

iDoubleBass

Scale Studies Book II

Intermediate to Advanced

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Scales appear in order of the circle of fifths. Each major scale is followed by its relative minor scale.

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C Major

♩ = 52

1 4 1 1 4 1 4 1 4 2 4 1

7 3 2 3 2 3 1 4 2 4 1 4 1

13 4 2 1 4 1 1 4 1 4 3 1

19 3 1 3 4 1 4 1 1 4 1 4 1 1

25 1 1 2 4 2 1 3 1 3 3 1 3 1 2 4 2 1 1

31 1 1 4 1 4 1 1 1 4 1 1 4 1

37 4 2 4 4 2 3 1 3 1 3 3 1

43 3 1 3 2 4 4 2 4 1 4

A Minor

♩ = 52 Melodic Minor

0 1 1 4 1 4 2 4 1 2 1 4

1 3 1 3 1 3 1 3 2 3 1 3

2 3 1 3 1 3 1 4 1 2 1 4

1 2 1 4 1 1 0 0 1 1 4

1 2 1 4 1 2 1 4 1 3 1 3

1 3 1 2 1 3 1 3 2 3 1 3

1 3 1 4 1 2 1 4 1 2 1 4

1 1 0 0 1 1 4 1 2

A Minor

49 G

1 1 4 1 2 1 2 1 2 1 2 3

55

2 3 2 3 2 1 3 2 3 2 4 2

61 D

4 1 1 4 2 2 1 4 1 1 0

67

0 2 1 4 1 4 1 3 1 3 1 3

73

1 4 1 4 1 2 0 0 2 1 2 1 4

79

4 4 1 4 1 1 2 1 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 2 1 2 1 2 1 1 4 1 4 4

91

4 1 2 1 2 0 0 0 2 1 1 2 1

97 D

4 1 4 4 1 4 1 4 2 3

A Minor

103

G D G D G

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 2

115

4 1 4 1 4 4 1 4 1 2 0

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F Major

♩ = 52

7 8 9 10 11 12 13 14 15 16 17 18

1 4 0 1 1 4 1 1 4 1 1 4

19 20 21 22 23 24 25 26 27 28 29 30

1 4 1 3 1 2 1 3 2 3 2 3

31 32 33 34 35 36 37 38 39 40 41 42

1 3 2 3 1 4 1 4 1 1 4 2

43 44 45 46 47 48 49 50 51 52 53 54

1 4 1 1 0 4 1 1 4 1 1

55 56 57 58 59 60 61 62 63 64 65 66

4 1 4 1 3 3 3 1 4 1 4 1

67 68 69 70 71 72 73 74 75 76 77 78

1 4 1 1 0 4 0 4 4 4 2 4 2 1

79 80 81 82 83 84 85 86 87 88 89 90

4 1 4 4 4 1 2 1 1 3 1 3 3 1 3 1 1 2

91 92 93 94 95 96 97 98 99 100 101 102

1 4 4 4 1 4 1 2 4 2 4 4 4 4 (

F Major

49

Musical notation for measures 49-54. Measure 49 has a whole rest. Measure 50 starts with a 3/2 time signature. The notes are: 50: C4, D4, E4, F4; 51: G4, A4, B4, C5; 52: B4, A4, G4, F4; 53: E4, D4, C4, B3; 54: A3, G3, F3, E3. Fingering: 1, 1, 4, 1, 1, 0, 2, 2, 1, 2, 2.

55

Musical notation for measures 55-60. Notes: 55: C4, D4, E4, F4; 56: G4, A4, B4, C5; 57: B4, A4, G4, F4; 58: E4, D4, C4, B3; 59: A3, G3, F3, E3; 60: D4, C4, B3, A3. Fingering: 1, 4, 1, 4, 1, 4, 1, 4, 4, 3, 1, 2.

61

Musical notation for measures 61-66. Notes: 61: G4, A4, B4, C5; 62: B4, A4, G4, F4; 63: E4, D4, C4, B3; 64: A3, G3, F3, E3; 65: D4, C4, B3, A3; 66: G4, A4, B4, C5. Fingering: 1, 3, 1, 3, 1, 3, 3, 1, 3, 1, 3, 1.

67

Musical notation for measures 67-72. Notes: 67: G4, A4, B4, C5; 68: B4, A4, G4, F4; 69: E4, D4, C4, B3; 70: A3, G3, F3, E3; 71: D4, C4, B3, A3; 72: G4, A4, B4, C5. Fingering: 2, 1, 3, 4, 4, 1, 4, 1, 4, 1, 4, 1.

73

Musical notation for measures 73-78. Notes: 73: G4, A4, B4, C5; 74: B4, A4, G4, F4; 75: E4, D4, C4, B3; 76: A3, G3, F3, E3; 77: D4, C4, B3, A3; 78: G4, A4, B4, C5. Fingering: 2, 2, 1, 2, 2, 0, 1.

