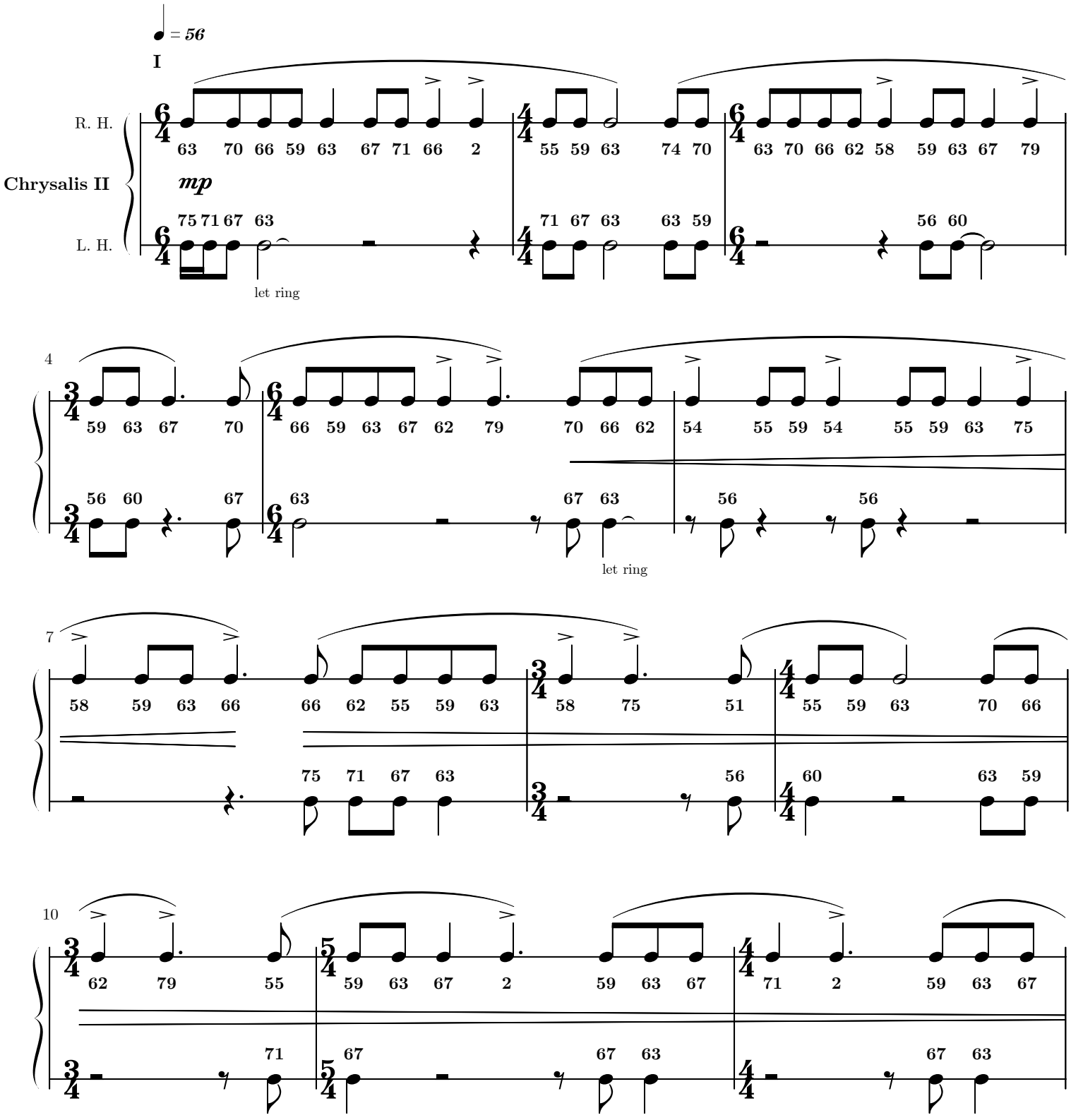
