

Answers to in-text exercises

Level Mastery 1.1.

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

9. 10. 11. 12. 13. 14. 15. 16.

17. 18. 19. 20. 21. 22. 23. 24.

This section contains 24 numbered musical exercises. Each exercise is a single note on a five-line staff, with the staff clef and key signature indicated above the note. The exercises are arranged in three rows of eight. The notes and their positions are: 1. Treble clef, G4; 2. Bass clef, G2; 3. Bass clef, G2 with sharp sign; 4. Bass clef, G2 with sharp sign; 5. Bass clef, G2 with flat sign; 6. Treble clef, G4 with sharp sign; 7. Bass clef, G2 with flat sign; 8. Bass clef, G2 with sharp sign and double bar line; 9. Bass clef, G2 with flat sign; 10. Treble clef, G4 with flat sign; 11. Bass clef, G2 with flat sign; 12. Bass clef, G2 with flat sign and double bar line; 13. Treble clef, G4 with double bar line; 14. Bass clef, G2 with flat sign; 15. Bass clef, G2 with sharp sign; 16. Bass clef, G2 with flat sign; 17. Bass clef, G2 with flat sign; 18. Bass clef, G2 with sharp sign; 19. Bass clef, G2 with flat sign; 20. Treble clef, G4 with double bar line; 21. Bass clef, G2 with flat sign; 22. Treble clef, G4 with double bar line; 23. Bass clef, G2 with flat sign; 24. Bass clef, G2 with sharp sign.

Level Mastery 1.2.

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.

This section contains 30 numbered musical exercises. Each exercise is a single note on a five-line staff, with the staff clef and key signature indicated above the note. The exercises are arranged in five rows of six. The notes and their positions are: 1. Bass clef, G2; 2. Treble clef, G4; 3. Bass clef, G2 with sharp sign; 4. Bass clef, G2 with sharp sign; 5. Bass clef, G2 with sharp sign; 6. Treble clef, G4 with sharp sign; 7. Treble clef, G4 with flat sign; 8. Treble clef, G4 with sharp sign; 9. Bass clef, G2 with sharp sign; 10. Bass clef, G2 with sharp sign; 11. Bass clef, G2 with sharp sign; 12. Bass clef, G2 with sharp sign; 13. Bass clef, G2 with sharp sign; 14. Treble clef, G4 with sharp sign; 15. Treble clef, G4 with sharp sign; 16. Bass clef, G2 with sharp sign; 17. Bass clef, G2 with sharp sign; 18. Treble clef, G4 with sharp sign; 19. Bass clef, G2 with sharp sign; 20. Bass clef, G2 with sharp sign; 21. Treble clef, G4 with sharp sign; 22. Bass clef, G2 with sharp sign; 23. Bass clef, G2 with sharp sign; 24. Treble clef, G4 with sharp sign; 25. Bass clef, G2 with sharp sign; 26. Treble clef, G4 with sharp sign; 27. Bass clef, G2 with sharp sign; 28. Bass clef, G2 with sharp sign; 29. Bass clef, G2 with sharp sign; 30. Treble clef, G4 with sharp sign.

Level Mastery 1.3.

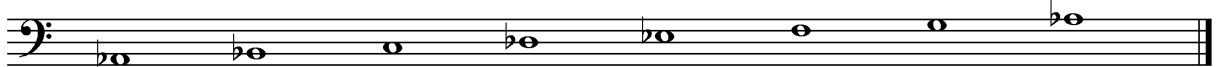
- a.
- | | | | | | | | |
|------------|------------|------------|------------|------------|------------|------------|------------|
| A \flat | B \flat | C | D \flat | E \flat | F | G | A \flat |
| C \sharp | D \sharp | E \sharp | F \sharp | G \sharp | A \sharp | B \sharp | C \sharp |
| E | F \sharp | G \sharp | A | B | C \sharp | D \sharp | E |
| G \flat | A \flat | B \flat | C \flat | D \flat | E \flat | F | G \flat |
| A | B | C \sharp | D | E | F \sharp | G \sharp | A |
| F \sharp | G \sharp | A \sharp | B | C \sharp | D \sharp | E \sharp | F \sharp |

b.

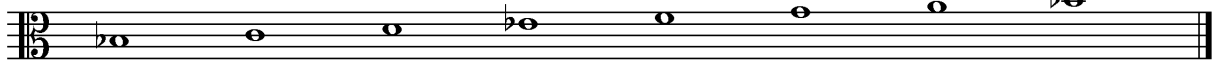
B major



A \flat major



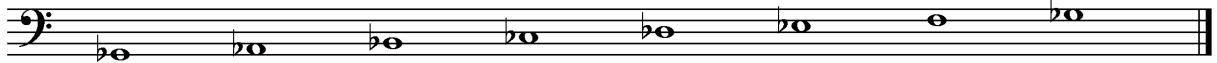
B \flat major



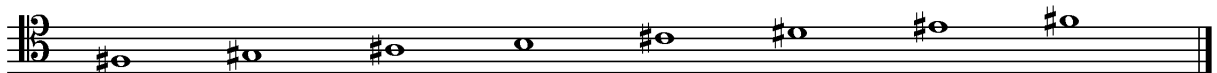
C \sharp major



G \flat major



F \sharp major



Level Mastery 1.4.

a.

B E \flat D G \flat

 G F A B \flat

 B C \flat C \sharp E

 F \sharp A \flat E \flat G

 D C \sharp D \flat B

b.

F major, alto clef D \flat major, tenor clef B \flat major, treble clef B major, bass clef
 F \sharp major, treble clef E \flat major, alto clef D major, bass clef A \flat major, tenor clef
 B \flat major, bass clef C \flat major, tenor clef F major, bass clef E major, tenor clef

C# major, bass clef B major, treble clef A \flat major, alto clef A major, treble clef

C \flat major, treble clef E \flat major, bass clef F# major, tenor clef C# major, treble clef

Level Mastery 1.5.

a. e \flat harmonic minor:

e \flat f g \flat a \flat b \flat c \flat d \natural e \flat

g# natural minor:

g# a# b c# d# e f# g#

f melodic minor, descending:

f e \flat d \flat c b \flat a \flat g f

b \flat melodic minor, ascending:

b \flat c d \flat e \flat f g \natural a \natural b \flat

d natural minor:

d e f g a b \flat c d

f# harmonic minor:

f# g# a b c# d e# f#

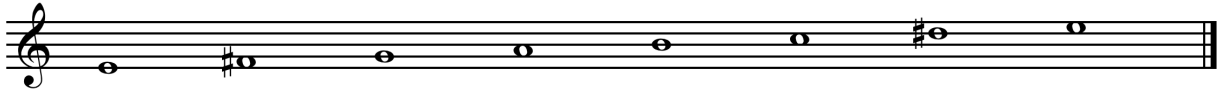
b.

c# melodic minor

b \flat harmonic minor

a \flat natural minor

e harmonic minor



g melodic minor



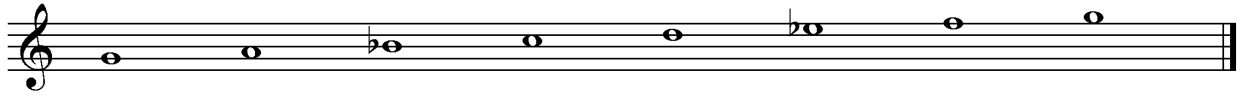
g# natural minor



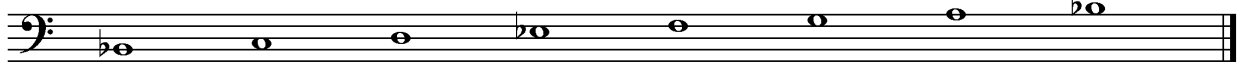
c.	Key:	Scale:	Pitch:	Scale degree number:	Scale degree name:
	B	major	G#	[^] 6	submediant
	f#	harmonic minor	E#	[^] 7	leading tone
	d#	natural minor	C#	[^] b 7	subtonic
	e ^b	melodic minor, ascending	C ^b	[^] 6	raised submediant
	D	major	F#	[^] 3	mediant
	B ^b	major	E^b	[^] 4	subdominant
	b	natural minor	C#	[^] 2	supertonic
	D ^b	major	C	[^] 7	leading tone

d.

g natural minor



Bb major



F# major



eb melodic minor



g# melodic minor



f natural minor



Level Mastery 1.6.

$E\flat$ Major	B Major	$b\flat$ minor	$c\sharp$ minor
$C\sharp$ Major	$A\flat$ Major	The relative major of g minor	The parallel minor of F Major
		(Name the key: $B\flat$ major)	(Name the key: f minor)
The relative minor of $F\sharp$ Major	The parallel major of $e\flat$ minor	E major	$D\flat$ Major
(Name the key: $d\sharp$ minor)			
$f\sharp$ minor	G major	The parallel major of $f\sharp$ minor	The relative minor of $C\sharp$ Major
		(Name the key: $a\sharp$ minor)	

Chapter 1 Self-Test

1.1.

<u>C5</u>	<u>F#3</u>	<u>D#3</u>	<u>A#3</u>	<u>A#4</u>	<u>E3</u>
<u>F#2</u>	<u>B#5</u>	<u>C#4</u>	<u>G#4</u>	<u>E#4</u>	<u>D#4</u>
<u>D#5</u>	<u>G#3</u>	<u>B#4</u>	<u>B#2</u>	<u>D#3</u>	<u>A#2</u>

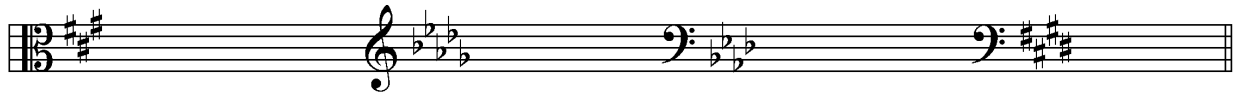
1.2.

Musical notation for exercise 1.2, consisting of six staves. The notation includes notes on various staves (treble and bass clefs) and chord labels below the staves. The notes are: F#5, Bb2, G3, E#4, Db2, Eb3, Gb2, D5, Eb3, A#5, Ab3, D4, B4, C5, Eb3, D#4, Bb1, Eb5.

1.3.

Musical notation for exercise 1.3, consisting of four staves. The notation includes notes on various staves (treble and bass clefs) with accidentals (sharps, flats, and naturals) and some notes marked with an 'x'.

1.4.



A major, alto clef

D \flat major, treble clef

A \flat major, bass clef

E major, bass clef

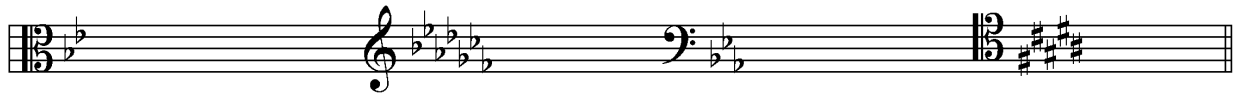


C \sharp major, tenor clef

F \sharp major, alto clef

B major, treble clef

D major, tenor clef



B \flat major, alto clef

C \flat major, treble clef

E \flat major, bass clef

B major, tenor clef

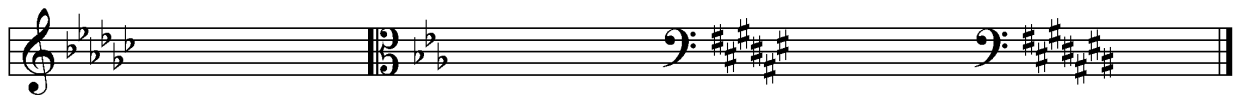


F major, bass clef

D major, treble clef

D \flat major, alto clef

C \sharp major, treble clef



G \flat major, treble clef

E \flat major, alto clef

F \sharp major, bass clef

C \sharp major, bass clef

1.5.

G major

f natural minor


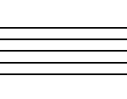
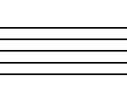


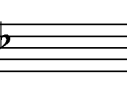
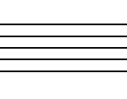


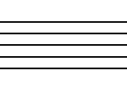
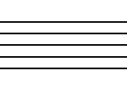






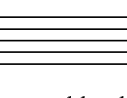
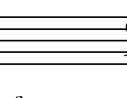
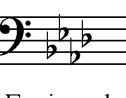


g \sharp harmonic minor






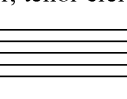
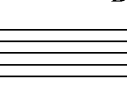
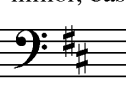

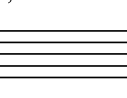
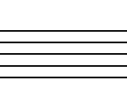

A \flat major



1.7.

			
B \flat minor, bass clef	E minor, treble clef	G minor, tenor clef	F# minor, alto clef
			
E \flat minor, treble clef	D# minor, bass clef	F minor, alto clef	B minor, tenor clef
			
C# minor, bass clef	B \flat minor, treble clef	G minor, bass clef	E \flat minor, alto clef
			
D minor, tenor clef	A \flat minor, treble clef	E minor, tenor clef	C minor, bass clef
			
F# minor, treble clef	F minor, bass clef	C# minor, tenor clef	G# minor, treble clef

1.8.

The relative minor of B major, treble clef	The parallel major of F# minor, tenor clef	The relative major of B \flat minor, bass clef	The parallel minor of A \flat major, alto clef
			
Key: <u>g#</u>	Key: <u>F#</u>	Key: <u>D\flat</u>	Key: <u>a\flat</u>
The relative minor of G major, tenor clef	The parallel major of D minor, bass clef	The relative major of C minor, bass clef	The parallel minor of C# major, alto clef
			
Key: <u>e</u>	Key: <u>D</u>	Key: <u>E\flat</u>	Key: <u>c#</u>
The relative minor of E major, treble clef	The parallel major of B \flat minor, tenor clef	The relative major of A \flat minor, bass clef	The parallel minor of F major, alto clef
			
Key: <u>c#</u>	Key: <u>B\flat</u>	Key: <u>C\flat</u>	Key: <u>f</u>

1.9.

B \flat
 G \sharp
 E \flat
 A \flat

Chapter 1 Apply This!**1.1. Analysis**

The underlying scale for this excerpt is d harmonic minor.

1.2. Improvisation

Various solutions are, of course, possible.

Level Mastery 2.1.a. B \flat Aeolian:

B \flat C D \flat E \flat F G \flat A \flat B \flat

G \sharp Phrygian:

G \sharp A \flat B C \sharp D \sharp E F \sharp G \sharp

G Lydian:

G A B C \sharp D E F \sharp G

E \flat Mixolydian:

E \flat F G A \flat B \flat C D \flat E \flat

D Locrian:

D E \flat F G A \flat B \flat C D

F \sharp Dorian:

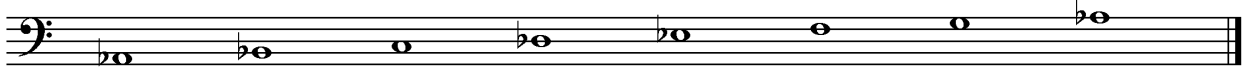
F \sharp G \sharp A B C \sharp D \sharp E F \sharp

b.

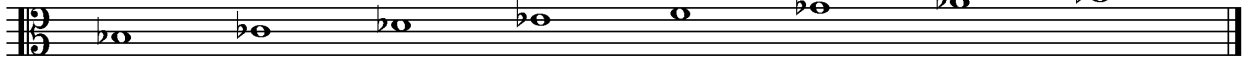
F Mixolydian



A \flat Ionian



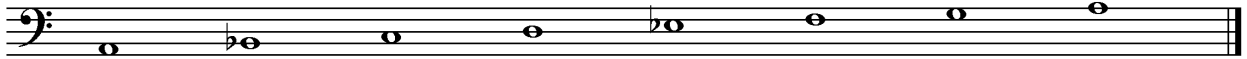
B \flat Phrygian



E Lydian



A Locrian



F Aeolian

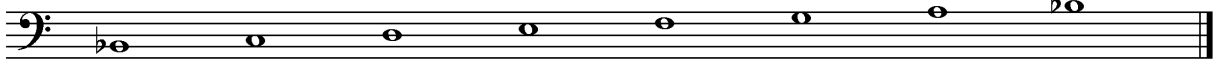


c.

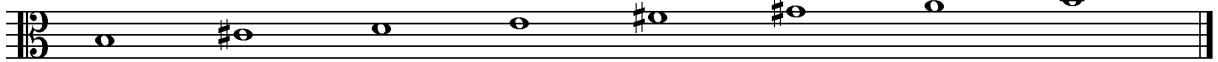
D Phrygian



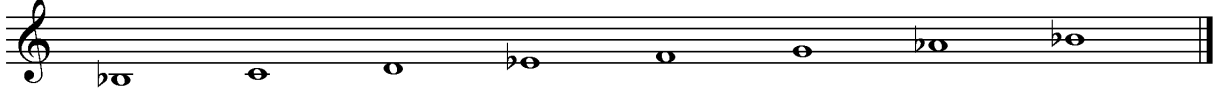
Bb Lydian



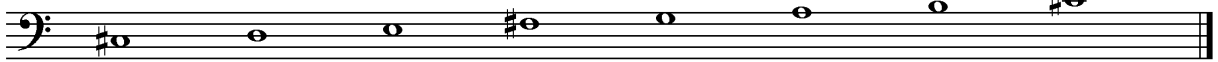
B Dorian



Bb Mixolydian



C# Locrian



F Phrygian



Level Mastery 2.2.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.
3 6 7 2 4 5 4 6 6 7

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.
2 3 4 5 6 2 6 5 3 7

The exercise consists of 20 numbered musical phrases, each on a single staff. The staves alternate between treble and bass clefs. Each phrase is a short melodic or harmonic fragment. Below each phrase is a number indicating the finger used for that note. The phrases are: 1. Treble clef, G4 (3); 2. Bass clef, F3 (6); 3. Bass clef, G3 (7); 4. Bass clef, D3 (2); 5. Treble clef, E4 (4); 6. Bass clef, F3 (5); 7. Bass clef, G3 (4); 8. Treble clef, A4 (6); 9. Bass clef, Bb3 (6); 10. Bass clef, C4 (7); 11. Bass clef, D3 (2); 12. Treble clef, E4 (3); 13. Bass clef, F3 (4); 14. Bass clef, G3 (5); 15. Bass clef, A3 (6); 16. Treble clef, Bb4 (2); 17. Bass clef, C4 (6); 18. Bass clef, D3 (5); 19. Treble clef, E4 (3); 20. Bass clef, F3 (7).

Level Mastery 2.3.

a.

1. (two solutions) 2. 3. 4.

M3 P5 m6 ++4

5. 6. 7. 8.

+6 m2 o4 m7

9. 10. 11. 12.

o5 ++3 +4 +2

13. 14. 15. 16.

M3 +6 M6 o6

17. 18. 19. 20.

M7 +5 o7 ++2

21. 22. 23. 24.

+4 o4 ++4 o7

(additional solutions are possible for most of these, employing double sharps and double flats)

b.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

P4 +2 P5 M7 +4 M3 M6 m3 +5 +6

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

M6 m3 m6 M2 m2 m3 #m6 +6 M6 m3

21. 22. 23. 24. 25. 26. 27. 28. 29. 30.

+5 o7 +2 M6 M3 M7 o5 +4 m3 o5

31. 32. 33. 34. 35. 36. 37. 38. 39. 40.