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D Minor

♩ = 52 Melodic Minor

0 1 2 1 4 1 4 1 4 1 3 1

7

3 2 3 1 3 2 3 1 4 1 4 1

13 Natural Minor

4 1 2 1 0 0 1 1 4 1 1

19

4 1 4 1 3 1 2 1 3 1 3 2

25

3 1 4 1 4 2 1 4 2 1 0

31 Harmonic Minor

0 1 1 4 2 4 1 1 4 1 3 1

37

2 2 3 2 3 2 3 1 4 1 1 4

43

2 4 1 1 0 4 1 4 4

D Minor

49

3 1 4 4 4 1 4 1 2 1 2 1 1

55

1 3 1 3 1 1 2 1 3 3 1 2 1 1 3 1 3 1

61

1 1 2 1 2 1 1 1 2 1 1 1 2 1

67

1 4 1 3 1 3 1 2 1 3 3 1

73

2 1 3 1 3 1 4 1 1 2 1

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B \flat Major

$\text{♩} = 52$

1 4 2 4 1 4 1 2 1 4 1 4

7 1 3 1 3 1 2 1 3 2 3 2 3

13 1 3 2 3 1 3 1 4 1 4 1 2

19 1 4 1 4 2 4 1 1 4 1 2

25 1 4 1 3 1 3 1 3 1 4 1 2

31 1 4 1 1 4 1 4 1 1 1 1 1 2 1 1

37 3 1 3 2 3 1 2 1 1 3 1 3 3 1 3 1 1 2

43 1 3 2 3 1 3 1 1 2 1 1 1 1 1 1 1

B♭ Major

49

1 4 1 1 4 1 2 1 2 2

55

1 4 1 3 1 3 1 2 3 3 1 2

61

1 3 1 3 1 3 3 1 3 1 3 1

67

2 1 3 3 2 1 3 1 3 1 4 1

73

2 2 1 2 1 4 1

Micah Howard © 2018

G Minor

♩ = 52 Melodic Minor

4 0 1 1 4 1 2 4 2 4 1 4

7 1 4 1 3 1 3 1 3 2 3 1 3

13 2 3 1 3 1 4 1 4 1 4 2 4

19 Natural Minor 1 4 2 4 1 0 4 4 0 1 4

25 G 2 4 1 4 2 4 1 4 1 4 1 3

31 1 3 1 2 1 3 1 3 2 3 1 3

37 D 1 4 1 4 1 4 2 4 1 4 2 4

43 Harmonic Minor 1 0 4 4 0 1 4 2 4

G Minor

49

4 1 4 2 3 1 2 1 2 1 2 3

55

2 3 2 3 2 1 2 1 2 1 3 2

61

4 1 4 1 1 4 2 4 1 0 4

67

4 1 4 4 1 4 1 3 1 3 1 3

73

1 4 1 4 4 1 4 1 2 1 2 1 1

79

1 1 4 1 2 1 2 1 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 2 1 2 1 2 1 2 1 4 1 1

91

1 1 2 1 2 1 1 4 1 4 4 1 4

97

4 1 4 4 1 4 1 2 1 3

G Minor

103

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 1

115

2 1 4 1 4 4 1 4 4 1 4

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E \flat Major

$\text{♩} = 52$ D

1 4 2 4 1 4 1 1 4 1 2 1

7

3 2 3 2 3 1 3 2 4 1 1 4

13

1 4 2 4 1 1 4 1 4 1 3

19

3 3 1 4 1 4 1 1 4 1 4 1 1

25

1 1 1 2 3 1 3 1 3 3 1 3 1 3 2 1 1 1

31

1 1 4 1 4 1 1 2 1 4 4 1 4

37

4 3 1 2 1 3 1 3 1 3 3 1

43

3 1 3 1 2 1 3 4 4 1

C Minor

♩ = 52 Melodic Minor

1 2 4 1 4 1 4 1 4 1 4 1

7

3 2 3 1 3 2 4 1 4 1 4 1

13 Natural Minor

4 1 4 2 1 1 2 4 1 4 1

19

4 1 4 1 4 1 2 1 3 1 3 2

25

4 1 4 1 4 1 4 1 4 2 1

31 Harmonic Minor

1 2 4 1 2 4 1 1 4 1 4 1

37

2 2 3 2 3 2 4 1 4 1 1 4

43

2 1 4 2 1 1 2 1 4

C Minor

49

3 3 1 4 1 2 1 1 2 1 2 1 1

55

1 1 1 4 1 1 2 1 3 3 1 2 1 1 4 1 1 1

61

1 1 2 1 2 1 1 1 2 1 1 2 1

67

1 4 1 4 1 3 1 2 1 3 3 1

73

2 1 3 1 4 1 4 1 1 2 1

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A \flat Major

$\text{♩} = 52$

1 4 1 1 4 1 2 4 1 4 1 4

7

1 3 1 3 1 2 1 3 2 3 2 3

13

1 3 2 3 1 3 1 4 1 4 1 4

19

2 1 4 1 1 4 1 2 1 4 4

25

2 4 1 3 1 3 1 3 1 4 2 4

31

4 1 2 2 1 4 1 4 4 4 4 4 2 4 2 1

37

4 1 2 1 2 1 2 1 1 3 1 3 3 1 3 1 2 3

43

2 3 2 3 1 4 1 2 4 2 4 4 4 4

F Minor

♩ = 52 Melodic Minor

1 2 4 1 1 4 1 2 2 4 1 4

1 4 1 3 1 3 1 3 2 3 1 3

2 3 1 3 1 4 1 4 1 4 2 4

1 4 2 1 4 2 1 1 2 4 1

Natural Minor

2 4 1 4 2 4 1 4 1 4 1 3

1 3 1 2 1 3 1 3 2 3 1 3

1 4 1 4 1 4 2 4 1 4 2 1

4 2 1 1 2 4 1 2 4

Harmonic Minor

F Minor

49

Musical staff for measures 49-54. The staff is in bass clef with a key signature of two flats (B-flat and E-flat). It contains a sequence of eighth notes. A bracket above the staff spans measures 52-54, with a 'G' above it. A treble clef appears at the end of measure 54.

4 1 4 2 4 1 2 1 2 1 2 3

55

Musical staff for measures 55-60. The staff is in treble clef with a key signature of two flats. It contains a sequence of eighth notes. A bracket above the staff spans measures 56-58. A 'D' above the staff is positioned above measure 60. A bass clef appears at the end of measure 60.

2 3 2 3 2 1 3 2 2 1 4 2

61

Musical staff for measures 61-66. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes. The staff ends with a double bar line.

4 1 4 1 1 4 2 1 4 2 1

67

Musical staff for measures 67-72. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes. A treble clef appears at the end of measure 70.

1 4 2 2 2 1 4 1 3 3 3 1

73

Musical staff for measures 73-78. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes. A double bar line is followed by a 3/2 time signature change. The staff ends with a double bar line.

4 1 2 2 2 4 1 1 4 2 4 2 2

79

Musical staff for measures 79-84. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes. A treble clef appears at the end of measure 82.

