256 ÷ 32 = Bb

2 x 0.125 = C	1 + 7 = A	0.75 + 0.25 = G#	55 - 51 = G	2 ÷ 16 = Bb	4 x 0.125 = B