+4 m7 +6 P5 +3 o7 +4 o5 M3 m6

41. 42. 43. 44. 45. 46. 47. 48. 49. 50.

o3 o4 P4 +4 o7 +4 P4 o3 m7 o3

c.

m3 M3 +4 P4 +2

m2 M3 o5 M3 +3

oo4 M6 m6 +5 o5

++2 +6 P4 o6 M3

d.

m3 +5 M6 P5 +6
 6
 M3 +4 m2 m6 M7
 11
 m7 m3 M3 °7 °5
 16
 °7 m3 m6 M7 M6

Level Mastery 2.4.

1. 2. 3. 4. 5. 6. 7.
 m3 M6 °7 +2 P4 P5 M2 m7 P4 P5 +2 °7 +5 °4
 8. 9. 10. 11. 12. 13. 14.
 M3 m6 +3 °6 M6 m3 M7 m2 m3 M6 m6 M3 °7 +2
 15. 16. 17. 18. 19. 20.
 +6 °3 M2 m7 m6 M3 +4 °5 °4 +5 °3 +6

Chapter 2 Self-Test

2.1.

[raise ceiling] [lower floor] [lower ceiling] [lower ceiling] [raise floor]

P4 +4 ++4 +4 P4 o4

[lower floor] [raise ceiling] [raise floor] [raise floor] [lower ceiling]

M6 +6 ++6 +6 M6 m6

[raise floor] [lower ceiling] [lower floor] [lower floor] [lower floor]

M3 m3 o3 m3 M3 +3

[lower floor] [raise ceiling] [lower floor] [lower ceiling] [lower ceiling]

m2 M2 +2 ++2 +2 M2

[lower floor] [raise ceiling] [raise floor] [raise floor] [raise floor]

o5 P5 +5 P5 o5 oo5

[lower ceiling] [lower floor] [lower floor] [lower ceiling] [lower floor]

M6 m6 M6 +6 M6 +6

2.2.

M3 +5 +2 o5 M7 o7

o4 P4 M7 M6 m3 m6

System 1 (Bass Clef):
 Chord 1: M6
 Chord 2: °7
 Chord 3: m3
 Chord 4: m6
 Chord 5: +8
 Chord 6: M3

System 2 (Treble Clef):
 Chord 1: °3
 Chord 2: M7
 Chord 3: M6
 Chord 4: +4
 Chord 5: M3
 Chord 6: +6

System 3 (Bass Clef):
 Chord 1: M6
 Chord 2: M3
 Chord 3: M3
 Chord 4: M7
 Chord 5: +2
 Chord 6: +3

2.3.

System 2.3 (Treble/Bass Clef):
 Chord 1: +4
 Chord 2: M3
 Chord 3: m6
 Chord 4: M2
 Chord 5: P5
 Chord 6: °7

System 2.3 (Bass/Treble Clef):
 Chord 1: +5
 Chord 2: +2
 Chord 3: °3
 Chord 4: P4
 Chord 5: +5
 Chord 6: m6

2.4.

System 2.4 (Treble Clef):
 Chord 1: M3
 Chord 2: °5
 Chord 3: m6
 Chord 4: m3
 Chord 5: +4
 Chord 6: m7

System 2.4 (Bass Clef):
 Chord 1: m2
 Chord 2: +4
 Chord 3: P4
 Chord 4: °7
 Chord 5: M6
 Chord 6: +2

m3 M6 M7 +5 +6 P5

+6 M3 +4 P5 °7 °8

+5 °3 M6 m6 °4 +4

2.5.

+5 +6 M3 P4 M2 m3

M3 M6 °7 m6 +2 P5

°5 m7 m3 M2 °8 m3

M3 m6 +6 M3 m6 +4 P5

M6 +5 P5 +5 m6 M2

2.6.

P4 P5 M3 m6

⁺ 6	<u>°3</u>	°5	<u>+4</u>
m3	<u>M6</u>	+2	<u>°7</u>
+5	<u>°4</u>	m2	<u>M7</u>
+3	<u>°6</u>	°8	<u>+1 or +U</u>

Chapter 2 Apply This!

2.1. Analysis

- a. Mixolydian
- b. Dorian
- c. Lydian and Ionian

2.3.

- | | | | |
|--------------|---------------|---------------|---------------|
| 1. <u>°7</u> | 2. <u>°5</u> | 3. <u>°4</u> | 4. <u>M2</u> |
| 5. <u>m2</u> | 6. <u>M3</u> | 7. <u>M6</u> | 8. <u>M7</u> |
| 9. <u>+4</u> | 10. <u>+4</u> | 11. <u>M6</u> | 12. <u>M3</u> |

























2.4.

P8 M6 °5 M3 P8 m6 P4 M2 m3 P5 m7 M3

P8 m3 +4 m6 P8 M3 P5 m7 M6 P4 M2 m6

The two examples are strict intervallic inversions of each other.

Level Mastery 3.1.

1.		x	<u>3</u>	=	
2.		x	<u>4</u>	=	
3.		x	<u>7</u>	=	
4.		x	<u>4</u>	=	
5.		x	<u>2</u>	=	
6.		x	<u>3</u>	=	
7.		x	<u>12</u>	=	
8.		x	<u>4</u>	=	
9.		x	<u>8</u>	=	
10.		x	<u>2</u>	=	
11.		x	<u>4</u>	=	
12.		x	<u>14</u>	=	

Level Mastery 3.2.

a. Answers below in boldface.

4 4	simple	compound	dupe	triple	quadruple
3 8	simple	compound	dupe	triple	quadruple
6 16	simple	compound	dupe	triple	quadruple
¢	simple	compound	dupe	triple	quadruple
9 4	simple	compound	dupe	triple	quadruple
3 4	simple	compound	dupe	triple	quadruple

Level Mastery 3.3.

a.

metric
Andante
p
fp
dynamic, metric, contour
agogic, metric

b.

metric, contour, agogic
contour, agogic
metric, contour, agogic
5
3
contour

5

dynamic dynamic

7

contour

This musical score consists of two systems of piano music. The first system starts at measure 5 and features a treble clef with a melodic line containing slurs and accents, and a bass clef with a harmonic accompaniment. Two arrows labeled 'dynamic' point to specific notes in the treble staff. The second system starts at measure 7 and continues the melodic and harmonic development. An arrow labeled 'contour' points to a phrase in the treble staff.

c.

metric, contour

agogic, contour

agogic

p

5

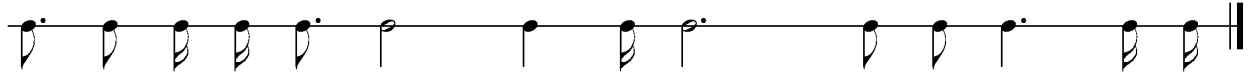
metric

metric, contour

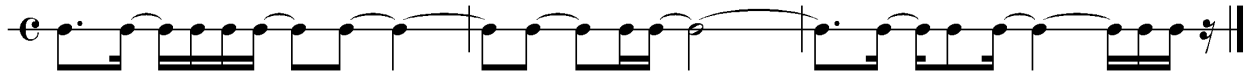
This musical score is in 2/4 time and marked *p*. It consists of two systems. The first system has four measures. Annotations include 'metric, contour' pointing to the first measure, 'agogic, contour' pointing to the second measure, and 'agogic' pointing to the fourth measure. The second system starts at measure 5 and has four measures. An annotation 'metric' points to the second measure, and 'metric, contour' points to the first measure of this system.

Level Mastery 3.4.

1.



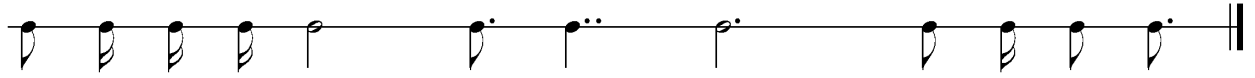
a.



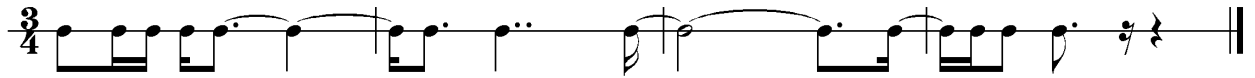
b.



2.



a.

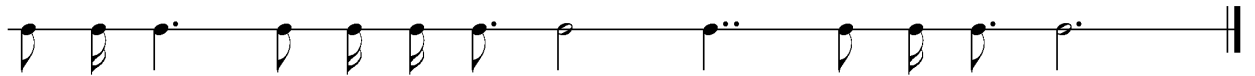


b.

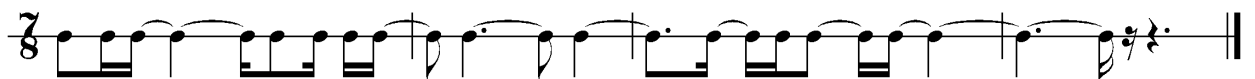


Level Mastery 3.5.

1.



a. (4+3)



b. (3+2)



Chapter 3 Self-Test

3.1. 1. D 2. H 3. G 4. C 5. E 6. J 7. F 8. A 9. B 10. I

3.2. 1. D 2. F 3. I 4. H 5. J 6. G 7. B 8. C 9. A 10. E

3.3.	9	<u>compound</u>	<u>triple</u>
	16		
	2	<u>simple</u>	<u>duple</u>
	8		
	3	<u>simple</u>	<u>triple</u>
	2		
	6	<u>compound</u>	<u>duple</u>
	8		
	4	<u>simple</u>	<u>quadruple</u>
	4		

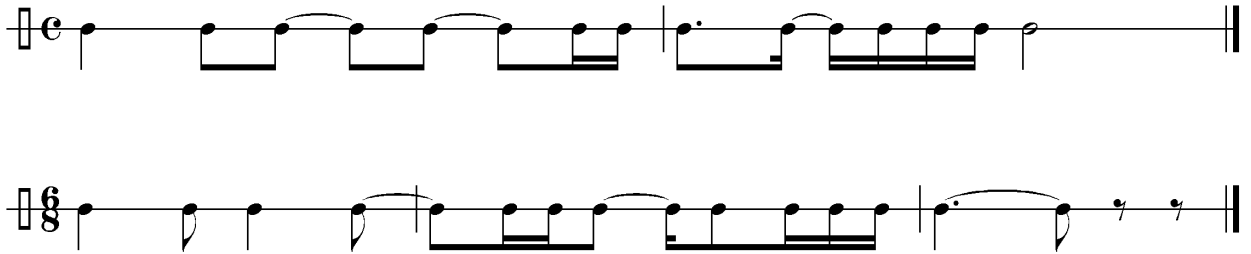
3.4.

EXAMPLE

(4 attacks, full measure) (5 attacks, full measure) (2 groupings of 3 attacks, time of 1 quarter note each)

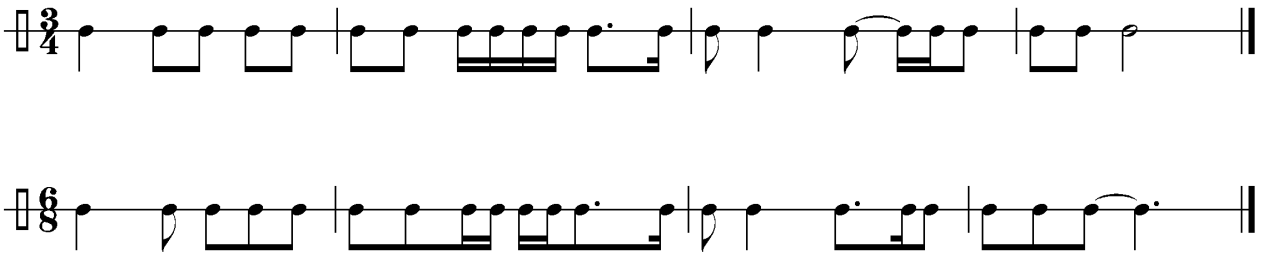
(6 attacks, full measure) (2 groupings of 4 attacks, time of 1 dotted quarter quarter note) (4 attacks in the time of 1 dotted dotted quarter note, followed by 3 attacks in the time of 1 quarter note)

3.5.



3.6.

a.



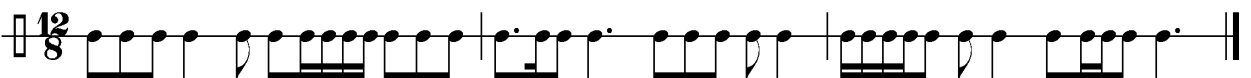
b.



c.



d.



Chapter 3 Apply This!

3.1.

Each answer represents one measure.

a.

•

• • •

• • • • • •

• • • • • • • •

b.

•

• • •

• • • • • •

• • • • • • • •

c.

•

• • •

• • • • • •

• • • • • • • •

3.2.

a.

•

• • •

• • • • • •

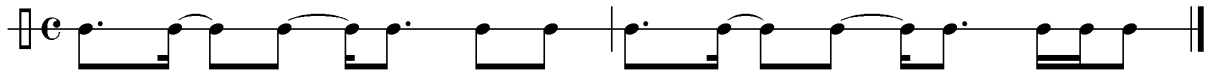
• • • • • • • •

• • • • • • • •

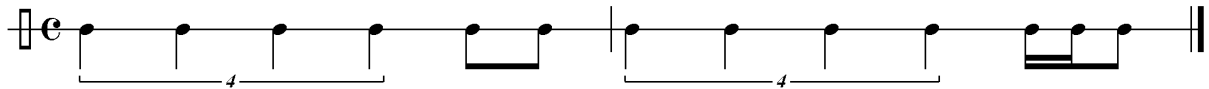
b. Polymeter. The drum pattern best fits a $\frac{4}{4}$ meter, but the guitar riff is in $\frac{3}{8}$. See the following:

$\frac{3}{8}$

c.



or (using triplets):



Level Mastery 4.1.

a.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

m M o o + M m + m M

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

+ M o M m o M m M m

b.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

M o o + + m + M + +

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

m m o + M M + o M m

c.

Example: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

3rd o 3rd m Root o 5th + 5th M Root + Root o 5th M 3rd + 5th o 3rd M

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

3rd o 3rd + Root m 5th M Root m 3rd + 3rd m 3rd + Root M 3rd m

Level Mastery 4.2.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Mm7 ø7 o7 MM7 mm7 Mm7 ø7 MM7 o7 mm7

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

Mm7 ø7 o7 MM7 mm7 ø7 Mm7 o7 MM7 mm7

Level Mastery 4.3.

Quality: MM Mm o ø mm

Inversion: 3rd 2nd 1st R R

Quality: ø mm Mm Mm MM

Inversion: 1st 3rd 3rd 2nd 1st

Quality: MM Mm o mm MM

Inversion: R 1st 3rd 2nd 2nd

Quality: ∅ Mm o Mm mm

Inversion: 3rd 3rd R 1st 3rd

Level Mastery 4.4.

Various spacings are permissible. Note that some chords have additional tones implied by the chord structure—for example, a fifth added between a third and seventh within a seventh chord.

7 # b6 b5 ∅ 4 3 ∅ 4+ 2+ b6 b3 ∅ 5 4+ # ∅ 4+ 3 5+ # 7 b

b7 5+ 3 b4 b b6 b4 2 ∅ 4+ 3 7 # #7 5 4 b6 b5 b ∅ 4 2

Chapter 4 Self-Test

4.1.

AM fm e^b° A^bM f#m D^b+ bm d°

b^b° G⁺ c#m B^bM d^b° FM D^bM D⁺

A⁺ em d#° G^bM EM b° f° E^b+

D^bM EM F#M g^bm C#⁺ e^b° BM e^bm

4.2.

Quality	Root	Third	Fifth	Triad
major:	A	C#	E	AM
minor:	B ^b	D ^b	F	b ^b m
augmented:	G#	B#	D×	G#+
diminished:	D ^b	F ^b	A ^b	d ^b °
major:	B ^b	D	F	B ^b M
major:	E ^b	G ^b	B ^b	E ^b M
diminished:	E#	G#	B	e#°
minor:	D#	F#	A#	d#m
augmented:	B ^b	D	F#	B ^b +
minor:	F	A ^b	C	fm

4.3.

g o⁷ c# mm⁷ Eb Mm⁷ Ab MM⁷ f ø⁷ E MM⁷ Bb Mm⁷ g# ø⁷

B MM⁷ eb mm⁷ c ø⁷ db mm⁷ c# o⁷ bb o⁷ F# MM⁷ a mm⁷

e mm⁷ Db Mm⁷ Bb MM⁷ d# mm⁷ e# o⁷ f ø⁷ Eb MM⁷ g ø⁷

d o⁷ c# mm⁷ F# Mm⁷ Gb MM⁷ g# o⁷ e mm⁷ f ø⁷ A MM⁷

4.4.

MM⁷ ø⁴ 6 5 Mm⁴ 4 o² mm⁴ 3 MM⁶ 5 o⁶ 5

ø⁷ MM⁴ 3 Mm⁴ 2 o⁴ 2 MM⁶ 5 Mm⁴ 3 ø⁴ 3 mm⁵ 5

MM⁴ 2 Mm⁶ 5 o⁷ Mm⁷ MM⁴ 3 mm⁶ 5 o⁷ ø⁴ 3

Mm⁴ 2 ø⁴ 2 Mm⁷ Mm⁴ 3 o⁶ 5 mm⁴ 3 mm⁶ 5 MM⁷

Chapter 4 Apply This!

4.1.

	Quality:	Inversion:	RN analysis:
Measure 2, quarter-note beats 1 & 2:	<u>M</u>	<u>6</u>	<u>IV⁶</u>
Measure 3, quarter-note beats 1 & 2:	<u>ø7</u>	<u>7</u>	
Measure 3, quarter-note beats 3 & 4 (piano only):	<u>Mm7</u>	<u>7</u>	<u>V⁷</u>
Measure 4, quarter-note beat 3 (right-hand piano only):	<u>+</u>	<u>6</u> <u>4</u>	
Measure 5, quarter-note beats 3 & 4 (piano only):	<u>MM7</u>	<u>4</u> <u>3</u>	<u>I₃⁴</u>
Measure 6, quarter-note beats 1 & 2:	<u>MM7</u>	<u>7</u>	<u>IV⁷</u>
Measure 6, quarter-note beats 3 & 4:	<u>mm7</u>	<u>4</u> <u>3</u>	<u>vi₃⁴</u>
Measure 7, quarter-note beats 1 & 2:	<u>mm7</u>	<u>7</u>	<u>ii⁷</u>
Measure 7, quarter-note beats 3 & 4 (piano only):	<u>MM7</u>	<u>4</u> <u>3</u>	<u>IV₃⁴</u>
Measure 8, quarter-note beats 1 & 2:	<u>ø7</u>	<u>7</u>	<u>vii^{ø7}</u>
Measure 8, quarter-note beats 3 & 4:	<u>mm7</u>	<u>4</u> <u>3</u>	<u>ii₃⁴</u>
Measure 9, quarter-note beats 1 & 2:	<u>Mm7</u>	<u>(root)</u>	<u>V⁷</u>
Measure 10, quarter-note beats 3 & 4 (piano only):	<u>M</u>	<u>6</u>	<u>IV⁶</u>

Measure 11, quarter-note beats 1 & 2:	<u>°7</u>	<u>7</u>	
Measure 11, quarter-note beats 3 & 4:	<u>Mm7</u>	<u>$\frac{6}{5}$</u>	<u>V_5^6</u>
Measure 12, quarter-note beats 3 & 4:	<u>m</u>	<u>(root)</u>	<u>iii</u>
Measure 13, quarter-note beats 1 & 2:	<u>m</u>	<u>(root)</u>	<u>vi</u>
Measure 14, quarter-note beats 3 & 4:	<u>M</u>	<u>(root)</u>	
Measure 15, quarter-note beats 1 & 2:	<u>m</u>	<u>(root)</u>	
Measure 28, quarter-note beats 1 & 2:	<u>ø7</u>	<u>7</u>	
Measure 28, quarter-note beats 3 & 4:	<u>+</u>	<u>6</u>	
Measure 29, quarter-note beats 1 & 2:	<u>ø7</u>	<u>7</u>	
Measure 30, quarter-note beats 3 & 4:	<u>Mm7</u>	<u>7</u>	
Measure 31, quarter-note beats 3 & 4:	<u>Mm7</u>	<u>7</u>	<u>V^7</u>
Measure 35, quarter-note beat 3:	<u>M</u>	<u>$\frac{6}{4}$</u>	<u>I_4^6</u>

4.2.