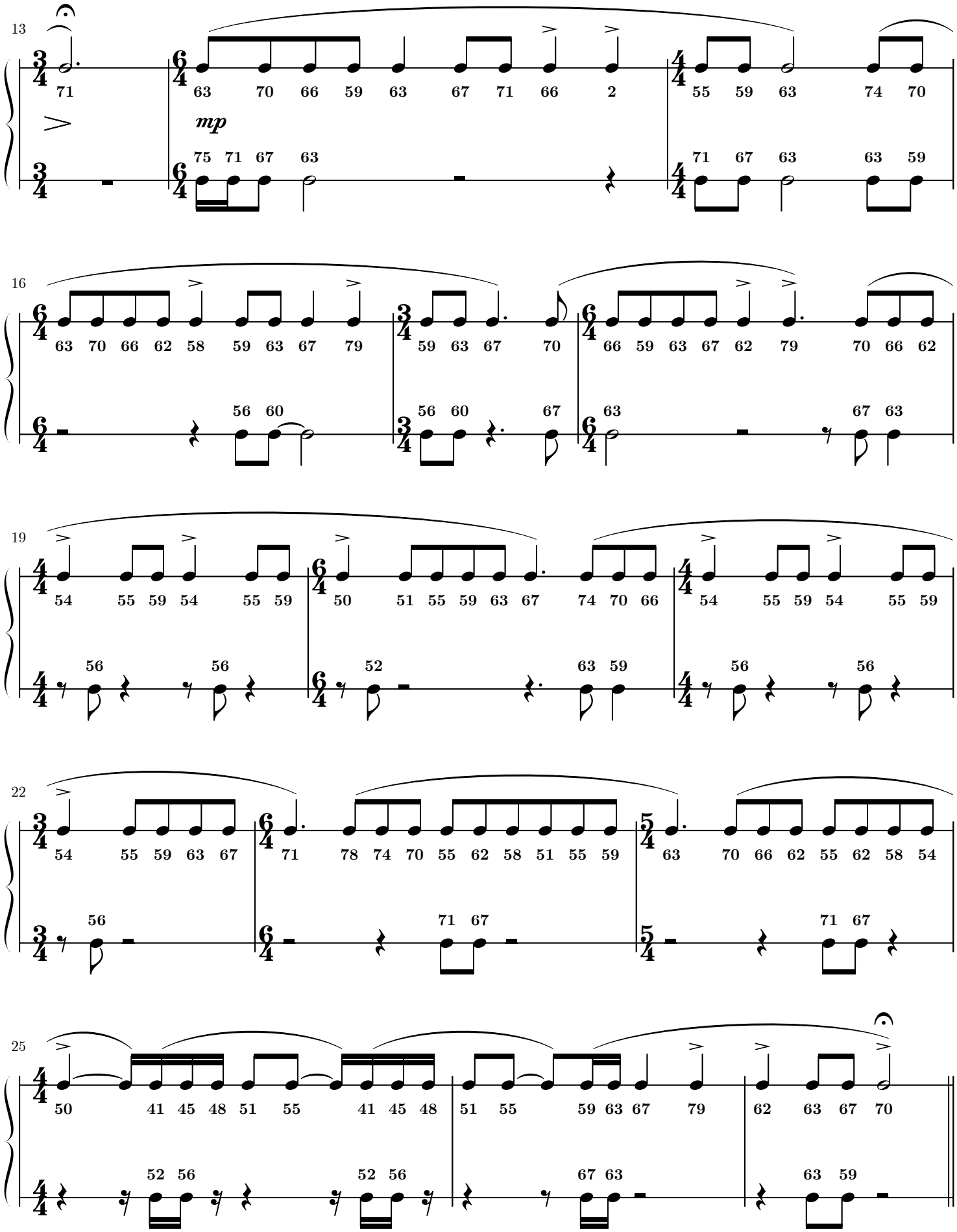