2 2 4 1 4 2 4 2 4 4 4 1 3 1 1 2 1 3

85

Musical staff for measures 85-90. The staff is in treble clef with a key signature of two flats. It contains a sequence of eighth notes. A bass clef appears at the end of measure 88.

3 1 2 1 1 3 1 4 4 4 2 4 2 4 1 4 2 2

91

Musical staff for measures 91-96. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes. A double bar line is followed by a 3/2 time signature change. The staff ends with a double bar line.

2 2 4 2 4 1 1 1 4 2 2 4 2

97

Musical staff for measures 97-102. The staff is in bass clef with a key signature of two flats. It contains a sequence of eighth notes.

2 4 1 1 4 2 1 4 2 4

F Minor

103

4 3 1 3 1 3 1 2 1 3 3 1

D G D G

This musical staff contains measures 103 through 108. It begins with a bass clef and a key signature of two flats (B-flat and E-flat). The notes are: 103 (F4, G4), 104 (F4, G4), 105 (F4, G4), 106 (F4, G4), 107 (F4, G4), 108 (F4, G4). Fingerings are indicated by numbers 1-4 below the notes. Chord symbols 'D' and 'G' are placed above the notes in measures 105, 107, and 108.

109

2 1 3 1 3 1 3 4 4 1 4 2

This musical staff contains measures 109 through 114. It begins with a treble clef and a key signature of two flats. The notes are: 109 (F4, G4), 110 (F4, G4), 111 (F4, G4), 112 (F4, G4), 113 (F4, G4), 114 (F4, G4). Fingerings are indicated by numbers 1-4 below the notes.

115

4 1 2 4 1 1 4 2 2 4 1

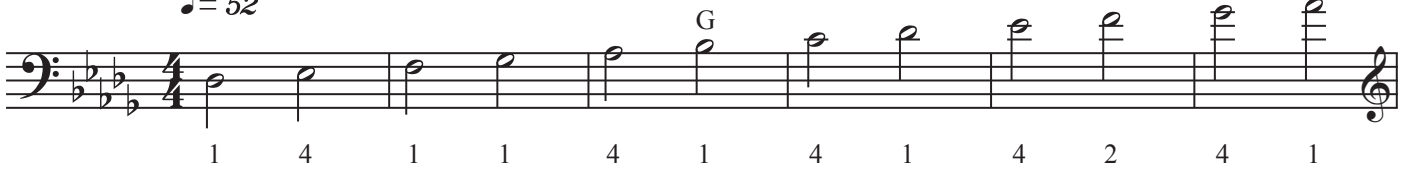
This musical staff contains measures 115 through 120. It begins with a bass clef and a key signature of two flats. The notes are: 115 (F4, G4), 116 (F4, G4), 117 (F4, G4), 118 (F4, G4), 119 (F4, G4), 120 (F4, G4). Fingerings are indicated by numbers 1-4 below the notes.

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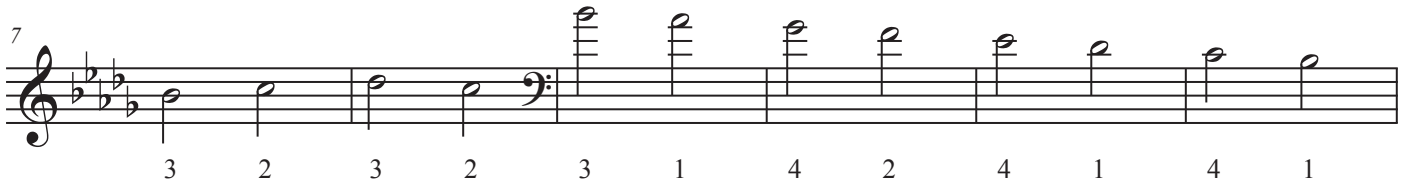
D \flat Major