	1.	2.	4.
Root:	<u>D</u>	<u>B</u>	<u>G</u>
Quality:	<u>M</u>	<u>m</u>	<u>M</u>
Inversion:	<u>Root</u>	<u>1st</u>	<u>2nd</u>

See the chord symbols in Example 4.7 of the text. In the first two chords, the E is a “color tone” and not considered part of the triad.

4.3. Various voicings/realizations are possible. The following is one possible rendition that might be used as a model for comparison.

The image displays a musical score for piano, consisting of two systems of staves. The first system covers measures 20 to 25, and the second system covers measures 26 to 30. The music is written in a key signature of one flat (B-flat) and a common time signature (C). The score includes a treble clef staff with a melodic line, a grand staff (treble and bass clefs) for the piano accompaniment, and a bass clef staff with a bass line. The piano accompaniment features complex chordal textures, often with multiple notes in the same voice. The bass line provides a steady rhythmic and harmonic foundation. Measure numbers 20, 25, and 30 are indicated at the top of their respective measures. Below the piano accompaniment staves, there are numerical figures indicating fingerings or voicings for the chords.

20 25

$\flat 6$ 7
4 4

6 6 6 6 6

30

6 9 8 7 7 6 6 7
5 8 6 5 4 3

4.4.

Chord progression for exercise 4.4:

- System 1: C, Dm/C, G7/B, C, Am/C, D/C
- System 2: G/B, C/B, Amin7 (or C/A), D7, G, C#dim/G
- System 3: Dm/F, Bdim/F, C/E, F/E, Dmin7 (or F/D), G7, C

Slight variants on the above (as noted in the text) are permissible, for instance “CM” or “CMaj” instead of “C.”

Level Mastery 5.1.

a.

Chord progression for Level Mastery 5.1:

- 1. Eb: vi
- 2. g: V
- 3. f: ii°
- 4. c: III+
- 5. E: vii°
- 6. c#: VI
- 7. Db: IV
- 8. d: III+
- 9. bb: VII (natural minor)
- 10. G: iii
- 11. Db: iii
- 12. eb: VI
- 13. g#: iv
- 14. a: V
- 15. Bb: ii
- 16. C#: vii°
- 17. g: v (natural minor)
- 18. b: #vi° (melodic minor)
- 19. F: IV
- 20. c: ii°

b.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

F: vi Ab: vii⁰ eb: III⁺ g: VI D: iii A: IV Bb: V bb: III g: #vi⁰ E: vii⁰

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

a: #vi⁰ Eb: IV ab: VI A: vi b: ii⁰ B: V Ab: iii f#: iv g#: vii⁰ eb: #vi⁰

c.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

Ab: IV⁶₄ e: vii⁰⁶ b: iv c: VI⁶ F#: I⁶₄ a#: III⁺⁶ Eb: ii⁶ g: VI ab: iv⁶ F: V⁶₄

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

Eb: V⁶ bb: ii⁰⁶ c#: III⁶₄ a: iv⁶₄ Bb: vii⁰⁶ F#: IV d: VI⁶ b: III⁶₄ D: I⁶₄ g: iv⁶

d.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

E: I⁶₄ g: vii⁰⁶ Eb: IV⁶ f: VI⁶₄ B: iii⁶ Bb: vi⁶ e: VII⁶ bb: III⁶₄ Db: vi⁶₄ C#: vii⁰⁶
(natural minor) ———

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

f#: iv⁶₄ Eb: ii⁶ eb: ii⁰⁶₄ Bb: iii⁶ G: vi⁶₄ b: V⁶ Ab: V⁶ f#: VI⁶ g#: vii⁰⁶ ab: VI⁶₄

Level Mastery 5.2.

a.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

G: \underline{vi}^7 f#: $\underline{ii}^{\emptyset 7}$ g: \underline{iv}^7 Eb: \underline{iii}^7 b: $\underline{\#vi}^{\emptyset 7}$ c: \underline{VI}^7 Bb: \underline{vi}^7 D: \underline{V}^7 eb: \underline{III}^7 e: \underline{V}^7
(melodic minor) (harmonic minor)

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

Ab: \underline{V}^7 F: \underline{iii}^7 eb: $\underline{vii}^{\emptyset 7}$ D: \underline{vi}^7 f#: $\underline{vii}^{\emptyset 7}$ Eb: \underline{I}^7 e: $\underline{ii}^{\emptyset 7}$ g: \underline{VI}^7 Gb: \underline{V}^7 B: \underline{iii}^7

b.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

b: $\underline{ii}^{\emptyset 6}_5$ a: $\underline{vii}^{\emptyset 4}_3$ Eb: \underline{vi}^4_2 d: $\underline{ii}^{\emptyset 4}_3$ F#: $\underline{vii}^{\emptyset 6}_5$ ab: $\underline{vi}^{\emptyset 4}_2$ B: \underline{IV}^6_5 Bb: \underline{V}^4_3 B: \underline{ii}^4_3 E: \underline{iii}^4_2
(melodic minor)

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

Ab: \underline{I}^6_5 g: $\underline{ii}^{\emptyset 4}_3$ eb: $\underline{vii}^{\emptyset 4}_2$ D: \underline{ii}^7 f#: \underline{V}^4_2 Eb: \underline{vi}^4_3 e: $\underline{ii}^{\emptyset 6}_5$ g: \underline{iv}^4_3 Gb: \underline{V}^4_2 B: \underline{iii}^4_3

c.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

C: \underline{iii}^6_5 d: \underline{VI}^4_3 g#: $\underline{vii}^{\emptyset 7}_5$ D: \underline{ii}^4_2 Eb: \underline{vi}^6_5 bb: \underline{V}^7 f#: $\underline{ii}^{\emptyset 4}_3$ F: \underline{IV}^4_2 A: \underline{vii}^6_5 Ab: \underline{IV}^4_3

11. 12. 13. 14. 15. 16. 17. 18. 19. 20.

A: \underline{vi}^7 B: \underline{iii}^4_2 Db: \underline{IV}^6_5 c#: \underline{V}^6_5 f: \underline{III}^7 E: $\underline{vii}^{\emptyset 4}_3$ G: \underline{vi}^6_5 b: \underline{VII}^4_3 b: $\underline{vii}^{\emptyset 7}_5$ F#: \underline{iii}^6_5

c.

T PD — D T PD — D T PD — T PD — D

Munter. (Lively)

D: I iii IV vii^{o6} I iii IV vii^{o6} I iii IV I ii⁶ *— V

Chapter 5 Self-Test

5.1.

Chapter 5 Apply This!

5.1.

a.

T T D T PD D D T D T PD D

g: i i V⁶ i iv⁶ V V² i⁶ vii⁰⁶ i ii⁰⁶ V

PD D D T PD T PD D T

g: iv⁶ V vii⁰⁶ i iv⁶ i⁴ ii⁰⁵ V⁷ I

b.

T PD PD

A^b: I IV ii

D D T D T

V V⁷ I⁴ V⁷ I

Level Mastery 6.1.

Various answers are possible. The melodies below are provided as suggested guidelines.

Numbers refer to (consonant) intervals above the bass.

8 5 3 6 | 3 8 3 | 3 6 6 3 | 8

f#:

8 3 3 | 5 3 3 | 5 8 3 | 8

d:

5 3 8 | 3 8 6 | 3 3 3 | 8

E:

8 5 3 8 | 5 3 3 6 | 3 8 3 5 | 8

Ab:

Level Mastery 6.2.

- a. 1. parallel 2. oblique 3. contrary
- b. 1. contrary 2. oblique 3. parallel 4. similar 5. similar

- c. 1. oblique 2. contrary 3. parallel 4. parallel 5. similar 6. contrary

Level Mastery 6.3.

A musical score for a piano exercise. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#). The melody in the treble clef consists of quarter notes: C4, D4, E4, F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4, B3, A3, G3, F3, E3, D3, C3.

(Jeppesen)

A musical score for a piano exercise. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#). The melody in the treble clef consists of quarter notes: C4, D4, E4, F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4, B3, A3, G3, F3, E3, D3, C3.

A musical score for a piano exercise. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#). The melody in the treble clef consists of quarter notes: C4, D4, E4, F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4, B3, A3, G3, F3, E3, D3, C3.

Level Mastery 6.4.

A musical score for a piano exercise. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one sharp (F#). The melody in the treble clef consists of quarter notes: C4, D4, E4, F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. The bass line consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4, B3, A3, G3, F3, E3, D3, C3.

Level Mastery 6.5.

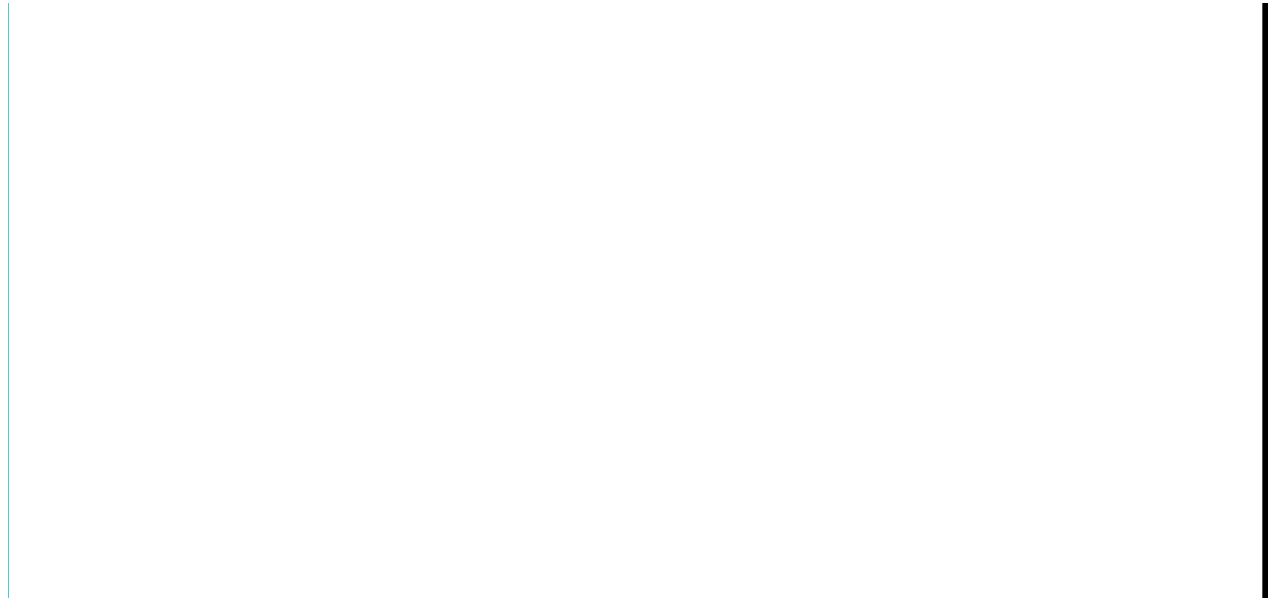
Numbers refer to intervals above the bass. Dissonances are in parentheses.

a.

8 (9) 8 6 5 (4) 10 10 5 6 (7) 10 (9) 10 (4) 6 (°5) (7) 6 10 (9) 8 (7)

10 (9) 10 4 6 (7) 8 6 6 5 6 8 10 (4) 5 6 8

b.



Chapter 6 Self-Test

6.1.

6.2.

- a. Generally well formed, with a single focal point and mostly conjunct motion; one leap is followed by a step in the opposite direction. The melody begins and ends on the tonic.
- b. This melody is too disjunct. The first leap is too large (a sixth); other leaps are followed by another leap, or by a step in the same direction rather than “filled in” with a step in the opposite direction.

- c. Measures 4 through 6 contain two leaps of a fourth in the same direction, and the second leap is an augmented fourth (tritone). The last four measures outline a whole-tone tetrachord.

Chapter 6 Apply This!

6.1.

The musical score for exercise 6.1 consists of five staves. The first two staves are in treble clef, and the last three are in bass clef. The music is in 9/4 time and features piano dynamics (*p*). The score is divided into two systems of four measures each. The first system contains measures 1-4, and the second system contains measures 5-8. The chord analysis below the staves is as follows:

C: I V I vi V I I IV I I vi ii ii V I I⁶ V

6.2. Composition.

Various solutions are possible.

Level Mastery 7.1.

a.

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

F: ⁴7 ³1 b: ⁴2 ³1 Eb: ⁴2 ³1 g#: ⁴2 ³1 f#: ⁴2 ³1

c: ⁴2 ³1 E: ⁴2 ³1 f: ⁴2 ³1 Db: ⁴2 ³1 F#: ⁴2 ³1

Detailed description: This musical exercise consists of two rows of five measures each, numbered 1 through 10. Each measure is written for piano accompaniment on a grand staff (treble and bass clefs). The notes are primarily quarter notes and half notes, often beamed together. Below each measure, a chord symbol is provided, and specific fingers are indicated with numbers 1-4 and accents (^) above the notes. The key signature changes from one flat (Bb) to two flats (Bb, Eb) to three flats (Bb, Eb, Ab) to four flats (Bb, Eb, Ab, Db) to five flats (Bb, Eb, Ab, Db, Gb) across the first row. The second row continues with three flats (Bb, Eb, Ab), two flats (Bb, Eb), one flat (Bb), and no flats (C).

b.

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

G: B: Bb: d: c#: e: A: f: a: Eb:

Detailed description: This musical exercise consists of two rows of five measures each, numbered 1 through 10. Each measure is written for piano accompaniment on a grand staff. The notes are primarily quarter notes and half notes. Below each measure, a chord symbol is provided. The key signature changes from one sharp (F#) to two sharps (F#, C#) to one sharp (F#) to no sharps or flats (C) to one flat (F) to two sharps (F#, C#) to one sharp (F#) to no sharps or flats (C) to one flat (F) to two flats (F, Cb). The chord symbols are: G, B, Bb, d, c#, e, A, f, a, Eb.

Level Mastery 7.2.

a.

(Asterisks indicate tendency tone resolutions involving chromatic alteration.)

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

G: 7 1 bb: 2 1 d#: 6 5 B: 2 1 g: 4 3

f#: 6 5 D: 2 1 f: 7* 1 c#: 6 5 ab: 6 5

Detailed description: This musical score for exercise 'a' consists of ten measures, numbered 1 through 10. Each measure is presented in a grand staff with a treble clef on top and a bass clef on the bottom. The key signature changes from G major (one sharp) to B-flat major (two flats) in measure 2, then to D major (two sharps) in measure 3, B major (two sharps) in measure 4, and G minor (two flats) in measure 5. Measures 6-10 continue with key signatures of F# major (three sharps), D major (two sharps), F major (one sharp), C# major (three sharps), and A-flat major (four flats). Above the notes, numbers 1-7 indicate fingerings, and numbers 2-7 with an accent (^) indicate scale degrees. Asterisks (*) are placed above notes 6 and 7 in measures 1, 3, 4, 6, 7, 8, 9, and 10, indicating tendency tones. Measure 8 features a chromatic alteration in the bass line, marked with an asterisk and a double asterisk (**).

b.

(Asterisks indicate tendency tone resolutions involving chromatic alteration.)

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

g: 7* 1 e: 2 1 A: 4 3 Bb: 6* 5 b: 4 3

Db: 4 3 F: 4 3 g#: 4 3 d: 7* 1 E: 4 3

Detailed description: This musical score for exercise 'b' consists of ten measures, numbered 1 through 10. Each measure is presented in a grand staff with a treble clef on top and a bass clef on the bottom. The key signature changes from G minor (two flats) to E minor (three flats) in measure 2, then to A major (three sharps) in measure 3, B-flat major (two flats) in measure 4, and B minor (three flats) in measure 5. Measures 6-10 continue with key signatures of D-flat major (five flats), F major (one sharp), G# major (three sharps), D major (two sharps), and E major (one sharp). Above the notes, numbers 1-7 indicate fingerings, and numbers 2-7 with an accent (^) indicate scale degrees. Asterisks (*) are placed above notes 6 and 7 in measures 1, 3, 4, 6, 7, 8, 9, and 10, indicating tendency tones. Measure 8 features a chromatic alteration in the bass line, marked with an asterisk and a double asterisk (**).

c.

Level Mastery 7.3.

- | | | |
|------------|--------------------|--------|
| a. PAC | b. ii:IAC | c. IAC |
| d. HC; IAC | e. PC | f. DC |
| g. HC; PAC | h. PC; HC; PC; IAC | |

Chapter 7 Self-Test

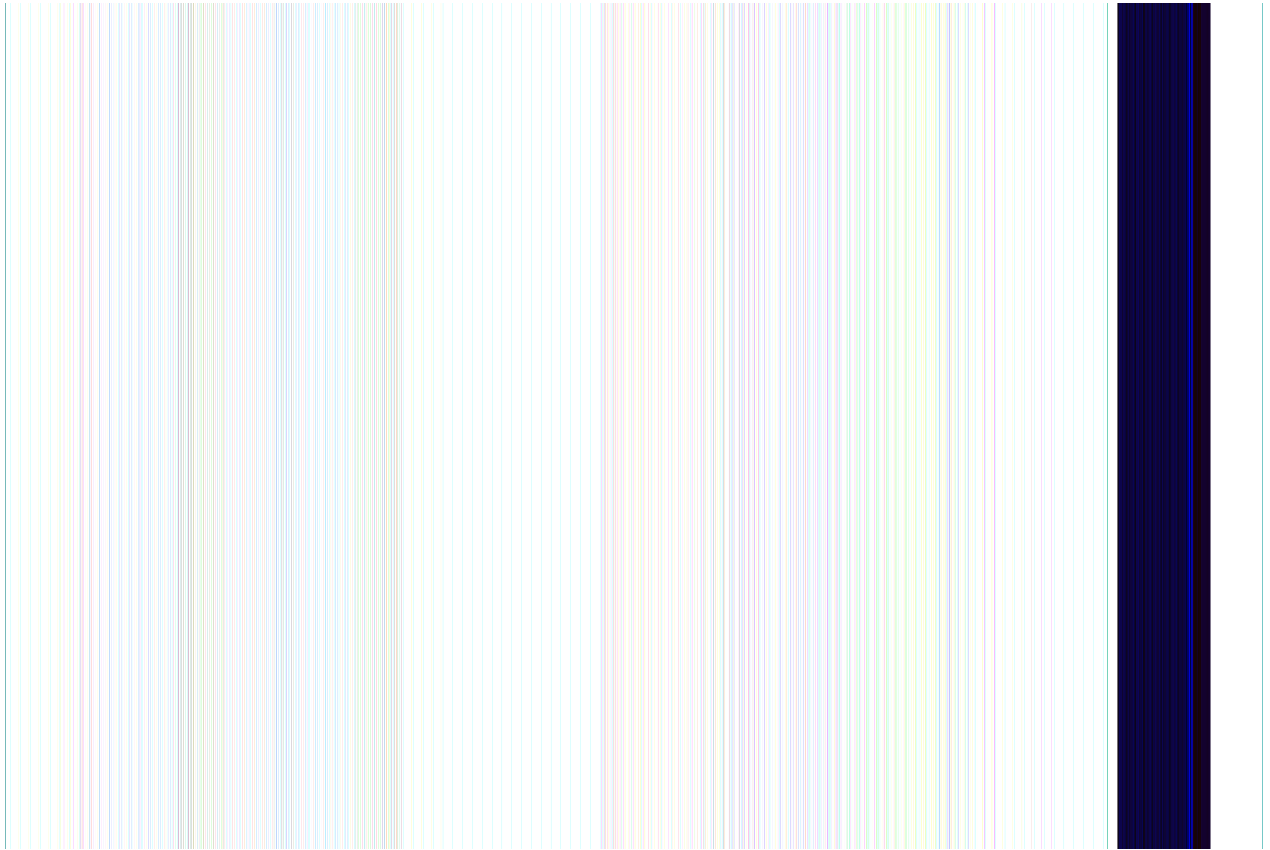
7.1.