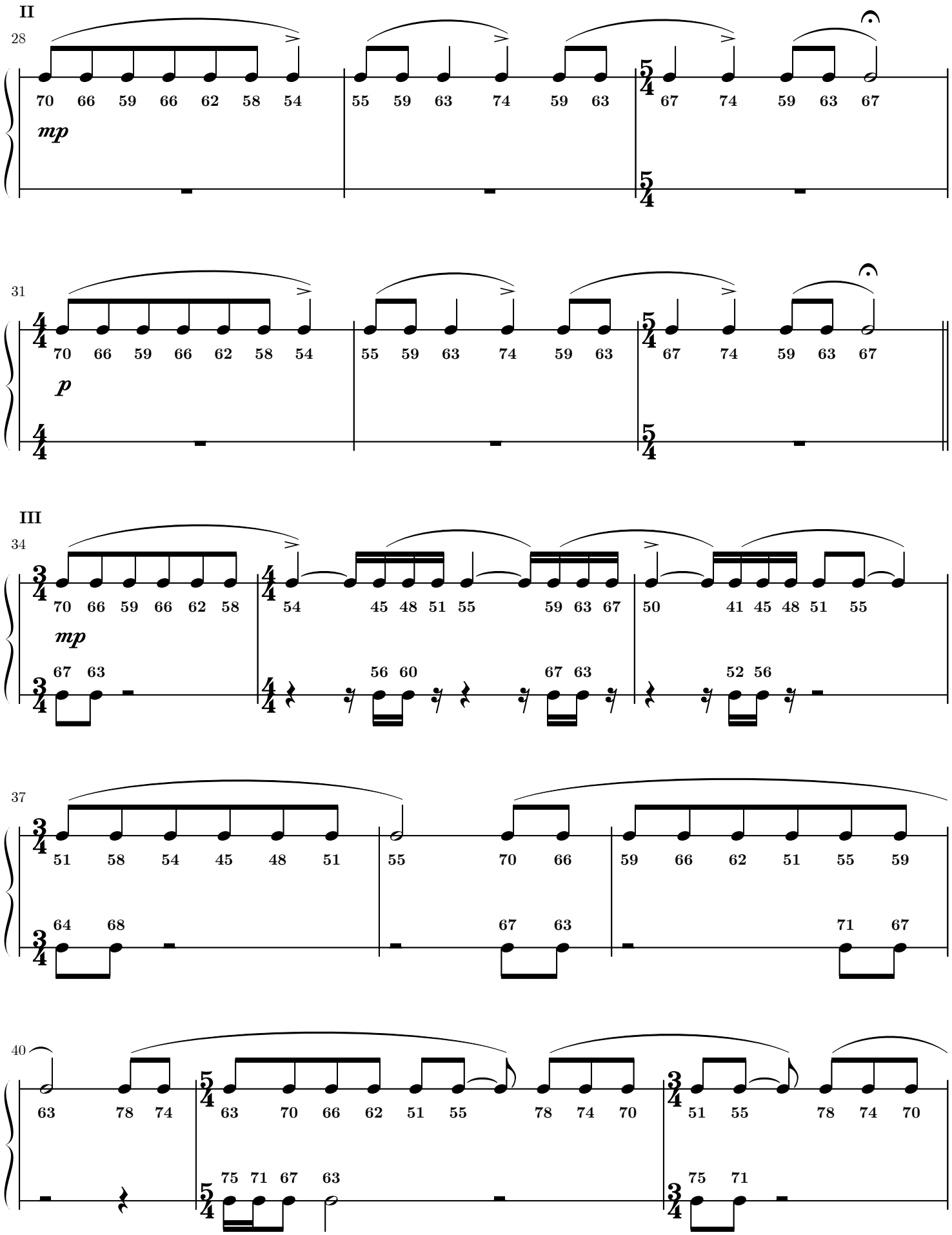
XIII. Psithurism