♩ = 52

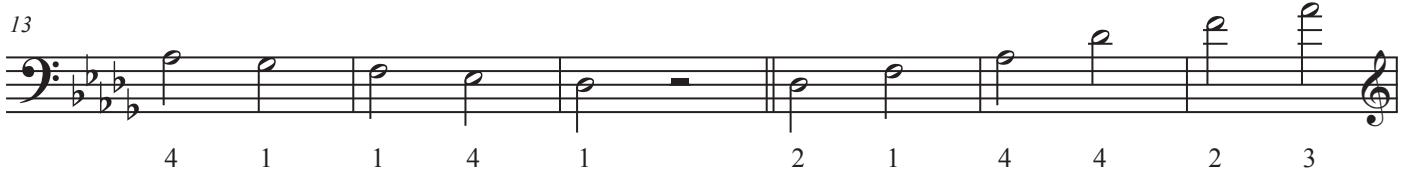
1 4 1 1 4 1 4 1 4 2 4 1



7 3 2 3 2 3 1 4 2 4 1 4 1



13 4 1 1 4 1 2 1 4 4 2 3



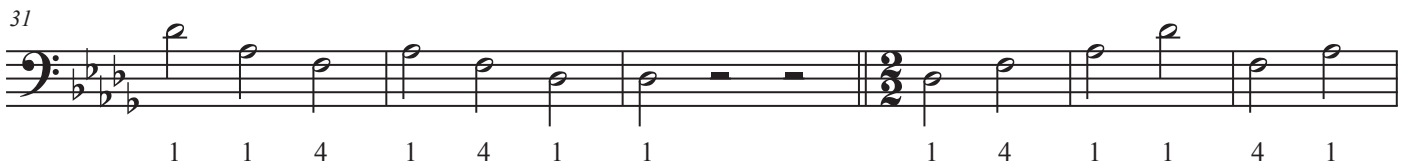
19 3 1 4 4 4 1 2 1 4 1 4 1 1



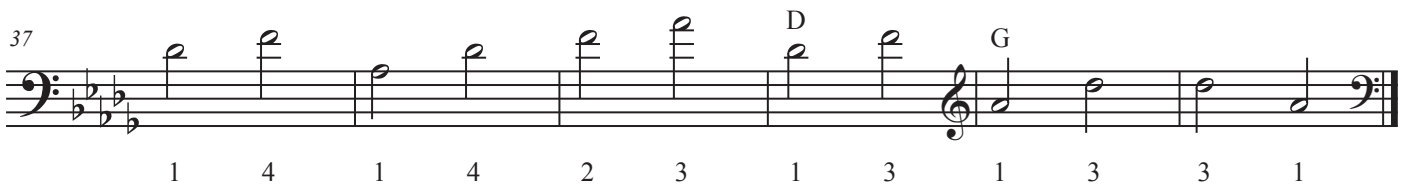
25 1 1 2 4 2 1 3 1 3 3 1 3 1 2 4 2 1 1



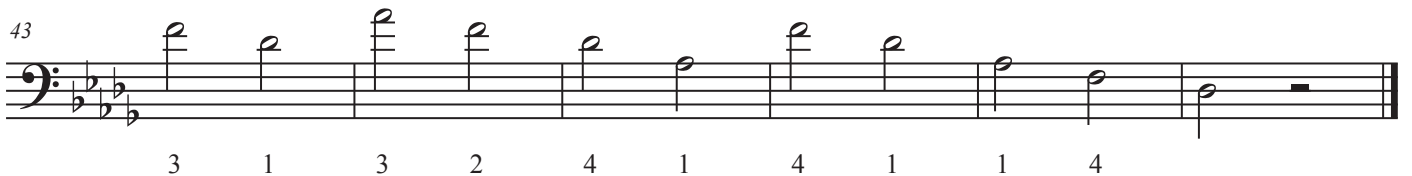
31 1 1 4 1 4 1 1 1 4 1 1 4 1



37 1 4 1 4 2 3 1 3 1 3 3 1



43 3 1 3 2 4 1 4 1 1 4



B \flat Minor

$\text{♩} = 52$ Melodic Minor

1 4 1 4 1 4 1 2 1 2 1 4

7

1 3 1 3 1 3 1 3 2 3 1 3

13

2 3 1 3 1 3 1 4 1 2 1 4

19

Natural Minor

1 2 1 4 1 4 1 1 4 1 4

25

1 2 1 4 1 2 1 4 1 3 1 3

31

1 3 1 2 1 3 1 3 2 3 1 3

37

1 3 1 4 1 2 1 4 1 2 1 4

43

Harmonic Minor

1 4 1 1 2 4 1 2 4

B \flat Minor

49

4 1 3 2 3 1 2 1 2 1 2 3

55

2 3 2 3 2 1 3 2 2 1 3 2

61

3 1 4 1 1 4 2 1 4 2 1

67

1 4 2 4 1 4 1 3 1 3 1 3

73

1 4 1 4 2 4 1 1 4 2 4 2 2

79

2 2 1 4 1 1 2 1 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 3 2 3 2 4 2 1 4 1 2 2

91

2 2 4 2 4 1 1 1 4 2 2 4 2

97

2 4 1 4 1 4 1 4 2 3

B \flat Minor

103

G D G D G

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 2

115

4 1 4 1 4 1 4 2 2 4 1

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G \flat Major

$\text{♩} = 52$

1 4 1 1 4 1 2 4 1 4 1 4

7 1 4 1 3 1 2 1 3 2 3 2 3

13 1 3 2 3 1 4 1 4 1 4 1 4

19 2 1 4 2 1 4 1 2 1 4 4

25 4 1 4 3 1 3 1 3 4 1 4 4

31 4 1 2 2 1 4 1 4 4 4 4 2 4 2 1

37 4 1 4 4 4 1 2 1 1 3 1 3 3 1 3 1 1 2

43 1 4 4 4 1 4 1 2 4 2 4 4 4 4

G \flat Major

49

Musical staff 49-54 in bass clef, G \flat Major. The staff contains two measures of rests followed by a sequence of eighth notes. Fingering numbers are written below the notes: 2, 2, 1, 4, 4, 1, 4, 4, 2, 4, 4.

55

Musical staff 55-60 in bass clef, G \flat Major. The staff contains a sequence of eighth notes with some beamed sixteenth notes. Fingering numbers are written below the notes: 2, 4, 1, 4, 1, 4, 1, 4, 4, 3, 1, 2.

61

Musical staff 61-66 in treble clef, G \flat Major. The staff contains a sequence of eighth notes with some beamed sixteenth notes. Chord symbols 'G' and 'D' are placed above the first two measures. Fingering numbers are written below the notes: 1, 3, 1, 3, 1, 3, 3, 1, 3, 1, 3, 2.

67

Musical staff 67-72 in bass clef, G \flat Major. The staff contains a sequence of eighth notes with some beamed sixteenth notes. Fingering numbers are written below the notes: 3, 1, 3, 4, 4, 1, 4, 1, 4, 1, 4, 2.

73

Musical staff 73-78 in bass clef, G \flat Major. The staff contains a sequence of eighth notes ending with a double bar line. Fingering numbers are written below the notes: 4, 4, 2, 4, 4, 1, 2.