C: V⁶₅ I e: vii^{o7} i b: V⁴₃ i A: V⁴₂ I⁶ c#: vii^{o6}₅ i

a: vii^{o4}₂ i⁶₄ Bb: V⁶₅ I c: vii^{o6}₅ i Db: V⁷ I eb: vii^{o4}₂ i⁶₄

7.2.

a.



b.

Musical score for piano in 3/4 time, featuring a melody in the right hand and chords in the left hand. The key signature has two sharps (F# and C#). The score includes dynamics like *p* and *pizz*, and harmonic analysis labels *A: V7* and *I*. A bracket labeled *IAC* spans the final two measures of the melody. The left hand plays a steady accompaniment of chords, with some notes marked *pizz*.

p

pizz

IAC

A: V7 *I*

c.

DC

mor - - - - - tis, ex - a - - - - mi - ne, in

mor - - - - - tis, ex - a - - - - mi - ne,

- ta - tum in mor - tis ex - a - mi - ne,

- ta - tum in mor - tis ex - a - mi - ne,

Organ

6 - 5
4 - 3
V IV⁶

d.

The musical score for exercise d consists of two systems of piano accompaniment in 2/4 time, marked with a key signature of one sharp (F#). The first system is labeled 'IAC' and the second 'HC'. Both systems begin with a dynamic of *mf* and a *cresc.* marking. The first system concludes with dynamics of *f* and *sf*, and is accompanied by chord labels 'V' and 'I'. The second system concludes with dynamics of *f* and *sf*, and is accompanied by chord labels 'ii', 'ii⁶', 'vi', and 'V'. The notation includes accents, slurs, and dynamic markings.

e.

The musical score for exercise e features a vocal line and a piano accompaniment in 3/4 time, marked with a key signature of two flats (Bb). The vocal line includes the lyrics: "Dai - sy, Dai - sy, Give me your an - swer, do." The piano accompaniment consists of chords in the right hand and a simple bass line in the left hand. The score is labeled 'PC' and includes chord labels 'F: IV' and 'I'.

Chapter 7 Apply This!

7.1.

Even though the downbeat of the final measure appears to spell out a second-inversion IV chord, the chord is the product of non-chord activity as shown in the first interpretation below.

And a partridge in a pear tree!

C: V I

The second interpretation (following) is problematic. First, the “deceptive” cadence does not occur at the end of the phrase—the move to the tonic after the IV implies a plagal cadence. A second problem is that the movement to the tonic happens on the metrically weak second beat, whereupon it is held for three beats—creating an awkward “syncopated” harmonic rhythm.

And a partridge in a pear tree!

C: V IV₄⁶ I

Level Mastery 8.1.

(other doublings
also possible)

G: IV⁶ Bb: I₄⁶ f#: VI eb: vii⁰⁶ Ab: vi⁶ E: ii⁶ g: V⁶ C#: iii g#: V₄⁶ b: ii⁰⁶
 close open close close open close open open close open

(other voicing solutions are possible)

G: iii⁶ d: iv₄⁶ B: vi f: ii⁰⁶ c#: vii⁰⁶ bb: i₄⁶ F#: ii⁶ G: vi⁶ Eb: vii⁰⁶ ab: III₄⁶
 close open open close open close open open close close

Level Mastery 8.2.

(free res.)

c#: V⁷ i F: V₅⁶ I A: V₂⁴ I⁶ bb: V⁷ i Eb: V₃⁴ I

(free res.)

D: V₂⁴ I⁶ f: V⁷ i B: V⁷ I Ab: V₅⁶ I f#: V₃⁴ i

Level Mastery 8.3.

a.

eb: i VI iv i F: I iii vi V B: vi IV ii V Eb: I ii V vi

b.

D \flat : I vi IV V e: VI iv i V c: i III VI iv E: I IV V vi

Chapter 8 Self-Test

8.1. Various voicings are possible.

open close open close close open open close close open

G: IV b: ii^{o6} e \flat : VI₄⁶ A: iii F \sharp : IV⁶ c \sharp : V₄⁶ b \flat : iv B: vii^{o6} E \flat : I₄⁶ c: vii^{o4}⁶

8.2.

open C C close C C open I C

a: V⁴₂ i⁶ F: V⁶₅ I eb: V⁷ i

close C C open C C close (free res.) C C

g#: V⁴₃ i Db: V⁶₅ I A: V⁷ I

open C I close C C close C C

F#: V⁷ I b: V⁴₂ i⁶ f: V⁴₃ i

8.3. Various soprano parts possible and, hence, various voicings.

The musical notation for exercise 8.3 consists of two systems of staves. Each system has a treble clef on top and a bass clef on the bottom. The first system is in E major (two sharps). The second system is in d minor (two flats). The third system is in Bb major (two flats). The fourth system is in b minor (two flats). The notes are written in a way that demonstrates various voicings for each chord.

E: I V vi IV d: i VI iv V B \flat : vi IV V I b: i III VI V

8.4.

The musical notation for exercise 8.4 consists of two systems of staves. Each system has a treble clef on top and a bass clef on the bottom. The first system is in f minor (three flats). The second system is in d minor (two flats). The third system is in Gb major (two flats). The fourth system is in D major (two sharps). The notes are written in a way that demonstrates various voicings for each chord.

f: i VI iv V d: III VI iv V G \flat : ii V iii vi D: vi IV V I

Chapter 8 Apply This!

8.1.

The first system of the musical score consists of four staves (Soprano, Alto, Tenor, and Bass) in a common time signature. The music is written in a key with one flat. Annotations include:

- Soprano staff:** "crossed voices" (measures 2-3), "3rd missing" (measures 4-5), "3rd missing" (measures 6-7), "crossed voices" (measures 8-9), and "3rd missing" (measures 10-11).
- Alto staff:** "*" (measure 2), "// 8ves (A & T)" (measures 4-5), and "// 8ves (A & T)" (measures 6-7).
- Tenor staff:** "**" (measures 2-3), "**" (measures 4-5), and "**" (measures 8-9).
- Bass staff:** No specific annotations.

The second system of the musical score continues with four staves. Annotations include:

- Soprano staff:** "3rd missing" (measures 1-2), "3rd missing" (measures 3-4), "crossed voices" (measures 5-6), "3rd and 5th missing" (measures 7-8), and "3rd missing" (measures 9-10).
- Alto staff:** "// 5ths (S & A, S & B)" (measures 1-2), "// 5ths (S & A, S & B)" (measures 3-4), "// 8ves (S & A)" (measures 5-6), "// 5ths (S & B)" (measures 7-8), "// 8ves (S & T)" (measures 9-10), and "// 8ves (S & B)" (measures 11-12).
- Tenor staff:** "// 8ves (A & B)" (measures 1-2), "// 8ves (A & B)" (measures 3-4), "*" (measures 5-6), "// 8ves (A & B)" (measures 7-8), "// 8ves (A & T)" (measures 9-10), "// 8ves (A & T)" (measures 11-12), and "// 8ves (A & T)" (measures 13-14).
- Bass staff:** "// 5ths (T & B)" (measures 3-4), "**" (measures 5-6), and "**" (measures 7-8).

* - indicates third of chord is doubled rather than the root
 ** - indicates fifth of chord is doubled rather than the root

Level Mastery 9.1.

close open open close

b: i ii^{o6} V B \flat : I IV⁶ V A: I I⁶ IV d: VI iv⁶ V

close open close close

A \flat : I V⁶ I e: VI III⁶ iv c: i VII⁶ III E: V V⁶ I

close open open close

G: vi V⁶ I B: I V⁶ vi E \flat : I I⁶ V b \flat : VI ii^{o6} V

Level Mastery 9.2.

(close) (close) (open)

A: I V⁶ vi⁶ IV f: i⁶ iv⁶ V i D: I IV⁶ V⁶ I

(close) (open) (open)

c: i VI⁶ V⁶ i B: I I⁶ ii⁶ V g: i⁶ ii⁰⁶ V i

(close) (close) (open)

Db: I vii⁰⁶ I⁶ IV e: i i⁶ ii⁰⁶ V Gb: I⁶ ii⁶ V vi

Level Mastery 9.3.

(open) (open) (close) (open)

Bb: iii⁶₅ vi e: V⁶₅ i c#: ii⁶₅ V Eb: vi⁶₅ ii

(close) (close) (open) (close)

d: VII⁶₅ III b: III⁶₅ VI Ab: ii⁶₅ V f#: i⁶₅ iv

(open) (close) (close) (open)

B: V⁶₅ I c: iv⁶₅ VII eb: III⁶₅ VI F#: iii⁶₅ vi

Chapter 9 Self-Test

9.1.

(open) (close) (close)

a: VI ii^ø₅⁶ V F: I V⁶ vi b: VI iv⁶ V

(close) (open) (close)

D^b: I IV⁶ V E: I V₅⁶ I c: i ii⁰⁶ V

(open) (close) (close)

e: VI III⁶ iv f#: VI iv⁶ V A^b: vi V⁶ I

(open) (close) (open)

g#: i V⁶ VI⁶ B^b: V V⁶ I e^b: i VII⁶ III

9.2. Various voicings are possible. The following is one realization.

Bb: I V⁵⁶ I I⁶ IV I⁶ ii⁶ ii⁶ V I

Chapter 9 Apply This!

9.1.

a.

126 *Allegro con brio*

C: I⁶ I⁶ I⁶ I⁶ V⁶ vii^{o6} I⁶

b.

Two systems of piano accompaniment in D major, 2/4 time. The first system shows a progression from D major (D:) to V⁶ (F#7) and then to I⁶ (D major with the bass line in the first inversion). The second system continues with I⁶ in the bass line and various chord voicings in the treble.

c.

Exercise c begins at measure 56, marked **Allegro non molto** and ***p f***. The score is in F major, 2/4 time. The right hand features a complex texture with rapid sixteenth-note runs and chords, while the left hand provides a steady accompaniment of eighth notes. The piece concludes with a final chord in the right hand.

(continued)

ii°₅⁶

ii°₅⁶

Level Mastery 10.1.

a.

p

3

3

B \flat :

IV₄⁶ (pedal)

b.

p

p

D:

IV₄⁶ (pedal)

c.

ca - ro mio ben, cre - di-mial-men, sen - za di te — lan - gui - sceil cor.

p *cresc.* *più cresc.* *colla voce p*

C: $\begin{matrix} 6 \\ I 4 \\ \text{(cadential)} \end{matrix}$

d.

p *dolcissimo*

O del mio dol - cear -

d: $\begin{matrix} V 3^4 \\ \text{(neighboring)} \end{matrix}$

dor — bra - ma - - - to og - get

to, bra - ma - - - toog - get to,

6
i 4
(passing)

Chapter 10 Self-Test

10.1. Various voicings are possible.

The musical score is organized into four systems, each with two staves (treble and bass clef). The notes are primarily quarter notes. The voicing labels and chord diagrams are as follows:

- System 1:**
 - Measure 1: arpeggiating. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: C: 6/4/6.
 - Measure 2: neighboring. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: a: 4/3.
 - Measure 3: passing. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: Eb: 4/3/6.
 - Measure 4: pedal. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: f: ♭/6/♭.
- System 2:**
 - Measure 1: cadential. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: E: 6/4.
 - Measure 2: passing. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: g: 6/6/4.
 - Measure 3: pedal. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: B: 6/4.
 - Measure 4: cadential. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: G: 6/6/4.
- System 3:**
 - Measure 1: neighboring. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: Db: 4/3.
 - Measure 2: arpeggiating. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: e: 6/6/4.
 - Measure 3: arpeggiating. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: A: 6/6/4.
 - Measure 4: cadential. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: c: 6/4/♭.
- System 4:**
 - Measure 1: passing. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: f#: 6/4/3.
 - Measure 2: pedal. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: d: ♯/6/♯.
 - Measure 3: neighboring. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: c#: 6/4/3.
 - Measure 4: passing. Treble: C4, E4, G4; Bass: C3, E3, G3. Diagram: D: 6/4/3.

Chapter 10 Apply This!

10.1.

a.

Adagio (pedal) cadential

dolce *p*

F: (IV₄)⁶ I₄⁶

cadential (pedal) cadential

I₄⁶ (IV₄)⁶ I₄⁶

b.

55 *f* passing

Nun muss sich Al - - - les, Al - - -

C: V₃⁴

60 passing *riten.* ***p*** *a tempo*

les wen - - - - den, nun muss sich

riten. *a tempo*

dim.

4
V₃

65 ***f*** cadential

Al - les, Al - - les wen - - - - den!

cresc.

6
I₄

c.

pedal

8

A: IV₄⁶

b.

Musical score for exercise b, featuring a piano accompaniment with various ornaments and fingerings. The score is in 2/4 time and consists of two staves. The right hand has ornaments labeled APT, LN, ET, UN, PT, UN, ET, and CPT. The left hand has ornaments labeled PT, APP, ET, LN, UN, and CPT. The piece concludes with a final chord in the right hand.

Level Mastery 11.2.

Musical score for Level Mastery 11.2, consisting of 15 numbered exercises. Each exercise is a short piano piece with a specific chord progression. The exercises are arranged in three rows of five. The chord progressions are as follows:

- 1. G: I vii⁰6
- 2. c: ii⁰7 V⁷
- 3. A: V⁷ I
- 4. bb: V⁴₂ i⁶
- 5. D: V vi
- 6. f: i iv⁶
- 7. g: i vii⁰6
- 8. B: vi ii⁶
- 9. E: V⁴₂ I⁶
- 10. E: V⁴₂ I⁶
- 11. F: V⁴₃ I
- 12. Ab: V⁷ vi
- 13. eb: V⁷ VI
- 14. f#: i V⁴₃
- 15. Eb: V⁴₂ I⁶

Level Mastery 11.3.

a.

Musical score for exercise a, measures 1-8. The score is in G major, 2/4 time. The piano introduction includes chords G, I, V7, V7, I, I, V7, V7, I. Fingerings and ornaments like PT, APP, and CPT are indicated.

b.

Musical score for exercise b, measures 1-8. The score is in B minor, 2/4 time. The piano introduction includes chords b: i (6) iv i6 vii⁰7 i iv⁶ f#: i UN V7 i. Fingerings and ornaments like LN, UN, S, and NG are indicated.

c.

(key: g) Gm or i Bb aug./ $F\#$ $Bb/F\flat$ or III_4^6

92 Em^{7b5} or $\flat vi^{\emptyset 7}$ $A\flat/E\flat$ $D7$ or V^7 Gm or i

($F\#$ in bass could be interpreted as a CPT)
($E\flat$ in bass could be interpreted as a CPT)

Articulation markings: PT, UN, LN, ANT, APP, ET.

d.

Andante con Variazioni.

p $cresc.$ sf p $cresc.$

Articulation markings: S (7-6), LN, APP, UN, LN, PT.

Chords: $A\flat:$ I V_3^4 I^6 V^6 I V IV^6 I_4^6

6 *p cresc.* APPs LN S (7-6) LN *p* LN *cresc.*

$Bb7/D$ vii^0_4 I^6 vi vii^0_7 I V I V_3 I^6 V^6

(IV⁶)

12 APP UN LN PT *sf* *p* *cresc.* APP LN PT *p*

I V IV^6 I^6_4 \uparrow vii^0_4 I^6 I^6_4 V^7 I

$Bb7/D$

Chapter 11 Self-Test

11.1.

1. neighbor tone 2. passing tone 3. neighbor group 4. escape tone 5. anticipation

(LN would create parallel fifths with alto) (two solutions) (if D preceded B, parallel fifths with alto would result) (two solutions) (two solutions)

6. two neighbor tones 7. two passing tones 8. chromatic passing tone 9. escape tone

NTs are possible between any two voices; be careful for the potential of parallel fifths between soprano and tenor) (two solutions) (two solutions)

11.2.

1. appoggiatura 2. accented passing tone 3. accented neighbor tone 4. two accented passing tones 5. appoggiatura

(two solutions) (UN or LN possible in any voice; UN in soprano shown) (two solutions; soprano is better choice, because of m2 dissonance)

6. two accented neighbor tones 7. two appoggiaturas 8. accented passing tone 9. accented neighbor tone

(LNs also possible) (three solutions) (UN a more satisfactory solution than LN, because of m2 dissonance)

11.3.

1. suspension in tenor 2. retardation in soprano 3. suspension in alto 4. two suspensions 5. suspension in bass

7 - 6 9 - 8 9 - 8 9 - 8 2 - 3

4 - 3

6. suspension with change of bass 7. suspension with ornamented resolution 8. suspension in tenor 9. suspension in soprano

9 - 6 4 - 3 (the ornament is not included) 9 - 8 4 - 3

Chapter 11 Apply This!

11.1.

a.