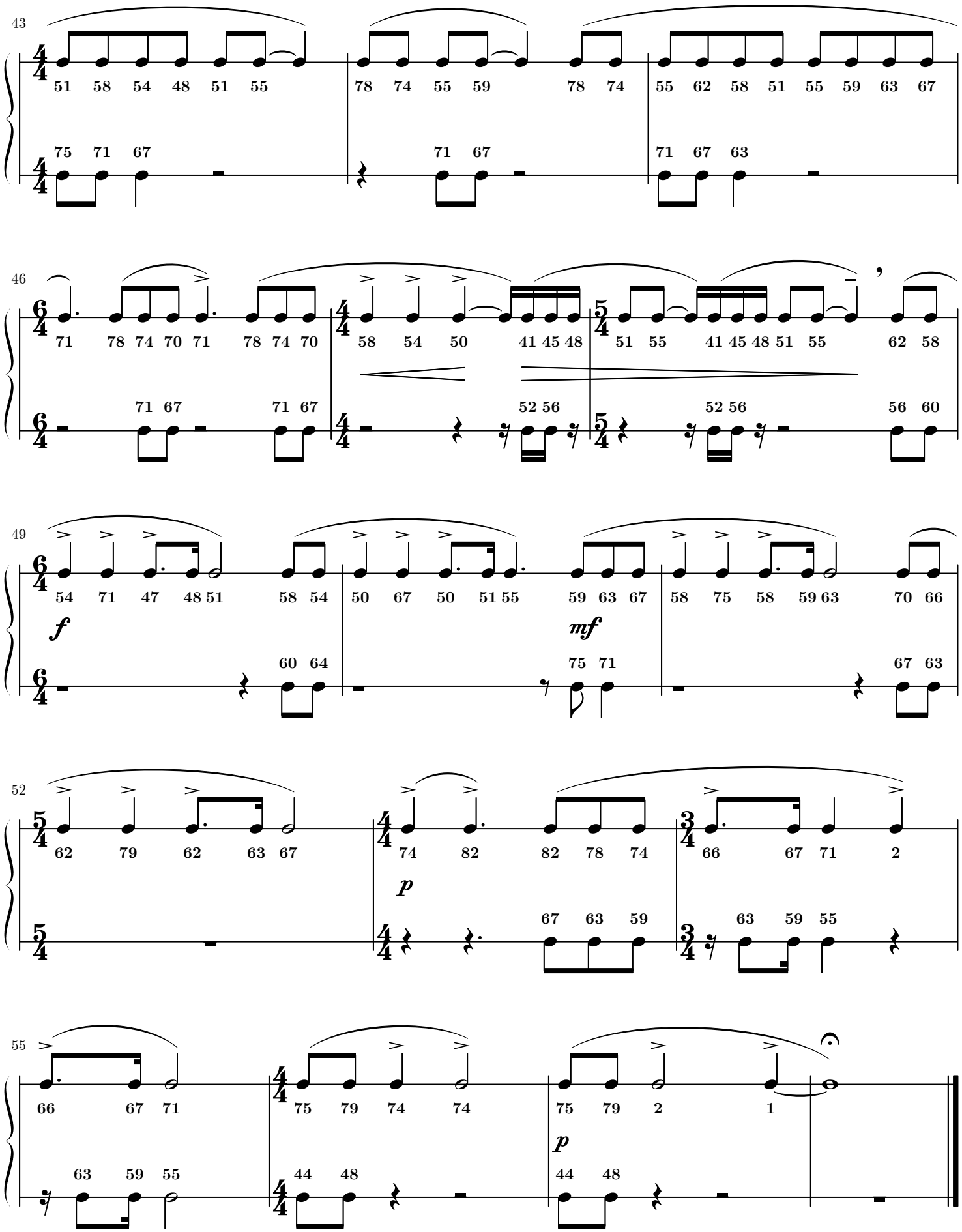
For Chrysalis II

Tablature Score




13
71
63 70 66 59 63 67 71 66 2
55 59 63 74 70
mp
75 71 67 63
71 67 63 63 59
16
63 70 66 62 58 59 63 67 79
59 63 67 70
66 59 63 67 62 79 70 66 62
56 60
56 60 67
63
67 63
19
54 55 59 54 55 59
50 51 55 59 63 67 74 70 66
54 55 59 54 55 59
56 56
52 63 59
56 56
22
54 55 59 63 67
71 78 74 70 55 62 58 51 55 59
63 70 66 62 55 62 58 54
56
71 67
71 67
25
50 41 45 48 51 55 41 45 48
51 55 59 63 67 79
62 63 67 70
52 56 52 56
67 63
63 59


II
28
70 66 59 66 62 58 54
55 59 63 74 59 63
67 74 59 63 67
mp
31
70 66 59 66 62 58 54
55 59 63 74 59 63
67 74 59 63 67
p
III
34
70 66 59 66 62 58
54
45 48 51 55
59 63 67
50
41 45 48 51 55
mp
67 63
56 60
67 63
52 56
37
51 58 54 45 48 51
55
70 66
59 66 62 51 55 59
64 68
67 63
71 67
40
63
78 74
63
70 66 62 51 55
78 74 70
51 55
78 74 70
75 71 67 63
75 71


43
51 58 54 48 51 55
78 74 55 59
78 74
55 62 58 51 55 59 63 67
75 71 67
71 67
71 67 63
46
71 78 74 70 71 78 74 70
58 54 50 41 45 48
51 55 41 45 48 51 55
62 58
71 67 71 67
52 56 52 56 56 60
49
54 71 47 48 51 58 54 50 67 50 51 55 59 63 67 58 75 58 59 63 70 66
f
mf
60 64 75 71 67 63
52
62 79 62 63 67
74 82 82 78 74
66 67 71 2
p
67 63 59 63 59 55
55
66 67 71
75 79 74 74
75 79 2 1
p
63 59 55 44 48 44 48