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E \flat Minor

$\bullet = 52$ Melodic Minor

1 2 4 1 4 1 4 1 4 1 3 1

7

3 2 3 1 3 2 3 1 4 1 4 1

13 Natural Minor

4 1 4 2 1 1 2 4 1 4 1

19

4 1 4 1 3 1 2 1 3 1 3 2

25

3 1 4 1 4 1 4 1 4 2 1

31 Harmonic Minor

1 4 1 4 2 4 1 1 4 1 3 2

37

3 2 3 2 3 2 3 1 4 1 1 4

43

2 4 1 4 1 1 4 2 2

E♭ Minor

49

3 3 1 2 2 4 1 1 4 2 4 2 2

55

2 2 1 3 1 1 2 1 3 3 1 2 1 1 3 1 2 2

61

2 2 4 2 4 1 1 1 4 2 2 4 2

67

2 4 1 3 1 3 1 2 1 3 3 1

73

2 1 3 1 3 1 4 2 2 4 1

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C \flat Major

$\bullet = 52$

1 4 2 4 1 4 1 2 1 4 1 4

1 3 1 3 1 2 1 3 2 3 2 3

1 3 2 3 1 3 1 4 1 4 1 2

1 4 1 4 2 4 1 1 1 4 1 4

2 4 1 3 1 3 1 3 1 4 2 4

1 4 1 1 4 1 4 1 1 1 1 2 4 2 1

3 1 3 2 3 1 2 1 3 1 3 3 3 3 1 3 1 2

1 3 2 3 1 3 1 2 4 2 1 1 1 1

C \flat Major

49

1 4 1 1 4 1 1 4 1 4

55

2 4 1 3 1 3 1 2 3 3 1 2

61

1 3 1 3 1 3 3 1 3 1 3 1

67

2 1 3 3 2 1 3 1 3 1 4 2

73

4 1 4 1 1 4 1

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A \flat Minor

$\text{♩} = 52$ Melodic Minor

4 1 1 4 1 4 2 4 1 2 1 4

7

1 3 1 3 1 3 1 3 2 3 1 3

13

2 3 1 3 1 4 1 4 1 2 1 4

19

Natural Minor

1 4 2 4 1 1 4 4 1 1 4

25

2 4 1 4 1 2 1 4 1 4 1 3

31

1 3 1 2 1 3 1 3 2 3 1 3

37

1 4 1 4 1 2 1 4 1 4 2 4

43

Harmonic Minor

1 1 4 4 1 1 4 2 4

A \flat Minor

49

4 1 4 2 3 1 2 1 2 1 2 3

55

2 3 2 3 2 1 3 2 2 1 3 2

61

4 1 4 1 1 4 2 4 1 1 4

67

4 1 4 4 1 4 1 3 1 3 1 3

73

1 4 1 4 4 1 4 1 4 2 4 2 2

79

2 2 4 1 4 2 4 2 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 3 2 3 2 4 2 4 1 4 2 2

91

2 2 4 2 4 1 1 1 4 2 2 4 2

97

2 4 1 1 4 2 1 4 2 3

A \flat Minor

103

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 2

115

4 1 2 4 1 1 4 2 2 4 1

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C# Major

♩ = 52

1 4 1 1 4 1 4 1 4 2 4 1

3 2 3 2 3 1 4 2 4 1 4 1

4 1 1 4 1 2 1 4 4 2 3

3 1 4 4 4 1 2 1 4 1 4 1 1

1 1 2 4 2 1 3 1 3 3 1 3 1 2 4 2 1 1

1 1 4 1 4 1 1 1 4 1 1 4 1

1 4 1 4 2 3 1 3 1 3 3 1

D G

3 1 3 2 4 1 4 1 1 4

A# Minor

♩ = 52 Melodic Minor

1 4 1 4 1 4 1 2 1 2 1 4

7

1 3 1 3 1 3 1 3 2 3 1 3

13

2 3 1 3 1 3 1 4 1 2 1 4

19 Natural Minor

1 2 1 4 1 4 1 1 1 4 1 4

25

1 2 1 4 1 2 1 4 1 3 1 3

31

1 3 1 2 1 3 1 3 2 3 1 3

37

1 3 1 4 1 2 1 4 1 2 1 4

43 Harmonic Minor

1 4 1 1 2 4 1 2 4

A# Minor

49

4 1 3 2 3 1

G

55

2 3 2 3 2 1 3 2

D

61

3 1 4 1 1 4 2 1 4 2 1

67

1 4 2 4 1 4 1 3 1 3 1 3

73

1 4 1 4 2 4 1 1 4 2 4 2 2

79

2 2 1 4 1 1 2 1 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 3 2 3 2 4 2 1 4 1 2 2

91

2 2 4 2 4 1 1 1 4 2 2 4 2

97

2 4 1 4 1 4 1 4 2 3

D

A# Minor

103

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 2

115

4 1 4 1 4 1 4 2 2 4 1

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F# Major

♩ = 52

1 4 1 1 4 1 2 4 1 4 1 4

7 1 4 1 3 1 2 1 3 2 3 2 3

13 1 3 2 3 1 4 1 4 1 4 1 4

19 2 1 4 2 1 4 1 2 1 4 4

25 4 1 4 3 1 3 1 3 4 1 4 4

31 4 1 2 2 1 4 1 4 4 4 4 2 4 2 1

37 4 1 4 4 4 1 2 1 1 3 1 3 3 1 3 1 1 2

43 1 4 4 4 1 4 1 2 4 2 4 4 4 4

F# Major

49

2 2 1 4 4 1 4 4 2 4 4

55

2 4 1 4 1 4 1 4 4 3 1 2

61

1 3 1 3 1 3 3 1 3 1 3 2

67

3 1 3 4 4 1 4 1 4 1 4 2

73

4 4 2 4 4 1 2

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D# Minor

♩ = 52 Melodic Minor

G

1 2 4 1 4 1 4 1 4 1 3 1

7

3 2 3 1 3 2 3 1 4 1 4 1

13

D Natural Minor G

4 1 4 2 1 1 2 4 1 4 1

19

4 1 4 1 3 1 2 1 3 1 3 2

25

3 1 4 1 4 1 4 1 4 2 1

31

Harmonic Minor G

1 4 1 4 2 4 1 1 4 1 3 2

37

D

3 2 3 2 3 2 3 1 4 1 1 4

43

A

2 4 1 4 1 1 4 2 2

D# Minor

49

3 3 1 2 2 4 1

A

1 4 2 4 2 2

55

2 2 1 3 1 1 2 1 3 3 1 2 1 1 3 1 2 2

61

2 2 4 2 4 1 1

A

1 4 2 2 4 2

67

2 4 1 3 1 3 1 2

D

G

1 3 3 1

73

2 1 3 1 3 1 4 2 2 4 1

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B Major

♩ = 52

1 4 2 4 1 4 1 2 1 4 1 4

7 1 3 1 3 1 2 1 3 2 3 2 3

13 1 3 2 3 1 3 1 4 1 4 1 2

19 1 4 1 4 2 4 1 1 4 1 4

25 2 4 1 3 1 3 1 3 1 4 2 4

31 1 4 1 1 4 1 4 1 1 1 1 2 4 2 1

37 3 1 3 2 3 1 2 1 3 1 3 3 3 3 1 3 1 2

43 1 3 2 3 1 3 1 2 4 2 1 1 1 1

B Major

49

Musical staff 49-54 in bass clef, B major key signature. The staff contains a whole rest followed by a double bar line, then a series of eighth notes: B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3. Fingering numbers are: 1, 1 4, 1 1, 4 1, 1 4, 1 4.