Allegro moderato

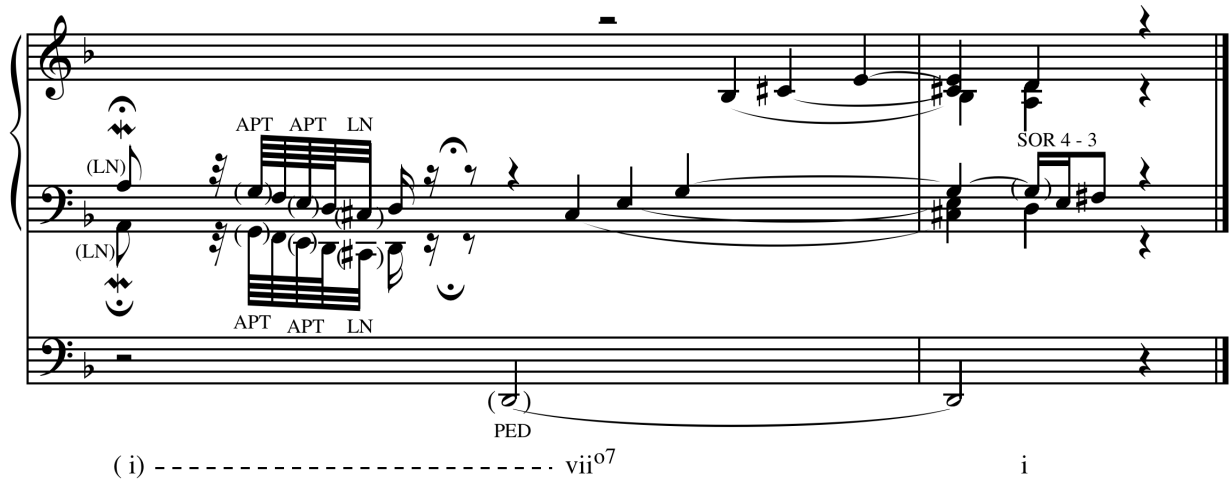
Chord progression:

A: I I⁶ ii ii⁶ V⁽⁷⁾ I⁴ V

5 A/C# A7/E Bm/D Bm B7/D# A/E E7 A

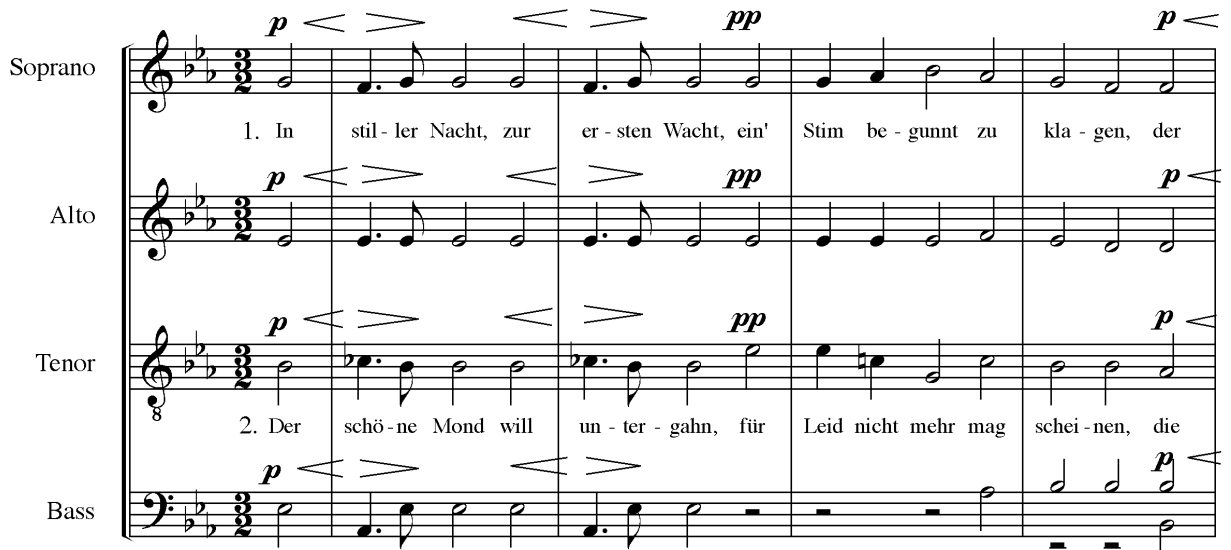
b.

d: i-----



Musical score for piano. The score consists of three staves: a grand staff (treble and bass clefs) and a separate bass clef staff below. The grand staff contains two systems of music. The first system has a treble clef staff with notes and a bass clef staff with notes and a large chordal block. Annotations include "(LN)" above and below the first staff, "APT APT LN" above and below the second staff, and "SOR 4-3" above the second staff. The second system has a treble clef staff with notes and a bass clef staff with notes. Annotations include "(LN)" above and below the first staff, "APT APT LN" above and below the second staff, and "SOR 4-3" above the second staff. Below the grand staff is a bass clef staff with a single note and the annotation "PED". Below that is a line of text: "(i) ----- vii°7 i".

c.



Vocal score for Soprano, Alto, Tenor, and Bass. The score is in 3/4 time and consists of four staves. The Soprano staff has lyrics: "1. In stil-ler Nacht, zur er-sten Wacht, ein' Stim-be-gunnt zu kla-gen, der". The Alto staff has lyrics: "1. In stil-ler Nacht, zur er-sten Wacht, ein' Stim-be-gunnt zu kla-gen, der". The Tenor staff has lyrics: "2. Der schö-ne Mond will un-ter-gahn, für Leid nicht mehr mag schei-nen, die". The Bass staff has lyrics: "2. Der schö-ne Mond will un-ter-gahn, für Leid nicht mehr mag schei-nen, die". Dynamic markings include *p*, *pp*, and *p* with accents. The score is divided into five measures.

5

näch - ge Wind hat süss und lind zu mir den Klang ge - tra - gen; von

8

Ster - ne lan ihr Glit - zen-stahn, mit mir sie wol - len wei - nen. Kein

9

her - bem Leid und Trau - rig - keit ist mir das Herz zu flo - ssen, die

UN poco a poco cresc. UN *f* S 6-5 *p*

UN *f* PT S 4-3 *p*

LN LN *f* LN APP *p*

LN LN *f* LN APP *p*

Vo - gel - sang, noch Freu - den - klang man hö - ret in den Lüf - ten, die

13

Blü - me - lein. mit Thrä - nen-rein hab ich sie all' be - go - ssen.

wil - den Thier traur'n auch mit mir in Stei - nen und in Klüf - ten.

11.2.

LN ET ANT RET ET S 4-3

ET ANT UN LN PT APT CPT LN LN S 4-3 APT

S 2-3 UN PT

APP ET PT ET LN APP UN PT

S 7-6 S 4-3 APP LN PT CPT SOR 4-3

PT PT

Level Mastery 12.1.

a.

f IAC

5 Rep. IAC

(Two phrases)

b.

p HC *f*

5 HC (or PAC in dominant key) *f*

(Two phrases)

c.

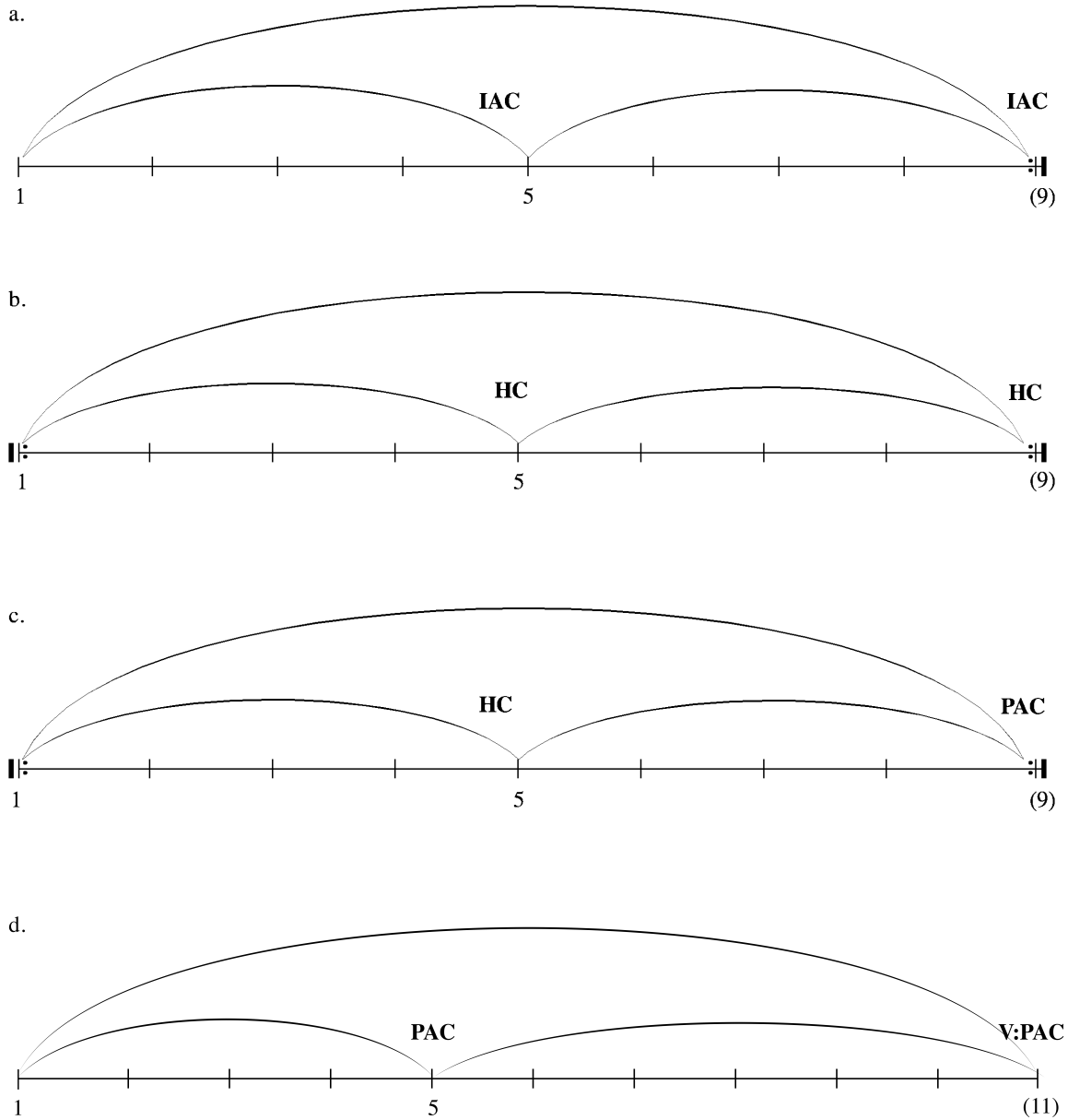
Two staves of music in G major (one sharp) and 2/4 time. The first staff begins with a treble clef and a key signature of one sharp. The melody consists of eighth notes and quarter notes, with a triplet of eighth notes in the fourth measure. Above the staff, the label "A:" is placed under the first measure, and "(implied: ii V)" is placed under the last two measures. A bracket labeled "HC" spans the final two measures. The second staff begins with a treble clef and a key signature of one sharp. The melody continues with eighth notes and quarter notes, including another triplet of eighth notes in the fourth measure. Above the staff, the label "PAC" is placed above the final measure, and "(implied: V I)" is placed below the final measure. A bracket labeled "5" spans the first five measures of the second staff.

(Parallel period)

d.

Two systems of piano accompaniment in G minor (two flats) and 2/4 time. The first system consists of two staves. The right hand has a melodic line with a triplet of eighth notes in the second measure and a trill in the fourth measure. Above the right hand staff, the label "PAC" is placed above the trill. The left hand has a bass line with quarter notes. The second system also consists of two staves. The right hand has a melodic line with three triplets of eighth notes in the third, fourth, and fifth measures. Above the right hand staff, the label "V:PAC" is placed above the final measure. The left hand has a bass line with quarter notes.

(two phrases)

Level Mastery 12.2.

The first three examples in Level Mastery 12.1 are very similar in terms of phrase structure; the differences are in the types of cadences found at the end of each phrase, and the presence or absence of repetitions. 12.2d is unusual in that it is asymmetrical; the second phrase may be further subdivided into three two-measure subphrases.

Chapter 12 Self-Test

1. a.

CONTRASTING PERIOD

ANTECEDENT PHRASE

9 HC

CONSEQUENT PHRASE

13 PAC

Self-Test 12.1a is an example of a contrasting period, with the antecedent phrase measures 9–12 and the consequent phrase measures 13–16. One might be tempted to analyze measure 14 as a IV:PAC, but the fact that the voice continues through the measure—only momentarily delayed by the fermata—would seem to eliminate it as a true cadence.

b.

PARALLEL PERIOD

ANTECEDENT PHRASE

Musical notation for the Antecedent Phrase of a Parallel Period. The score is in 3/4 time with a key signature of one sharp (F#). The melody in the treble clef consists of a sequence of eighth notes: B4, C5, D5, E5, F#5, G5, A5, B5, A5, G5, F#5, E5, D5, C5, B4. The bass line consists of a sequence of half notes: B3, C4, D4, E4, F#4, G4, A4, B4, A4, G4, F#4, E4, D4, C4, B3. The phrase concludes with a double bar line.

CONSEQUENT PHRASE

Musical notation for the Consequent Phrase of a Parallel Period. The score is in 3/4 time with a key signature of one sharp (F#). The melody in the treble clef consists of a sequence of eighth notes: B4, C5, D5, E5, F#5, G5, A5, B5, A5, G5, F#5, E5, D5, C5, B4. The bass line consists of a sequence of half notes: B3, C4, D4, E4, F#4, G4, A4, B4, A4, G4, F#4, E4, D4, C4, B3. The phrase concludes with a double bar line.

PAC

Musical notation for the Parallel Period. The score is in 3/4 time with a key signature of one sharp (F#). The melody in the treble clef consists of a sequence of eighth notes: B4, C5, D5, E5, F#5, G5, A5, B5, A5, G5, F#5, E5, D5, C5, B4. The bass line consists of a sequence of half notes: B3, C4, D4, E4, F#4, G4, A4, B4, A4, G4, F#4, E4, D4, C4, B3. The phrase concludes with a double bar line.

c.

CONTRASTING PERIOD

ANTECEDENT PHRASE

CONSEQUENT PHRASE

Repetition and elaboration

of consequent phrase, with extensions

(first phrase extension)

(second phrase extension)

(cadential extension)

(DC)

PAC *f*


PAC

The overall form of the excerpt is *abb'*.

d.


PARALLEL PERIOD

ANTECEDENT PHRASE **HC**



CONSEQUENT PHRASE **PAC**

5



e.

IAC



Mi tra - di — quell' al - ma in - gra - ta, quell' al - ma'in - gra - ta,

p *cresc.*

(PAC) (phrase extension)

in - fe - li - ce, o Di - o! mi fa, in - fe - li - ce,o

p cresc. *mfp* *sfp*

(PAC) (second phrase extension) PAC

Di - o! mi fa, in - fe - li - ce, o Di - o! o — Dio! mi fa.

mf *sf*

The form is a phrase group, form *abcc* (where *c* is the label given to the phrase extensions).

Chapter 12 Apply This!

12.1.

SIMILAR PERIOD

SCHERZO. *Allegretto.* ANTECEDENT PHRASE CONSEQUENT PHRASE

p motive *a* motive *a* motive *a* \sharp HC

6 PAC PAC

cresc. *f* *p*

13 PAC (phrase extension) PAC elision

cresc. *f* *ff* *p*

(g#)

20 PAC elision (phrase expansion) elision

tr

26

HC

a tempo

pp

p

SIMILAR PERIOD

33

ANTECEDENT PHRASE

CONSEQUENT PHRASE

HC

39

PAC

f

ff

ff

ff

ff

Trio. 45

p

sf

sf

motive *b*

motive *b*

motive *b*

motive *b*

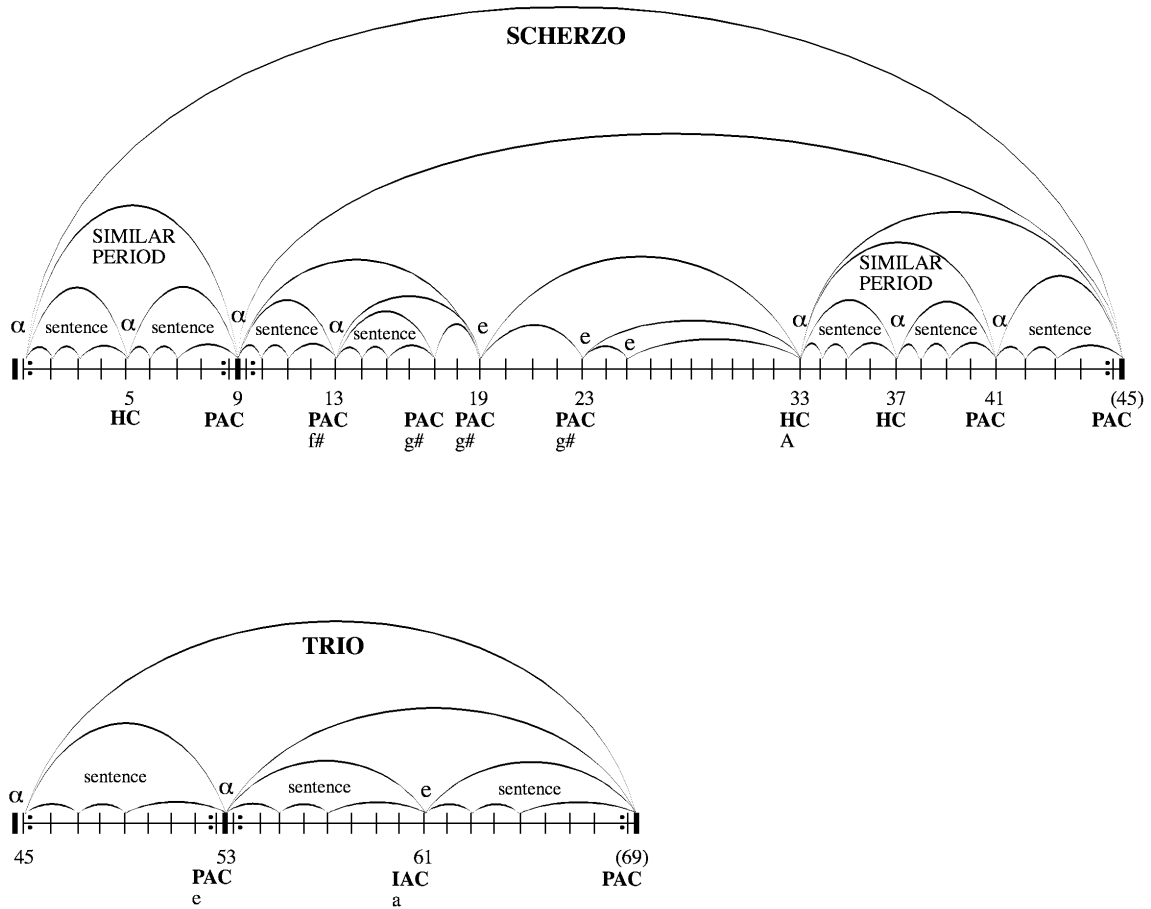
51 PAC *tr* *sf* *sf*

(e) IAC elision *sf* *fp*

63 *sf* *sf* *ff* PAC

sf *sf*

Detailed description: This musical score consists of three systems of piano music, each with a treble and bass clef staff. The first system (measures 51-56) begins with a 'PAC' (Phrase Accent) over a half note in the treble staff. A trill (*tr*) is marked over a quarter note in the treble staff at measure 52. Dynamic markings include *sf* (sforzando) in measures 54 and 56. A fermata is placed over the final note of measure 56. The second system (measures 57-62) features a slur over measures 57-60, with an 'IAC elision' (Inter-phrase Accent elision) bracketed over measures 60-61. Dynamic markings include *sf* in measure 61 and *fp* (fortissimo piano) in measure 62. The third system (measures 63-68) starts with *sf* in measure 63, followed by *sf* in measure 64, *ff* (fortissimo) in measure 65, and a final 'PAC' in measure 68. Additional *sf* markings are present in the bass staff at measures 63 and 65.