Psithurism — Performance Practices, Musical Notations, and Tuning Tables

Although the open strings of Chrysalis I and Chrysalis II may be damped with the fingers, hands, or forearms, this composition does not require damped strings. Consequently, all strings cease to vibrate naturally. The rate at which string vibrations decay depends on the lengths of the strings and how energetically a musician plays them. Under such circumstances, playing distinct melodic passages with the right hand and subtle harmonic passages with the left hand requires full musical awareness of how the two soundboards, the resonant cavity between the soundboards, and the 82 strings per soundboard interact. In short, everything depends on controlling the amplitudes of the strings. This requires careful listening to the decay — or the ring-time — of the vibrating strings. Imagine playing a tune on a piano with the damper pedal in the down position. The musicality of such a performance would depend entirely on controlling the relative amplitudes of the right hand notes in relation to the left hand notes, and *vice versa*.

Standard musical notation includes a "let ring" symbol. In this score, this symbol applies to all left hand half notes and quarter notes. To avoid clutter, the score shows only the first occurrence of a "let ring" half note in measure one, and of a "let ring" quarter note in measure five.

In summary, when the rhythmic values of single notes in the left hand match or exceed the rhythmic values of multiple notes in the right hand, play the left hand strings with enough energy so they are audible while playing the right hand strings. In other words, play the long left hand notes with sufficient amplitude so they ring through the playing of the short right hand notes.

All the tablature scores for Chrysalis I and Chrysalis II identify musical notes with string numbers. The longest string, or string number one, passes through a hole in the middle of the axle. When one faces a soundboard, all string numbers progress in a counterclockwise direction around the circumference of the soundboard.

Psithurism for Chrysalis II does not require playing all the strings of the left and right soundboards. The tuning tables below indicate that all but one string are tuned in groups of four and three strings per note. With a smooth and timely ascending and descending playing technique, the human ear tends to hear a given group of strings as a single note.

For *Psithurism*, all the left hand strings are tuned in groups of four strings per note. With three exceptions, this also applies to the right hand strings: here two groups include three strings per note, and string number one functions as a single string. Also, a note in the score marked with an accent specifies the playing of a single string, or *any* single string that belongs to the associated group of strings.

Chrysalis II Stringing: left side, strings 1–82, music wire #7 – 0.018 in.
Chrysalis II Stringing: right side, string 1, music wire #11 – 0.026 in.
Chrysalis II Stringing: right side, strings 2–82, music wire #9 – 0.022 in.

Chrysalis II: Left Soundboard
String Numbers, Ratios, and Frequencies

75 (74, 73) 72	3/2	D_4	294.0 cps
71 (70, 69) 68	15/8	$F\sharp_4$	367.5 cps
67 (66, 65) 64	1/1	G_4	392.0 cps
63 (62, 61) 60	9/8	A_4	441.0 cps
59 (58, 57) 56	5/4	B_4	490.0 cps
55 (54, 53) 52	4/3	C_5	522.7 cps
51 (50, 49) 48	3/2	D_5	588.0 cps
47 (46, 45) 44	5/3	E_5	653.3 cps

Chrysalis II: Right Soundboard
String Numbers, Ratios, and Frequencies

2 (3, 4) 5	9/8	A_3	220.5 cps
1	1/1	G_3	196.0 cps
82 (81, 80) 79	5/4	B_3	245.0 cps
78 (77, 76) 75	4/3	C_4	261.3 cps
74 (73, 72) 71	3/2	D_4	294.0 cps
70 (69, 68) 67	5/3	E_4	326.7 cps
66 (65, 64) 63	15/8	$F\sharp_4$	367.5 cps
62 (61, 60) 59	2/1	G_4	392.0 cps
58 (57, 56) 55	9/8	A_4	441.0 cps
54 (53, 52) 51	5/4	B_4	490.0 cps
50 (49) 48	4/3	C_5	522.7 cps
47 (46) 45	3/2	D_5	588.0 cps
44 (43, 42) 41	5/3	E_5	653.3 cps