55

Musical staff 55-60 in bass clef, B major key signature. The staff contains eighth notes: B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3. Chords D and G are indicated above the notes. Fingering numbers are: 2 4, 1 3, 1 3, 1 2, 3 3, 1 2.

61

Musical staff 61-66 in treble clef, B major key signature. The staff contains eighth notes: B3, D4, F#4, G4, B3, D4, F#4, G4, B3, D4, F#4, G4, B3, D4, F#4, G4. Chords G and D are indicated above the notes. Fingering numbers are: 1 3, 1 3, 1 3, 3 1, 3 1, 3 1.

67

Musical staff 67-72 in treble clef, B major key signature. The staff contains eighth notes: B3, D4, F#4, G4, B3, D4, F#4, G4, B3, D4, F#4, G4, B3, D4, F#4, G4. Fingering numbers are: 2 1, 3 3, 2 1, 3 1, 3 1, 4 2.

73

Musical staff 73-78 in bass clef, B major key signature. The staff contains eighth notes: B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3, B2, D3, F#3, G3. Fingering numbers are: 4 1, 4 1, 1 4, 1.

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G# Minor

♩ = 52 Melodic Minor

4 1 1 4 1 4 2 4 1 2 1 4

7

1 3 1 3 1 3 1 3 2 3 1 3

13

2 3 1 3 1 4 1 4 1 2 1 4

19

Natural Minor

1 4 2 4 1 1 4 4 1 1 4

25

G

2 4 1 4 1 2 1 4 1 4 1 3

31

1 3 1 2 1 3 1 3 2 3 1 3

37

1 4 1 4 1 2 1 4 1 4 2 4

43

Harmonic Minor

D

1 1 4 4 1 1 4 2 4

G# Minor

49

G

4 1 4 2 3 1 2 1 2 1 2 3

55

2 3 2 3 2 1 3 2 2 1 3 2

61

A

4 1 4 1 1 4 2 4 1 1 4

67

4 1 4 4 1 4 1 3 1 3 1 3

73

1 4 1 4 4 1 4 1 4 2 4 2 2

79

2 2 4 1 4 2 4 2 3 2 3 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 3 2 3 2 4 2 4 1 4 2 2

91

2 2 4 2 4 1 1 1 4 2 2 4 2

97

D

2 4 1 1 4 2 1 4 2 3

G# Minor

103

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 2

115

4 1 2 4 1 1 4 2 2 4 1

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E Major

♩ = 52

0 1 4 0 1 4 2 4 1 4 1 4

7

1 4 1 4 1 2 1 3 2 3 2 3

13

1 3 2 4 1 4 1 4 1 4 1 4

19

2 4 1 0 4 1 0 0 4 1 1

25

4 1 4 1 3 3 3 1 4 1 4 1

31

1 4 0 0 4 1 4 1 1 1 1 1 2 1 4

37

1 4 4 4 4 1 2 1 1 3 1 3 3 1 3 1 1 2

43

1 4 4 4 4 1 4 1 2 1 1 1 1 1

E Major

49

Musical notation for measures 49-54 in E major. Measure 49 starts with a whole rest. Measure 50 begins with a bass clef and a key signature of three sharps (F#, C#, G#). The notes are E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54. The fret numbers are 0, 0, 4, 1, 1, 4, 1, 2, 1, 2, 2.

55

Musical notation for measures 55-60 in E major. The notes are E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60. The fret numbers are 1, 4, 2, 1, 4, 4, 1, 4, 4, 3, 1, 2.

61

Musical notation for measures 61-66 in E major. The notes are E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60. The fret numbers are 1, 3, 1, 3, 1, 3, 3, 1, 3, 1, 3, 1. Chord diagrams for G and D are shown above the staff.

67

Musical notation for measures 67-72 in E major. The notes are E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60. The fret numbers are 2, 1, 3, 4, 4, 1, 4, 4, 1, 2, 4, 1.

73

Musical notation for measures 73-78 in E major. The notes are E2, E3, E4, E5, E6, E7, E8, E9, E10, E11, E12, E13, E14, E15, E16, E17, E18, E19, E20, E21, E22, E23, E24, E25, E26, E27, E28, E29, E30, E31, E32, E33, E34, E35, E36, E37, E38, E39, E40, E41, E42, E43, E44, E45, E46, E47, E48, E49, E50, E51, E52, E53, E54, E55, E56, E57, E58, E59, E60. The fret numbers are 2, 2, 1, 2, 1, 4, 0.