Compare the arch map above with your own. How closely does your arch map resemble this one in the number of layers and placement of phrases and cadences? Look over the score (and, ideally, listen to a recording of the piece) while looking over the arch map. Do the groupings make sense musically? If you are listening to a recording, does the performer articulate any of the seams between groupings by changes in dynamics or tempo?

Level Mastery 13.1.

1. T PD D 2. PD D [T] 3. T PD PD

B \flat : I IV V G: ii⁶ V vi c#: i VI iv

4. PD PD PD 5. T PD D 6. T PD T

A \flat : iii vi ii d: i⁶ ii⁶/₅ V b: i iv⁶/₄ i

7. T PD PD 8. T D [T] 9. PD D T

D: I IV ii E \flat : I V vi B: vi V I

Level Mastery 13.2.

a.

Musical score for exercise a. It consists of two staves in treble and bass clefs, with a key signature of one sharp (F#) and a common time signature (C). The music is marked *mf*. The right hand plays a continuous eighth-note pattern. The left hand plays a sequence of chords and notes, with brackets underneath indicating fingerings: N, P, P, P, N, P.

b.

Musical score for exercise b. It consists of two staves in treble and bass clefs, with a key signature of one sharp (F#) and a 2/4 time signature. The music is marked *p*. The score is divided into two systems. The first system starts at measure 49 and ends at measure 52. The second system starts at measure 53 and ends at measure 56. Brackets underneath indicate fingerings: N (measures 49-50), PED (measures 53-54), and P (measures 55-56).

c.

10

Mein Freud ist mir ge - nom - men, die ich nit weiss be - kom -

Mein Freud ist mir ge - nom - men, die ich nit weiss be - kom -

Mein Freud ist mir ge - nom - men, die ich nit weiss be - kom -

Mein Freud ist mir **CS** ge - nom - **P** - men, die ich nit weiss be - kom -

15

men, wo ich im E - - - - - lend bin,

men, wo ich im E - - - - - lend bin,

men, wo ich im E - - - - - lend bin,

men, wo ich im E - lend, im E **N** lend bin,

d.

Musical score for measures 1-2. The score includes staves for Violin I (Vln. I), Violin II (Vln. II), Viola (Vla), Violoncello (Vc), and Contrabasso (Cb). The key signature has one flat (B-flat), and the time signature is common time (C). The dynamic marking is *mp*. The Violin I part has a *mp* dynamic. The Violin II part has a *mp* dynamic and a *div.* (divisi) marking. The Viola part has a *mp* dynamic. The Violoncello and Contrabasso parts have a *mp* dynamic. A bracket labeled **PED** spans the bottom of the Vc and Cb staves.

Musical score for measures 1-2, piano accompaniment. The score includes staves for the right hand (RH) and left hand (LH). The key signature has one flat (B-flat), and the time signature is common time (C). The dynamic marking is *mp*. A bracket labeled **PED** spans the bottom of the LH staff.

Apply This! 13.1.

a.

Musical score for piano, consisting of two systems of four measures each. The key signature is three flats (B-flat major/C minor). The first system begins with a piano (*p*) dynamic. The right hand features a triplet of eighth notes in the second measure. The bass line consists of chords. Harmonic analysis labels below the first system are: *f*: (first measure), *i* (second measure), V_5^6 (third measure), and *N* (fourth measure). The second system begins with a mezzo-forte (*sf*) dynamic, followed by another *sf* dynamic in the second measure, a fortissimo (*ff*) dynamic with a crescendo hairpin in the third measure, and a piano (*p*) dynamic in the fourth measure. Harmonic analysis labels below the second system are: *i* (first measure), vii^{o6} (second measure), i^6 (third measure), ii^{o6} (fourth measure), and *V* (fifth measure). A bracket labeled *P* spans the first four measures of the second system.

b.

p molto legato

simile

Harmonic analysis labels:

- Measure 1: *P* (Prolongation)
- Measure 2: *P* (Prolongation)
- Measure 3: *P* (Prolongation)
- Measure 4: *P* (Prolongation)
- Measure 5: *P* (Prolongation)
- Measure 6: *P* (Prolongation)
- Measure 7: *N* (Neighbor)
- Measure 8: *N* (Neighbor)

* This harmony will be formally introduced in chapter 15. It is not essential to properly label this chord to recognize the neighboring prolongation.

c.

DUKE

Be-lia fi-glia del-l'a-mo re, schia-vo son de' vez-zi tuo i; con un

winds

pp

strings, pizz.

Db: I V³₄

P

det-to,un det-to sol tu puo - i le mie pe-ne, le mie pe-ne con-so-lar.

pp dolce

pp

I⁶ IV V⁷ I

P

d.

piano

bass guitar

Ab: I IV⁴₆ I I IV⁴₆ I

P

P

Level Mastery 14.1.

Voicing and spacing may vary.

a: $vii^{\circ 6}_5$ i B \flat : $vii^{\circ 4}_2$ I^6_4 f: $vii^{\circ 4}_3$ i^6 g#: $vii^{\circ 4}_2$ i^6_4

E \flat : $vii^{\circ 7}$ I g: $vii^{\circ 6}_5$ i A: $vii^{\circ 4}_3$ I^6 c: $vii^{\circ 4}_2$ i^6_4

Level Mastery 14.2.

(C must be below F)

A \flat : IV^7 V d: $ii^{\circ 6}_5$ V B: ii^4_2 V^6 f#: iv^6 V

(A# must be below D#)

(D \flat must be below G \flat)

F#: IV^4_3 V^6 f: $ii^{\circ 7}$ V D: ii^6 V b \flat : iv^4_3 V^6

Level Mastery 14.3.

Spacing may vary.

(Be careful to have the upper three voices in contrary motion with the bass.)

Ab: vi IV eb: III VI b: VI ii^{ø7} E: vi V

Db: iii⁶₄ vi c#: VI iv⁶ f: III iv g#: III VI

Level Mastery 14.4.

1.

G: vi ii V I IV vii^{o6*} iii vi

* (avoiding doubled leading tone)

2.

f#: i iv VII III VI ii^o V i

3.

g: VII III VI ii^{°6*} V i

* (inverted to avoid voice leading by augmented intervals)

Chapter 14 Self-Test

14.1.

B \flat : iii	PD	A: V	D	F: ii ^{°6}	PD	g: iv ⁶ ₄	PD
a: iv	PD	g \sharp : VI	PD	d: iv ⁶	PD	c: i ⁶ ₄	D
d: i	T	E: I	T	B \flat : vi ⁶	PD	E \flat : vi ⁶ ₄	PD

g \sharp : ii ^{°6}	PD	B \flat : I ⁶ ₄	D	E \flat : vii ^{°5} ₅	D	f: iv ⁶ ₄	PD
B: vii ^{°6}	D	F: IV ⁶ ₄	PD	c: ii ^{°6} ₅	PD	b \flat : i ⁶	T
		E \flat : V ⁶ ₄	D			A \flat : ii ⁶	PD

14.2.

(A smoother solution would be to begin in close spacing.)

musical notation for C major triad in C major, 4/4 time. Annotations include "doubled leading tone" and "incorrect doubling".

C:

musical notation for C minor triad in C minor, 4/4 time. Annotations include "accidental missing", "sharp (melodic minor) added to avoid melodic augmented second interval", and interval markings: "// 8ves, A & B; // 5ths, T & B".

a:

(tenor to E to avoid doubled leading tone)

musical notation for F major triad in F major, 3/4 time. Annotations include interval markings: "// 5ths, S & T" and "doubled leading tone".

F:

More extensive rewrites are necessary, shown below.

musical notation for F major triad in F major, 3/4 time, showing a rewrite of the triad.

14.3.

B \flat : I IV vii $^{\circ}4$ ^{6*} iii (g: i) vi g: iv V i

* (to avoid doubled leading tone or parallel octaves with soprano)

Chapter 14 Apply This!

14.1. Analysis.

- a. Bach, Allemande from Partita no. 4 in D major, BWV 828, mm. 18–21. This excerpt contains an ascending second 5–6 harmonic sequence.

D: 5 - 6 5 - 6 5 - 6 5 - 6

- b. Clara Schumann (1819-1896), Trio in G Minor for Violin, Cello and Piano, Opus 17 (1st mvt.), mm. 30–41a. This excerpt contains an ascending second 5–6 harmonic sequence.

30

34

cresc.

5 - 6 5 - 6 5 - 6

38

The musical score consists of three systems of staves. The first system has a vocal line in the treble clef and a bass line in the bass clef. The second system has a piano accompaniment with a treble clef and a bass clef. The key signature has two flats (B-flat and E-flat), and the time signature is 4/4. The music features various chord voicings and melodic lines with slurs and ties.

Level Mastery 15.1

- a.
- | | |
|---|--|
| 1. G: V ⁶ /V | 6. e \flat : V/V |
| 2. b \flat : V ⁷ /VI | 7. c \sharp : V ₅ ⁶ /III |
| 3. A \flat : V ₂ ⁴ /vi | 8. D \flat : V ⁶ /vi |
| 4. F: V/iii | 9. A: V ₄ ⁶ /ii |
| 5. B \flat : V ₃ ⁴ /iii | 10. E \flat : V ₂ ⁴ /iii |

b. Spacing may vary.

1. 2. 3. 4. 5.

6. 7. 8. 9. 10.

e: V_5^6/III F: V_3^4/vi c: V_6^6/iv b: V_2^4/VII B \flat : V_5^6/ii

E: V_6^6/iii g#: V_5^6/V f: V_4^6/VI D: V_2^4/IV A \flat : V_6^6/V

Level Mastery 15.2

Spacing may vary. All tendency-tone labels pertain to the key being tonicized by the secondary dominant chord.

1. 2. 3. 4.

a: V_5^6/V V E \flat : V_3^4/vi vi d: V_2^4/iv iv 6 e: V_7^7/III III

(free res.)

5. $B: V^5/ii \quad ii$

6. $F: V^7/iii \quad iii$ (free res.)

7. $b: V^2/VII \quad VII^6$

8. $c\#: V^3/VI \quad VI$

9. $f: V^5/iv \quad iv$

10. $g\#: V^2/V \quad V^6$

11. $D_b: V^7/vi \quad vi$

12. $D: V^5/iii \quad iii$

Level Mastery 15.3

a. Schubert, "Ave Maria" Op. 52, no. 6, mm. 1-2.

pp
col Pedale

$A_b: \quad V^7/IV$

- b. Claude-Michel Schönberg and Herbert Kretzmer, “I Dreamed a Dream” (from *Les Miserables*), mm. 12–21. The key is F major.

12

D D/F# Gm Gm/Bb D D/F# G G/B

But the ti-gers come at night With their voi-ces soft as thun-der

mf

F: V/ii V⁶/ii V/ii V⁶/ii V/V V⁶/V

16 C C/E Fm Fm/Ab C F Gm/F F Gm/F C

As they tear your hope a - part, As they turn your dream to shame.

- c. Brahms, Rhapsodie Op. 119 no. 4, mm. 1–13.

Allegro risoluto

E \flat :

7

V/iii

d. Beethoven, Piano Sonata in E major, Op. 90 (2nd mvt.), mm. 1–25a.

p dolce

E:

5

cresc. p

⁶
V₄/V V⁷/V

10

cresc.

V⁷/IV

14 SUS

p

4
V $3/V$

6
V $4/V$ V $7/V$

18

cresc.

V $7/IV$

22 SUS

p

teneramente

4
V $3/V$

Level Mastery 15.4

a.

1. 2. 3. 4. 5.

A: vii $^{\circ}7/iii$ Eb: vii $^{\circ}3/V$ c#: vii $^{\circ}5/iv$ F: vii $^{\circ}2/vi$ b: vii $^{\circ}4/VI$

6. 7. 8. 9. 10.

g: $\text{vii}^{\circ 4}/\text{III}$ B: $\text{vii}^{\circ 4}/\text{IV}$ f#: $\text{vii}^{\circ 4}/\text{VII}$ Bb: $\text{vii}^{\circ 6}/\text{ii}$ F#: $\text{vii}^{\circ 7}/\text{vi}$

b. Spacing may vary.

1. 2. 3. 4. 5.

G: $\text{vii}^{\circ 4}/\text{vi}$ d: $\text{vii}^{\circ 7}/\text{iv}$ Eb: $\text{vii}^{\circ 4}/\text{V}$ D: $\text{vii}^{\circ 6}/\text{ii}$ g: $\text{vii}^{\circ 6}/\text{V}$

6. 7. 8. 9. 10.

c#: $\text{vii}^{\circ 7}/\text{VI}$ B: $\text{vii}^{\circ 4}/\text{V}$ Ab: $\text{vii}^{\circ 6}/\text{iii}$ b: $\text{vii}^{\circ 4}/\text{VI}$ f: $\text{vii}^{\circ 6}/\text{V}$

Level Mastery 15.5

Spacing may vary. All tendency-tone labels pertain to the key being tonicized by the secondary diminished (leading tone) chord.

1. C: vii^{o7}/V V 2. Eb: vii^{o4}_3/iii iii^6 3. F: vii^{o4}_2/V V^6_4 4. G: vii^{o6}_5/vi vi

5. g#: vii^{o7}/V V 6. d: vii^{o4}_3/VI VI^6 7. D: vii^{o6}_5/ii ii 8. E: vii^{o4}_2/IV IV^6_4

9. Ab: vii^{o4}_3/IV IV^6 10. B: vii^{o6}_5/vi vi 11. Db: vii^{o4}_2/V V^6_4 12. b: vii^{o7}/VII VII

Level Mastery 15.6

- a. Beethoven, Piano Sonata no. 8 in C minor, "Pathetique," Op. 13 (1st mvt.), measures 1–2. (As part of your analysis, identify the non-chord tones in measure 2.)

Grave.

c: vii^{o7}/V

b. Schubert, Zwölf Ländler, Op. 171 no. 3, measures 1–8.

D: $\text{vii}^{\circ 7}/\text{ii}$

5 $\text{vii}^{\circ 7}/\text{ii}$

c. Paul Simon, “American Tune,” [1:55–2:15], chord progression only.

C: $\text{vii}^{\circ 2}/\text{V}$

- d. Mozart, Piano Sonata in D major, K.311 (2nd mvt.), measures 63–74. (This excerpt contains both secondary dominant and diminished chords.)

63 *p* *f* *p* *f*

G: $\text{vii}^\circ_3/\text{vi}$ V_2/IV

67 *f* *p* *f* *p*

$\text{vii}^\circ_3/\text{ii}$ $\text{vii}^\circ_3/\text{vi}$ V_2/IV $\text{vii}^\circ_3/\text{ii}$

72 *cresc.* *f* *p*

Chapter 15 Self-Test

15.1.

d: V_5/iv $\text{Bb}:\text{V}_3/\text{ii}$ c: V_2/VI $\text{Ab}:\text{V}_6/\text{ii}$ f: V_2/VI $\text{Db}:\text{V}_5/\text{ii}$ $\text{bb}:\text{V}_6/\text{V}$ $\text{eb}:\text{V}_3/\text{VI}$

a: V/iv C: V^6_5/iii G: V^4_3/vi b: V^4_2/iv A: V^6/vi c#: V^6_5/VII B: V^6_4/V F#: V^7/vi

15.2. Spacing may vary.

g: V^4_3/VI c#: V^7/III Ab: V^6_5/V B: V^4_3/ii F: V^6/ii

E: V^4_2/IV bb: V^6_5/VI D: V/iii f: V^4_2/VII Eb: V^7/iii

f#: V/V ab: V^4_3/III Bb: V^6_5/vi e: V^4_2/VI A: V^6/ii

15.3.

a: vii^07/iv G: $\text{vii}^06/5/\text{vi}$ D: $\text{vii}^04/3/\text{V}$ b: vii^02/VI f#: vii^06/VI E: vii^03/ii g#: $\text{vii}^06/5/\text{iv}$ f#: vii^02/VII

C: $\text{vii}^04/3/\text{IV}$ d: $\text{vii}^06/5/\text{iv}$ Bb: vii^07/iii c: $\text{vii}^04/2/\text{VI}$ Ab: vii^06/iii f: $\text{vii}^04/2/\text{VI}$ Db: $\text{vii}^06/5/\text{V}$ eb: vii^02/V

15.4. Spacing may vary.

e: vii^06/V Bb: vii^07/IV C#: $\text{vii}^06/5/\text{ii}$ c: $\text{vii}^04/2/\text{iv}$ g#: $\text{vii}^04/3/\text{VI}$

f#: $\text{vii}^06/5/\text{III}$ F: vii^06/vi B: $\text{vii}^04/3/\text{V}$ g: vii^07/III D: $\text{vii}^04/2/\text{iii}$

Ab : vii^{o4} 3/V a : vii^{o4} 2/VII f : vii^{o6} 5/VI E : vii^{o4} 3/vi Db : vii^{o7} /ii

15.5.

T ————— PD ————— T D PD (D) D —————

C: I I ————— I⁷ IV — 6 I V⁶ vi⁷ 4 - # V/V V V⁶ (I)3⁵
CS

4 (D) ————— D ————— D ————— T ————— (D) —————

6 - 5 V ————— V⁶ I V⁶/ii V/V V⁶/iii
4 - # V/V

7 PD (D) PD ————— (D) (D) PD ————— (D) ————— PD —————

iii 7 - 6 iii 5 - 6 6 - 5⁺ iii ^{b7}V⁽⁷⁾/IV IV
3 vii^o/iii 3 vi vii^o/iii 4 - # V/iii

P

10 (D) ——— D ——— T (D) D ——— T ———

7 # V(7)/V V V⁵ I 6 # V⁵/V 6 4 V 7 I I

Chapter 15 Apply This!

15.1. Analysis

Certain non-chord tones are shown to clarify the analysis.

(D) PD D T D (D) or [T] PD D (D) PD (D)

mf *sf* *ff* *sf*

Db: V/vi vi V I⁶ V₃⁴ V⁷/IV IV V V⁶/vi vi V⁶/V

D (D) D (D) PD D (D) or [T]

V V⁷/V V V/vi vi V V₃⁴ V⁷/IV

The image shows a musical score for measures 12 through 16. The score is written for piano, with a treble and bass clef. Above the staff, harmonic functions are labeled: PD, D (D), PD, D, and T. Below the staff, Roman numeral chord symbols are provided: IV, V, V⁶/vi, vi ii⁶, V⁷, V⁶/₅, and I. The notation includes various chord voicings, accidentals, and articulation marks such as accents and slurs. A specific chord in measure 15 is marked with 'ETs' above it.

An examination of the harmonic functions shows that, in contrast to a typical Classic era piece (which would often begin with a strong establishment of the tonic), this piece establishes the tonic rather circumspectly. The “tonic” chord in measure 2 actually serves as a passing chord between the two dominant-function chords, and the expected tonic in measure 3 is replaced by a V^7/IV . Not until measure 16 does a strong tonic chord provide closure.

* While the chord on the second beat of measure 10 suggests a *iii* chord, the syntax of the progression (with *V*s on either side of the chord) suggests that the *F*s should be analyzed as passing tones. As we learned in chapter 13, *V* does not normally progress to *iii*, nor does *iii* normally progress to *V*.

15.2. Analysis.

a.

Piu Allegro.

NCT (technically a 9-8 SUS, as previous measure--not shown--concluded on V₅ of g minor)

Gm **Gm7** **C7** SUS - 4-3

Fm SUS - 9-8 **Fm7** **Bb7** SUS - 4-3

Eb SUS - 9-8 **Ab7** SUS - 4-3

Db SUS - 9-8

locally, LNs

locally, LNs

PTs

PTs

PT

PT

PT

PT

(Left-hand sequence continues NCT pattern shown above)

3

- b. Although the passage cannot be confined diatonically to a single key, the sequence more closely resembles a diatonic circle-of-fifths sequence because of the ever-changing chord qualities. The first measure does not belong to the circle-of-fifths sequence.

Chord symbols for the first system:

- Measure 1: Fm
- Measure 2: Bbm⁶
- Measure 3: GbMM⁴

Chord symbols for the second system:

- Measure 4: Cb⁶
- Measure 5: FMm²
- Measure 6: Bbm

Level Mastery 16.1

- a. Spacings may vary.

1. F: iv 2. A: v⁶ 3. Eb: ii⁶₅ 4. D: bVI⁶ 5. E: bIII 6. Ab: bVII 7. Db: vii⁰₂ 8. G: bVI 9. Bb: ii⁰⁶ 10. B: bIII⁶₄

b.

The bracketed cadential 6_4 chords below may also be labeled as $I^6_4 - V$.

Ab: I V⁶ I I⁶ IV ii $\left[\begin{array}{c} 6 - 5 \\ 4 - 3 \end{array} \right]$ V vi ii⁶ $\left[\begin{array}{c} 6 - 5 \\ 4 - 3 \end{array} \right]$ V I

iv ii⁰ bVI ii⁰⁶

G: I V vi IV I V vi ii⁶ V I

bVI iv bVI ii⁰⁶

Chapter 16 Self-Test

16.1. Spacings may vary.

F#: iv Bb: $\flat VII^6$ Eb: $ii^{\emptyset 6}_5$ g#: IV^6_4 B: $\flat VI$

E: $\flat III^6$ Db: iv^6_4 b: $\#vi^{\emptyset 4}_3$ G: $\flat VII^6_4$ eb: ii^4_2

Chapter 16 Apply This!**16.1.**

a.

9

hoch ü - ber sich den blau - en, den kal - ren Him - mels - dom, hoch

A:

13

ü - ber sich den blau - - - - en, tief kla - ren Him - mels - dom.

iv⁶

b.

Andante

8

Mère au re - gard si doux, J'ai fait un vi - lain rê - ve,

p

E: v^7 (E ped.)

12 *cresc.*

Gar - dez - moi près de vous, Gar - dez - moi près de

pp

$ii \emptyset_3^4$

15

vous, Tant que la nuit s'a - chève.

pp

p

bVI $\frac{6}{4}$ iv

c.

VERSE (1:15 - 1:52)

(3x)

f#: i v III VII IV iv

CHORUS, excerpt (3:28 - 3:49)

i v III VII IV

VI III v I I

Level Mastery 17.1

1. 1. iv⁶
2. iv
3. III⁶
4. VI
5. ii

2. a. d: i
F: vi

- b. C: vi⁶
e: iv⁶

- c. g: i
d: iv

- d. G: ii
C: vi

Level Mastery 17.2

1. 1. V
2. ii
3. iii

Chapter 17 Self-Test

17.1. c

17.2. d

Chapter 17 Apply This!

17.1.

a.

9

p

key: ab

11

p

common-chord modulation

13

p cresc.

ab: i |
Cb: vi

15

decresc.

b.

common-chord modulation

Key: a

a: iv |
C: ii

4

7

c. (measures 35–40 only shown)

35

Key: A ii^6 ii^6 V

6 - 7
4 - 5
3

38 chromatic modulation

p fz fz fz

p fz fz

p fz fz

p fz fz

p fz fz

a: bVI
F: I

17.2. Various answers are possible.

17.3. Various answers are possible.

Chapter 18 Self-Test

18.1.

a. $E\flat$ major C major $C\flat$ major $G\flat$ major G major
 common tone: G $E\flat$ $B\flat$ G

b. $c\sharp$ minor $a\sharp$ minor a minor e minor f minor*
 common tone: $C\sharp$ E E $G\sharp / A\flat$

c. $A\flat$ minor f minor e minor* b minor* c minor
 common tone: $A\flat$ $C\flat / B$ $C\flat / B$ $E\flat$

*enharmonically a chromatic mediant relationship

18.2.

$A: V_5^6$ $F: V_3^4$ $F\sharp: V_3^4$ $C: : V^7$ $C\#: : V^7$
 $E\flat: V_3^4$ $C: V_2^4$ $C\flat: V_2^4$ $G\flat: V_5^6$ $G: V_5^6$
 $G\flat: V_2^4$ $E\flat: V_7$ $D: V_7$ $A: V_3^4$ $B\flat: V_3^4$
 (enharmonic chromatic mediant) (enharmonic chromatic mediant)

18.3. Enharmonic common-tone modulation (the $C\flat$ in the iv of $E\flat$ major is enharmonically equivalent to the B in the V of C major).

Chapter 18 Apply This!

18.1.

- Common tone (G between measures 16 and 17). Although the modulation occurs between phrases—a characteristic of direct modulation—G serves to connect the two keys.
- Sequential.

18.2. Various answers are possible.

18.3. Various answers are possible.

Level Mastery 19.1

- Real answer:



- Real answer:



- Tonal answer (fifth scale degree prominent at beginning of subject):



- Tonal answer (fifth scale degree prominent at beginning of subject):



Chapter 19 Self-Test

19.1.

a. Real answer.

b. Tonal answer. This is because the subject begins with a prominent dominant scale degree.

Ver-wirf mich nicht von deinem Angesicht und nimm deinen

nicht von deinem Angesicht heiligen Geist nicht von mir, und

c. Tonal answer; the subject begins in the tonic, but implies a movement toward the dominant by its end with the scalar descent to E. As a result, only the repeated Es in the answer are at the “real” transposition level of the dominant—the rest of the answer is a step lower (a fourth above the subject rather than a fifth).

Chapter 19 Apply This!

19.1.

a.

TONAL ANSWER (TA)

SUBJECT (S)

COUNTERSUBJECT (CS)

LINK

CS

End of Exposition EPISODE 1

S

S (E♭M)

CS

EPISODE 2

13

CS

S (gm), tonally modified

EPISODE 3

16

(first sequence)

18

(second sequence: bass and alto voices inverted)

END OF EPISODE 3

20

S (cm)

EPISODE 4

CS

(similar to Episode 1)

23 (similar to Episode 3)

26 END OF EPISODE 4 beginning of CS remainder of CS

29 (cadence) CODA S (cm) Picardy Third

b.

EXPOSITION

Andante con moto.

Subject

Real Answer

Link

Subject

Real Answer

End of Exposition

Subject (a minor)

Link

21

Link

ENTRY GROUP

Subject (d minor)

26

Real Answer

31

EPISODE 1

36

ENTRY GROUP

Subject (F major)

41 **Real Answer** **Link**

46 **Subject (F major)** **End of Entry Group** **EPISODE 2**

51

56 **ENTRY GROUP IN STRETTO** **Subject (d minor)** **Subject (d minor)**

Detailed description: This musical score is for piano and is divided into four systems. The first system (measures 41-45) features a treble clef with a melodic line and a bass clef with a harmonic accompaniment. A bracket labeled 'Link' spans measures 44 and 45. The second system (measures 46-50) continues the accompaniment and includes a section labeled 'End of Entry Group' and 'EPISODE 2' starting at measure 49. The third system (measures 51-55) shows a continuation of the melodic and harmonic material. The fourth system (measures 56-60) is titled 'ENTRY GROUP IN STRETTO' and features two instances of the 'Subject (d minor)' in the treble clef, with the bass clef providing accompaniment. The score is written in a key with one flat (B-flat major or F minor) and a common time signature.

61

Link

Altered Subject

66

CODA

Altered subject

Altered subject in stretto

Altered subject

72

in stretto

19.2.

1. Tonal answer:

(in Handel's score; D₄ also acceptable)

2. Real answer:

Level Mastery 20.1.

- a. Bach, “Courante” from Partita no. 5 in G major, BWV 829. This is an example of continuous simple, balanced binary form. The key areas visited are all closely related to the tonic, typical of a Baroque-period work.

G:

6

HC

12

HC

G: vi vi⁶

D: ii ii⁶ V⁷

18

23 DC

D: V vi⁷

29 PAC

D: V vi⁷

35 IV:IAC HC

D: IV
e: III VI V i⁶

41

D: IV
e: III VI V i⁶

47 PAC (circle of fifths sequence)

e: V i (G: vi) G: V⁷/V ----- V⁷

53 HC

V⁷/IV

59 PAC

- b. Brahms, Waltz Op. 39, no. 5. Although the cadence at measures 7–8 could be analyzed as a PAC in B major, the entire piece can be analyzed in E major, with an extended V in measures 9–11 (and a dominant pedal lasting to measure 16) and an extended tonicization of IV (A major) in measures 17–20. This is an example of continuous rounded binary form (the thematic material returns at measure 13).

Grazioso

p

poco cresc.

E:

HC (V:PAC)

8 IAC

p

p

poco cresc.

Level Mastery 20.2

Haydn, Piano Sonata no. 5 in A Major, Hob. XVI/5, 2nd mvt.

Menuetto

Trio
19

pp *mf* *tr* **III: PAC**

a:

27

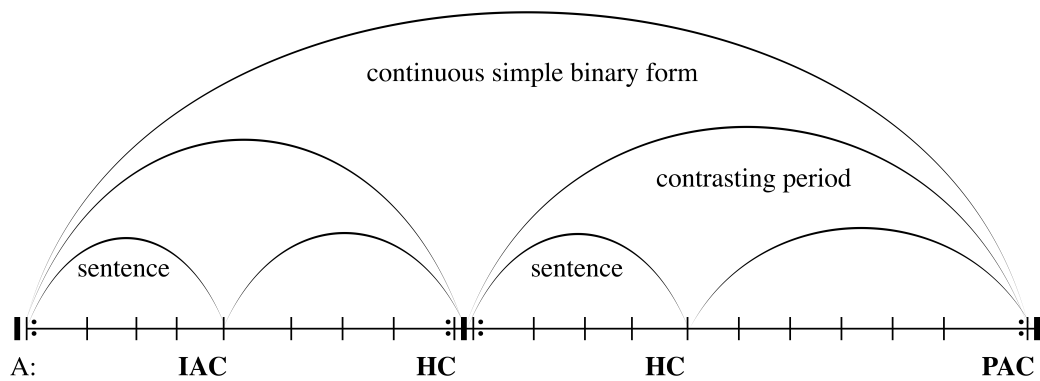
p *pp* **iv: PAC** *tr*

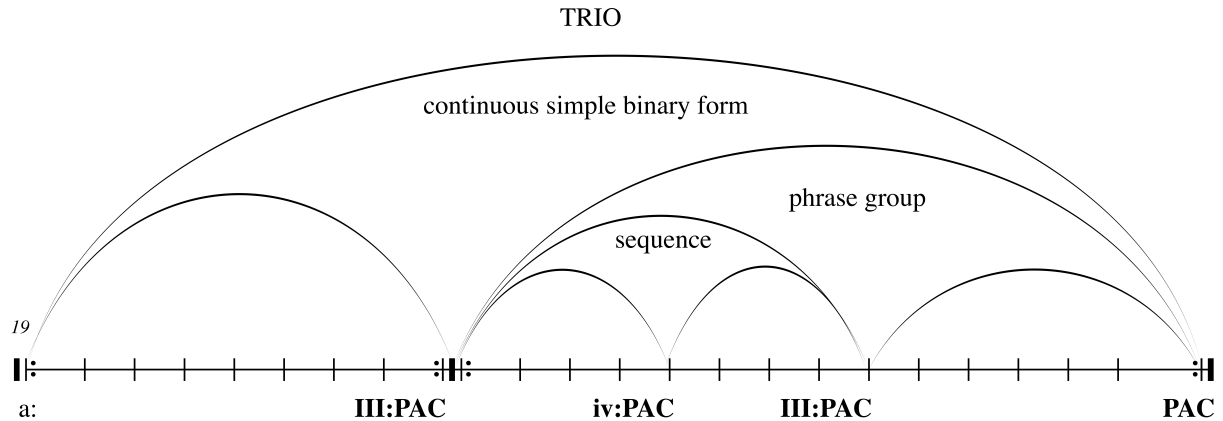
III: PAC
34

mf *p* *mf* **PAC**

Menuetto da capo

MENUETTO





Chapter 20 Self-Test

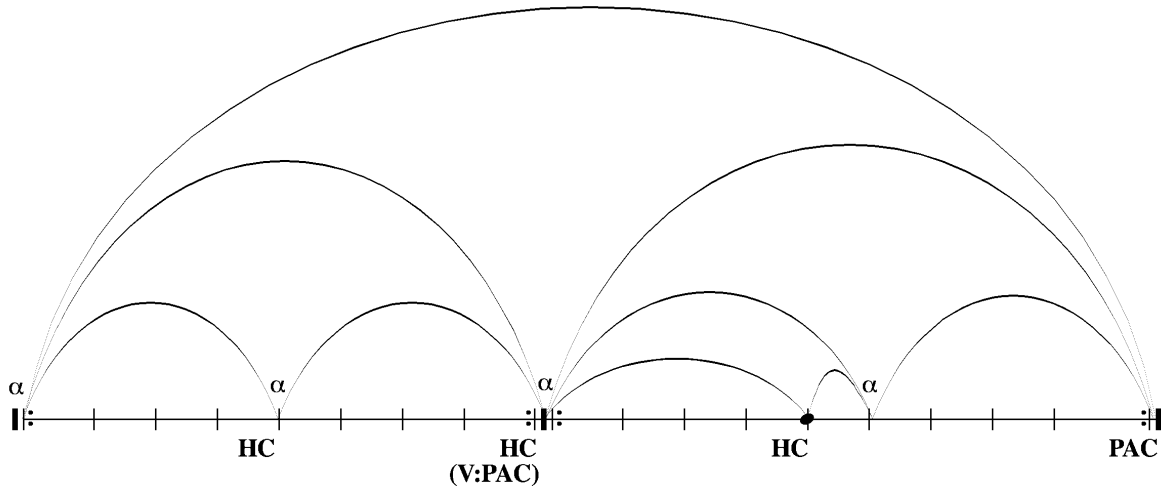
- 20.1.** A piece or excerpt in sectional binary form ends with an authentic cadence in the tonic at the end of the first of the two repeated sections that make up the binary form. If the first section's cadence is a half cadence or if the first section has modulated to another key, the piece or excerpt is in continuous binary form.
- 20.2.** A piece or excerpt in rounded binary form has a substantial return, in the second of the two repeated sections that make up the binary form, of the *beginning* of the thematic material found in the first section. If there is no return of opening material, the piece or excerpt is in simple binary form. Balanced binary form is determined by looking at the *ends* of the first and second repeated sections; if the endings are the same (allowing for transposition, if the piece is in continuous binary form), the form is balanced.

Chapter 20 Apply This!

20.1. Analysis

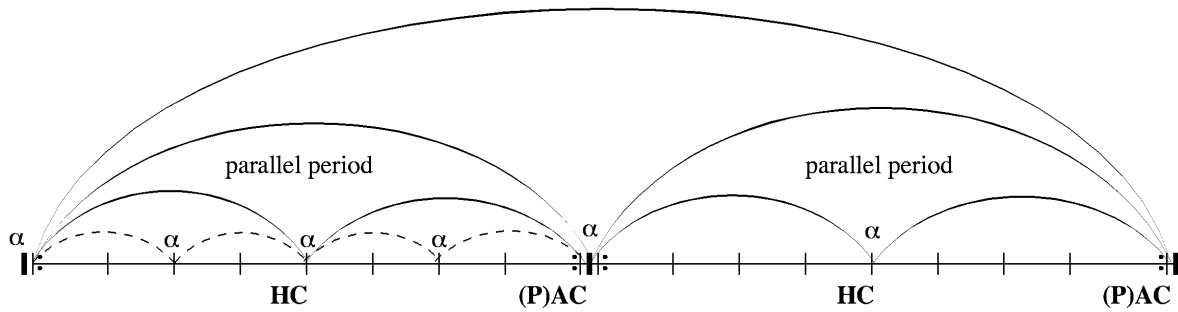
- a. Mozart, Piano Sonata no. 6 in D Major, K.284 (3rd mvt.), measures 1–17.

This is an example of continuous, rounded, balanced binary form.



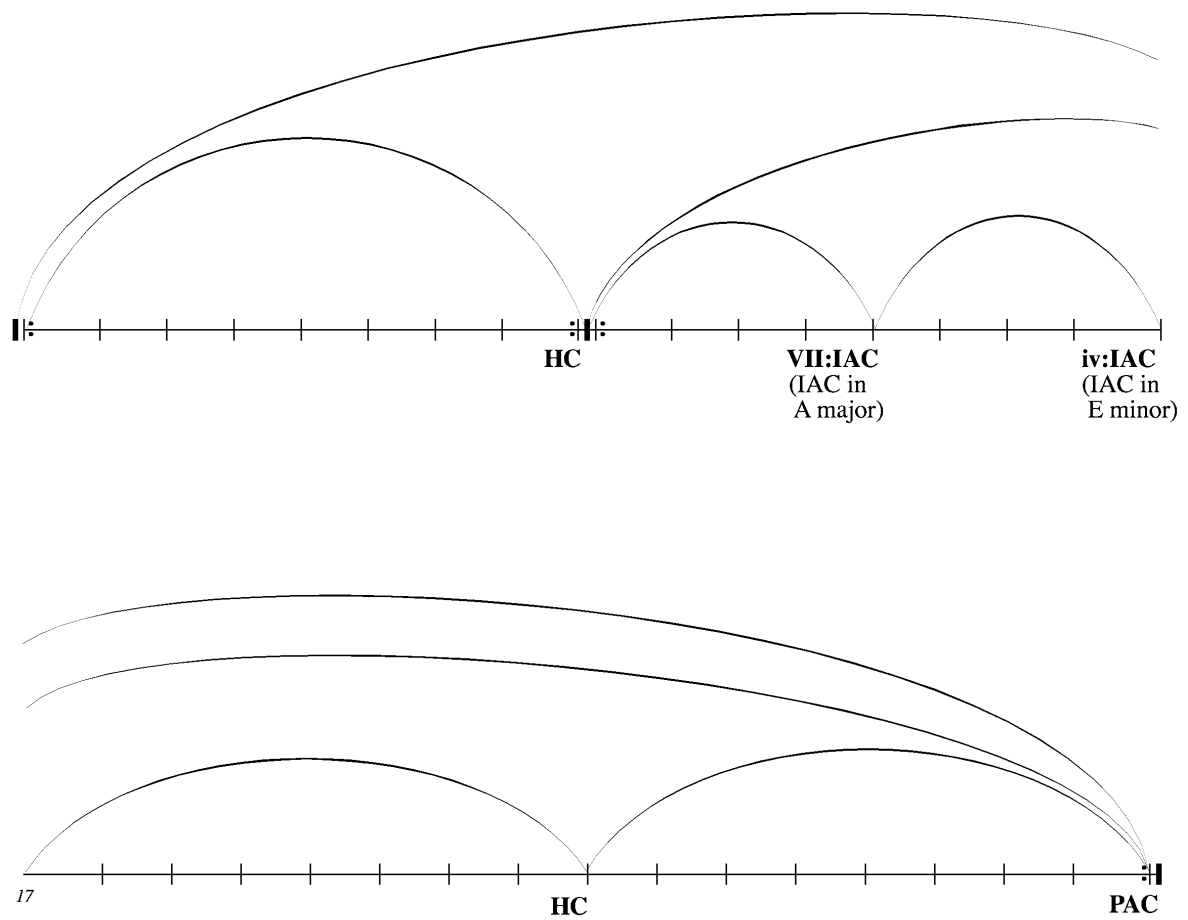
- b. Traditional American tune, “Soldier’s Joy.”