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C# Minor

$\text{♩} = 52$ Melodic Minor

4 1 2 1 4 1 4 1 4 1 4 1

7

3 2 3 1 3 2 4 1 4 1 4 1

13 Natural Minor

4 1 2 1 4 4 1 1 4 1 1

19

4 1 4 1 4 1 2 1 3 1 3 2

25

4 1 4 1 4 1 1 4 1 1 4

31 Harmonic Minor

4 1 1 4 2 4 1 1 4 1 4 2

37

3 2 3 2 3 2 4 1 4 1 1 4

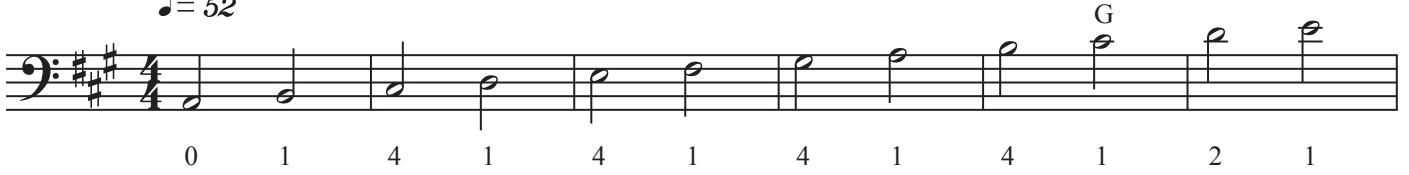
43

2 4 1 1 4 1 2 1 1

A Major

♩ = 52

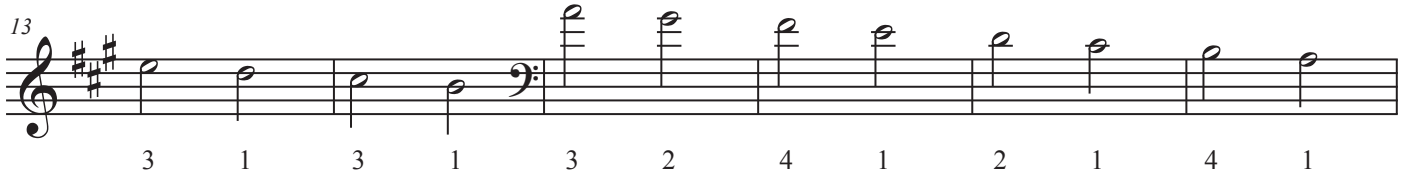
0 1 4 1 4 1 4 1 4 1 2 1



7 4 1 2 1 3 1 3 1 2 3 2 1



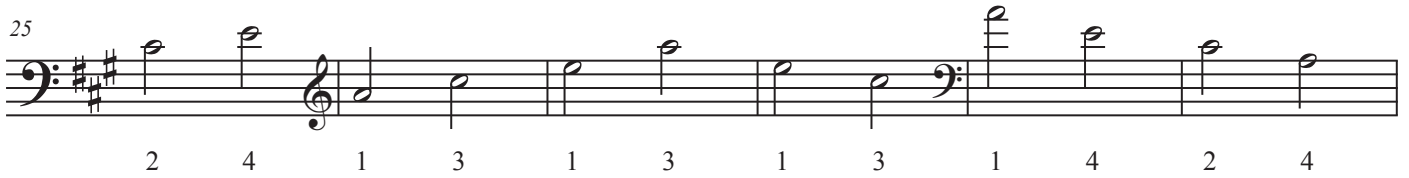
13 3 1 3 1 3 2 4 1 2 1 4 1



19 4 1 4 1 4 1 0 0 4 1 4



25 2 4 1 3 1 3 1 3 1 4 2 4



31 1 4 0 0 4 1 4 1 1 1 1 2 1 1



37 4 1 3 2 3 1 2 3 1 3 1 3 3 1 3 1 1 2



43 1 3 2 3 1 4 1 2 4 2 1 1 1 1



A Major

49

0 0 4 1 1 4 1 4 2 4 4

55

2 4 1 4 1 3 1 2 3 3 1 2

61

1 3 1 3 1 3 3 1 3 1 3 1

67

2 1 3 3 2 1 3 4 1 2 4 2

73

4 4 2 4 1 4 0

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F# Minor

♩ = 52 Melodic Minor

1 4 0 1 4 1 2 4 2 4 1 4

1 4 1 3 1 3 1 3 2 3 1 3

2 3 1 3 1 4 1 4 1 4 2 4

1 4 2 1 0 4 1 1 4 0 1

Natural Minor

2 4 1 4 2 4 1 4 1 4 1 3

1 3 1 2 1 3 1 3 2 3 1 3

1 4 1 4 1 4 2 4 1 4 2 1

0 4 1 1 4 0 1 2 4

Harmonic Minor

F# Minor

49

4 1 4 2 3 1 2 1 2 1 2 3

55

2 3 2 3 2 1 2 1 2 1 3 2

61

4 1 4 1 1 4 2 1 0 4 1

67

1 4 2 2 4 2 4 1 3 3 3 1

73

4 2 4 2 2 4 1 1 0 4 0 4 4

79

4 4 1 4 1 2 4 2 4 4 4 1 3 1 1 2 1 3

85

3 1 2 1 1 3 1 4 4 4 2 4 2 1 4 1 4 4

91

4 4 0 4 0 1 1 1 0 4 4 0 4

97

4 1 4 4 1 4 1 4 2 4

F# Minor

103

4 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 4 4 1 4 2

115

4 1 4 1 4 4 1 4 4 0 1

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D Major

♩ = 52

0 1 4 1 4 1 4 1 4 1 2 1

7

3 2 3 2 3 1 3 2 4 1 4 1

13

4 1 4 1 0 1 4 1 1 4 1

19

3 1 4 1 1 4 1 1 4 1 4 1 1

25

1 1 1 2 1 1 3 1 3 3 1 3 1 1 2 1 1 1

31

1 1 4 1 4 1 1 1 4 1 1 4 1

37

1 4 1 2 1 3 1 3 1 3 3 1

43

3 1 3 1 2 1 4 1 1 4

B Minor

$\text{♩} = 52$ Melodic Minor

1 2 4 1 4 1 4 1 4 1 4 1

7 3 1 2 1 2 1 3 1 2 3 2 1

13 3 1 3 2 3 1 3 2 4 1 4 1

19 D Natural Minor 4 1 4 1 4 2 1 1 2 4 1

25 G 2 4 1 4 2 4 1 4 1 3 1 3

31 1 3 1 2 1 3 1 3 2 3 1 3

37 1 3 1 4 1 4 2 4 1 4 2 1

43 Harmonic Minor 4 2 1 1 2 4 1 2 4

G

B Minor

49

4 1 4 1 2 1 2 1 2 1 2 3

55

2 3 2 3 2 1 3 2 3 2 3 2

61

4 1 4 1 1 4 2 1 4 2 1

67

1 4 2 4 1 4 1 3 1 3 1 3

73

1 4 1 4 2 4 1 1 4 2 4 2 2

79

2 2 1 4 1 1 2 1 3 2 3 1 3 1 3 1 3 3

85

3 3 1 3 1 3 1 3 2 3 1 2 1 1 4 1 2 2

91

2 2 4 2 4 1 1 1 4 2 2 4 2

97

2 4 1 4 1 4 1 2 1 3

D

B Minor

103

G D G D G

3 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 3 2 1 3 1

115

2 1 4 1 4 4 1 4 2 4 1

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G Major

♩ = 52

7 8 9 10 11 12 13 14 15 16 17 18

2 0 1 1 4 1 2 4 1 4 1 4

19 20 21 22 23 24 25 26 27 28 29 30

1 4 1 3 1 2 1 3 2 3 2 3

31 32 33 34 35 36 37 38 39 40 41 42

1 3 2 3 1 4 1 4 1 4 1 4

43 44 45 46 47 48 49 50 51 52 53 54

2 1 4 1 1 0 1 2 1 4 4

55 56 57 58 59 60 61 62 63 64 65 66

2 4 1 3 1 3 1 3 1 4 2 4

67 68 69 70 71 72 73 74 75 76 77 78

4 1 2 2 1 4 1 4 4 4 4 2 4 2 1

79 80 81 82 83 84 85 86 87 88 89 90

4 1 3 2 3 1 2 1 1 3 1 3 3 1 3 1 1 2

91 92 93 94 95 96 97 98 99 100 101 102

1 3 2 3 1 4 1 2 4 2 4 4 4 4

G Major

49

Musical staff 49-54 in bass clef, G major, 3/4 time. Measure 49 has a whole rest. Measure 50 starts with a 3/4 time signature. Fingerings: 2, 2, 1, 4, 4, 1, 4, 4, 2, 4, 4.

55

Musical staff 55-60 in bass clef, G major, 3/4 time. Chords D and G are indicated above measures 57 and 59 respectively. Fingerings: 2, 4, 1, 4, 1, 3, 1, 2, 3, 3, 1, 2.

61

Musical staff 61-66 in treble clef, G major, 3/4 time. Chords G and D are indicated above measures 61 and 62 respectively. Fingerings: 1, 3, 1, 3, 1, 3, 3, 1, 3, 1, 3, 1.

67

Musical staff 67-72 in bass clef, G major, 3/4 time. Fingerings: 2, 1, 3, 3, 2, 1, 3, 1, 4, 1, 4, 2.

73

Musical staff 73-78 in bass clef, G major, 3/4 time. Fingerings: 4, 4, 2, 4, 4, 1, 2.

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E Minor

♩ = 52 Melodic Minor

0 1 2 0 1 4 2 4 1 2 1 4

7

1 4 1 4 1 3 1 3 2 3 1 3

13

2 3 1 4 1 4 1 4 1 4 2 1

19

Natural Minor

4 1 1 0 2 1 0 0 1 2 0

25

G

1 1 4 1 2 4 1 4 1 4 1 4

31

1 3 1 2 1 3 1 3 2 3 1 4

37

1 4 1 4 1 4 2 1 4 1 1 0

43

Harmonic Minor

2 1 0 0 2 4 0 2 4

E Minor

49

Musical notation for measures 49-54 in E minor. The bass clef staff contains notes with a G chord symbol above measure 52. Fingering numbers are written below the notes.

4 1 4 2 4 1 2 1 2 1 2 3

55

Musical notation for measures 55-60 in E minor. The treble clef staff contains notes with a D chord symbol above measure 59. Fingering numbers are written below the notes.

2 3 2 3 2 1 2 1 2 1 4 2

61

Musical notation for measures 61-66 in E minor. The bass clef staff contains notes. Fingering numbers are written below the notes.

4 1 4 1 1 4 2 0 4 2 0

67

Musical notation for measures 67-72 in E minor. The bass clef staff contains notes. Fingering numbers are written below the notes.

0 2 1 1 4 2 4 1 3 3 3 1

73

Musical notation for measures 73-78 in E minor. The bass clef staff contains notes. A 3/2 time signature change is indicated at measure 74. Fingering numbers are written below the notes.

4 2 4 1 1 2 0 0 2 1 2 1 1

79

Musical notation for measures 79-84 in E minor. The bass clef staff contains notes. Fingering numbers are written below the notes.

1 1 4 1 4 2 4 2 4 4 4 1 3 1 1 2 1 3

85

Musical notation for measures 85-90 in E minor. The treble clef staff contains notes. Fingering numbers are written below the notes.

3 1 2 1 1 3 1 4 4 4 2 4 2 4 1 4 1 1

91

Musical notation for measures 91-96 in E minor. The bass clef staff contains notes. A 3/2 time signature change is indicated at measure 92. Fingering numbers are written below the notes.

1 1 2 1 2 0 0 0 2 1 1 2 1

97

Musical notation for measures 97-102 in E minor. The bass clef staff contains notes. Fingering numbers are written below the notes.

1 4 1 1 4 2 1 2 1 4

E Minor

103

4 3 1 3 1 3 1 2 1 3 3 1

109

2 1 3 1 3 1 3 4 4 1 4 2

115

4 1 2 4 1 1 4 1 1 2 0

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Micah Howard joined the world-renowned Pittsburgh Symphony Orchestra in 1996 at the age of 25. He regularly performs as a recitalist and chamber musician, and has been featured as a soloist with the Pittsburgh Symphony Orchestra. Howard has had the privilege of working with young musicians not only as a private teacher, but also as a lecturer and coach for various universities and music youth groups. In 2010 Howard received the Pennsylvania-Delaware String Teachers Association's *Outstanding String Teacher Award*. Since that same year, he has served as Artist Lecturer in Double Bass at Carnegie Mellon University in Pittsburgh. Micah Howard is passionate about promoting the arts and helping the next generation of musicians to achieve their greatest potential.