This is an example of sectional, simple, balanced binary form.

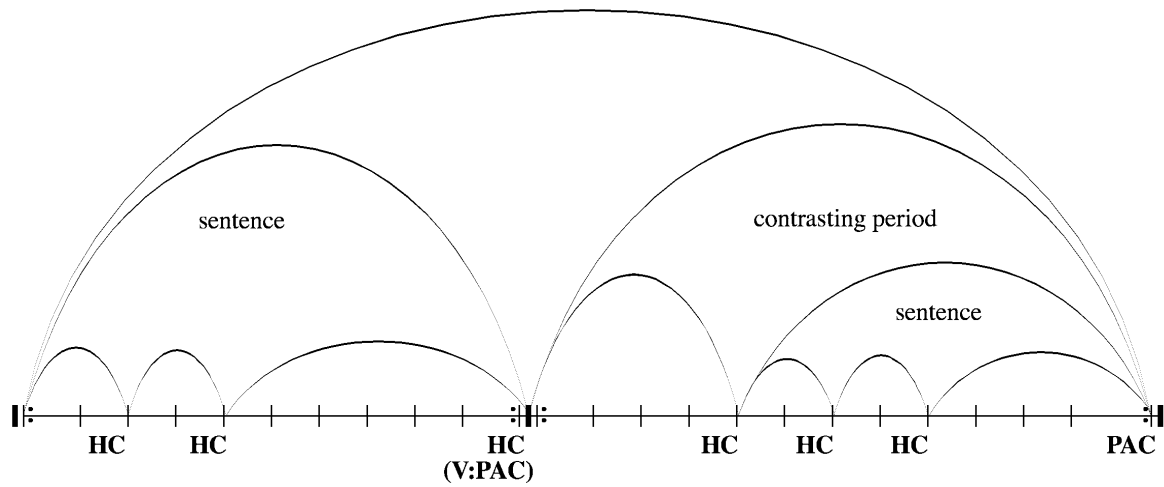


c. Bach, Double from Partita no. 1 in B minor for solo violin, BWV 1002.

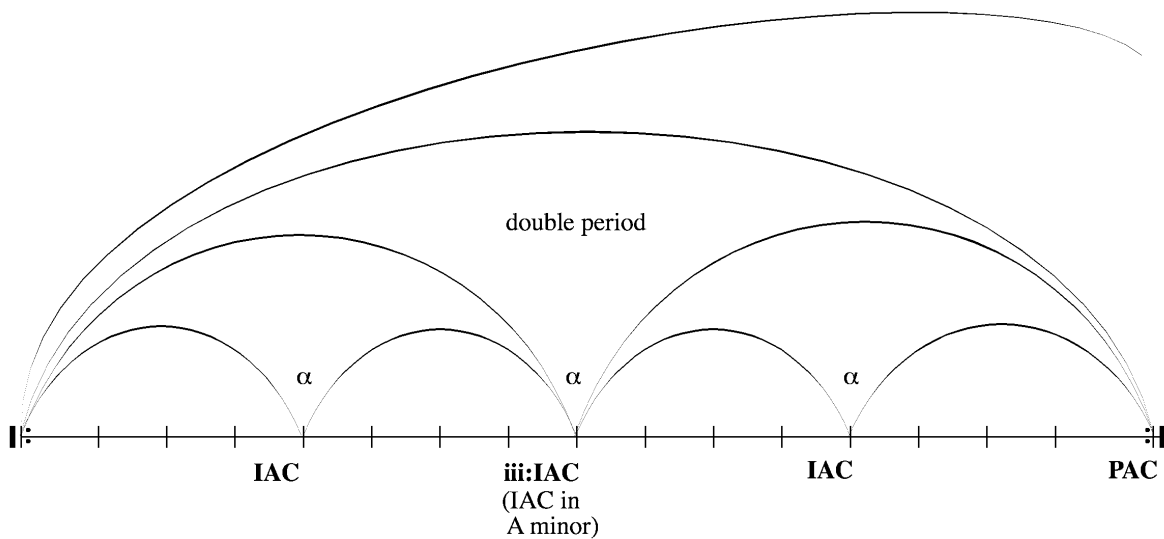
This is an example of continuous, simple binary form.

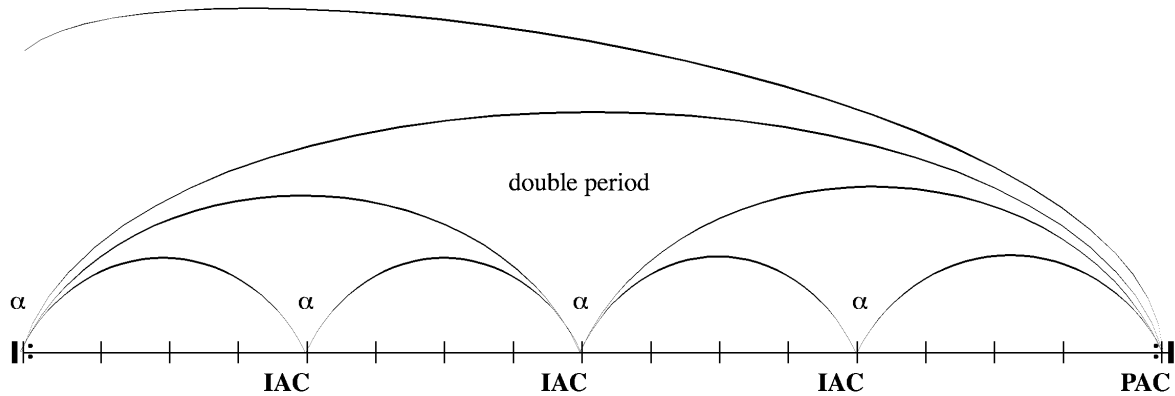


- d. Haydn, String Quartet in G Minor Op. 74, no. 3 (2nd mvt.), measures 1–22.
This excerpt is an example of continuous, rounded, balanced binary form.



- e. Scott Joplin, "Solace," measures 53–84.
This excerpt is an example of sectional, simple binary form.

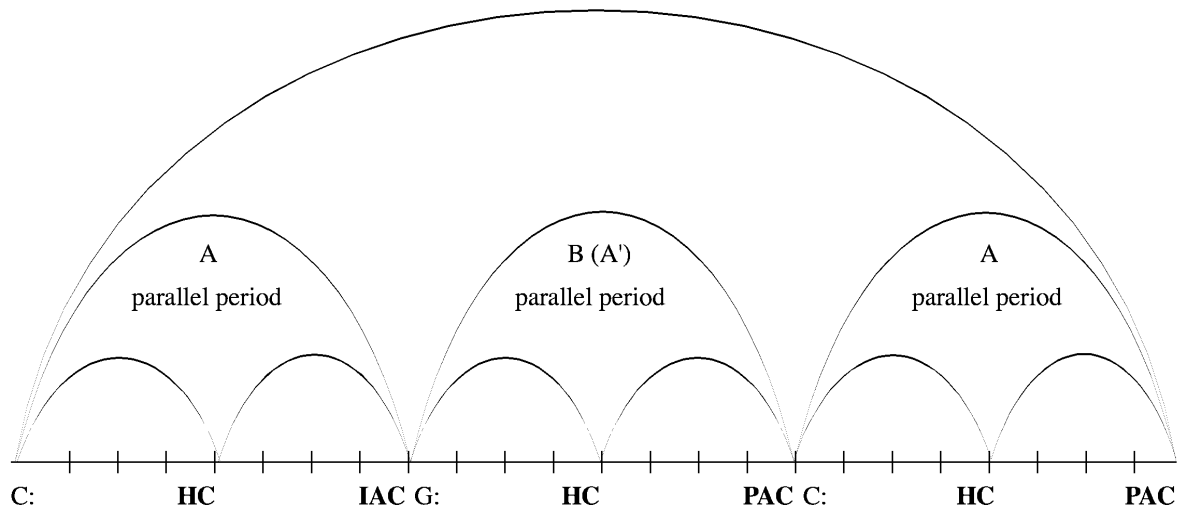




20.2. Analysis

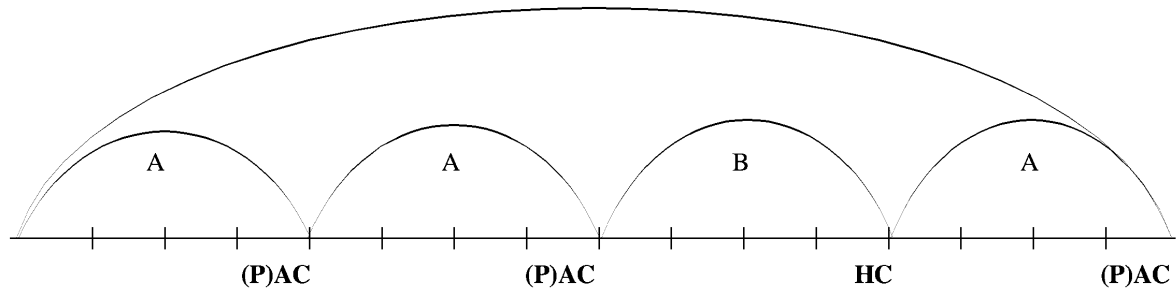
- a. Schumann, "Humming Song," no. 3 from *Album for the Young*, Op. 68.

In this example contrast is provided mainly by change of key; a third voice also enters for the B section (mm. 9–16), sustaining the implied bass line provided by contour accents in measures 1–8.



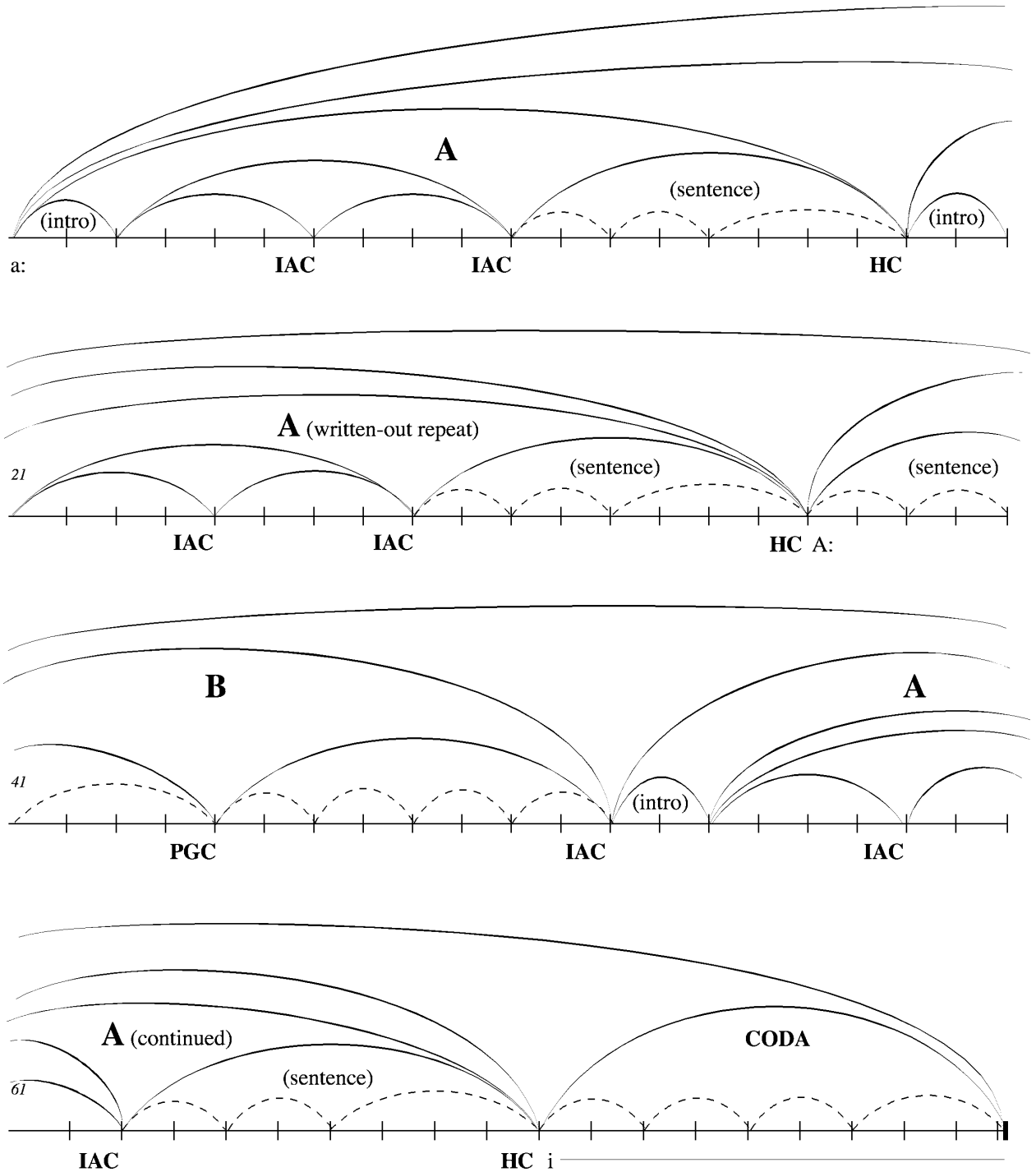
b. Traditional Welsh lullaby, “All Through the Night.”

This example is in song form (AABA).



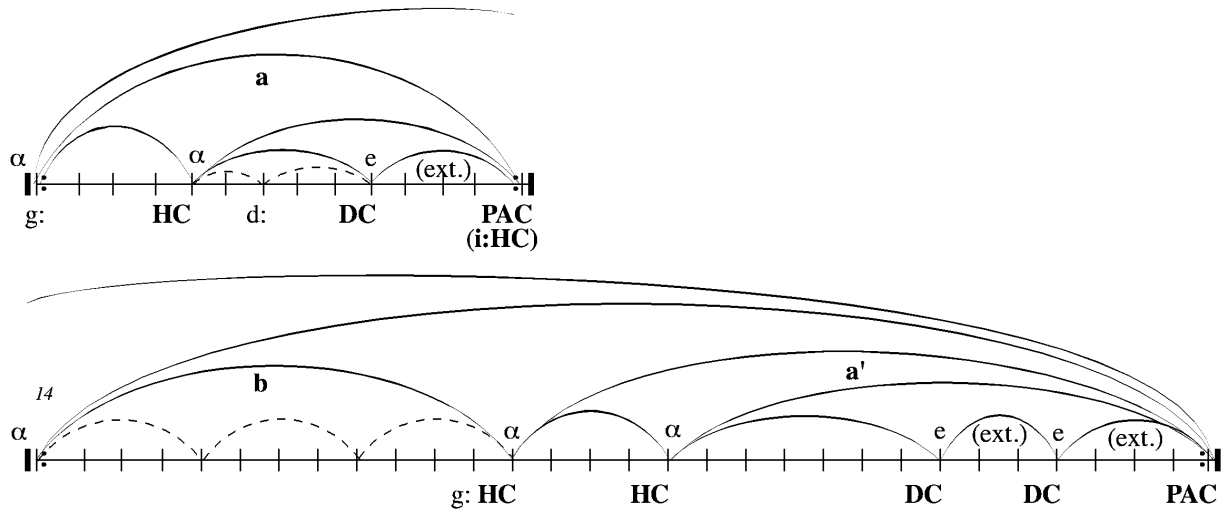
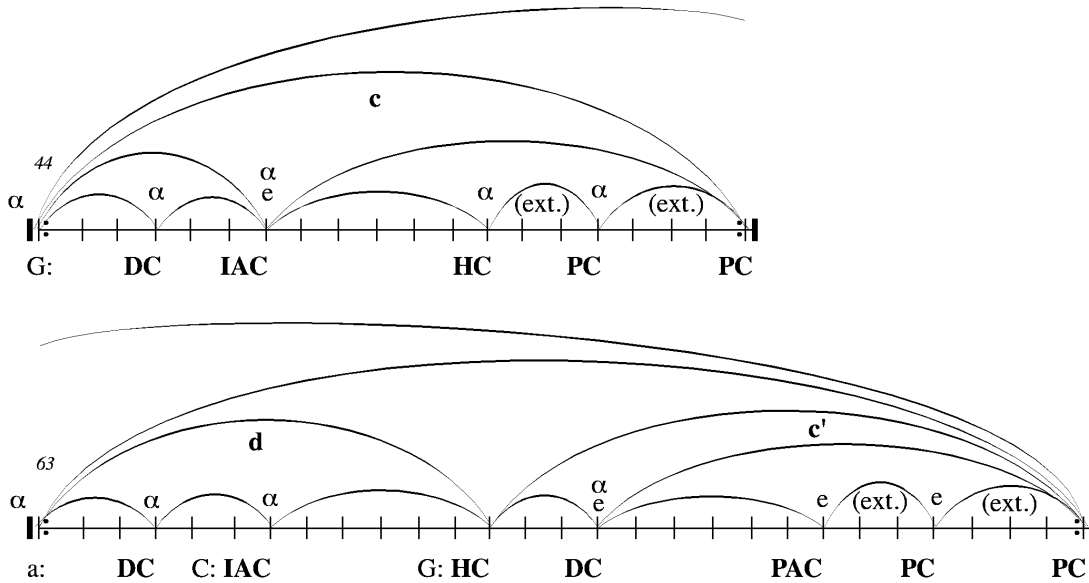
c. Grieg, "Waltz," no. 2 from *Lyrical Pieces*, Op. 12.

This is an example of song form (AABA), with a coda.



d. Mozart, String Quintet no. 4 in G minor, K.516 (2nd mvt.).

This is an example of compound ternary form. The reprise of the Menuetto is not shown on the arch map. Both the Menuetto and Trio sections are in continuous, balanced rounded binary form.

MENUETTO**TRIO****20.3. Composition**

Various solutions are possible.

20.4. Composition

Various solutions are possible.

20.5. Improvisation

Various solutions are possible.

Level Mastery 21.1.

1. The end of the exposition: Measure 49.

The beginning of the recapitulation: Measure 80.

The beginning of the secondary theme or secondary tonal area: Measure 22, 3rd beat.

This movement is not monothematic.

The beginning and ending of the transition between the primary and secondary theme, in both the exposition and recapitulation (how does the composer handle the problem of “transitioning” in the recapitulation when there is no need to modulate?)

The first transition lasts from measure 9 to measure 22 (14 measures). It begins with material from the opening theme, suggesting a large parallel period is about to unfold; instead, the music briefly tonicizes F major and d minor (measures 12–14) before arriving on an extended half cadence in c minor (measures 16–22). Given that the second tonal area is actually C major, this can be regarded as mode mixture.

The second transition lasts from measure 88 to measure 103 (16 measures). It begins with the opening theme material in the bass, initiating a descending harmonic sequence with suspensions in the highest voice of the accompaniment. The approach to the half cadence and caesura is extended by two bars (measures 95–96).

The caesura, if there is one: Measure 22.

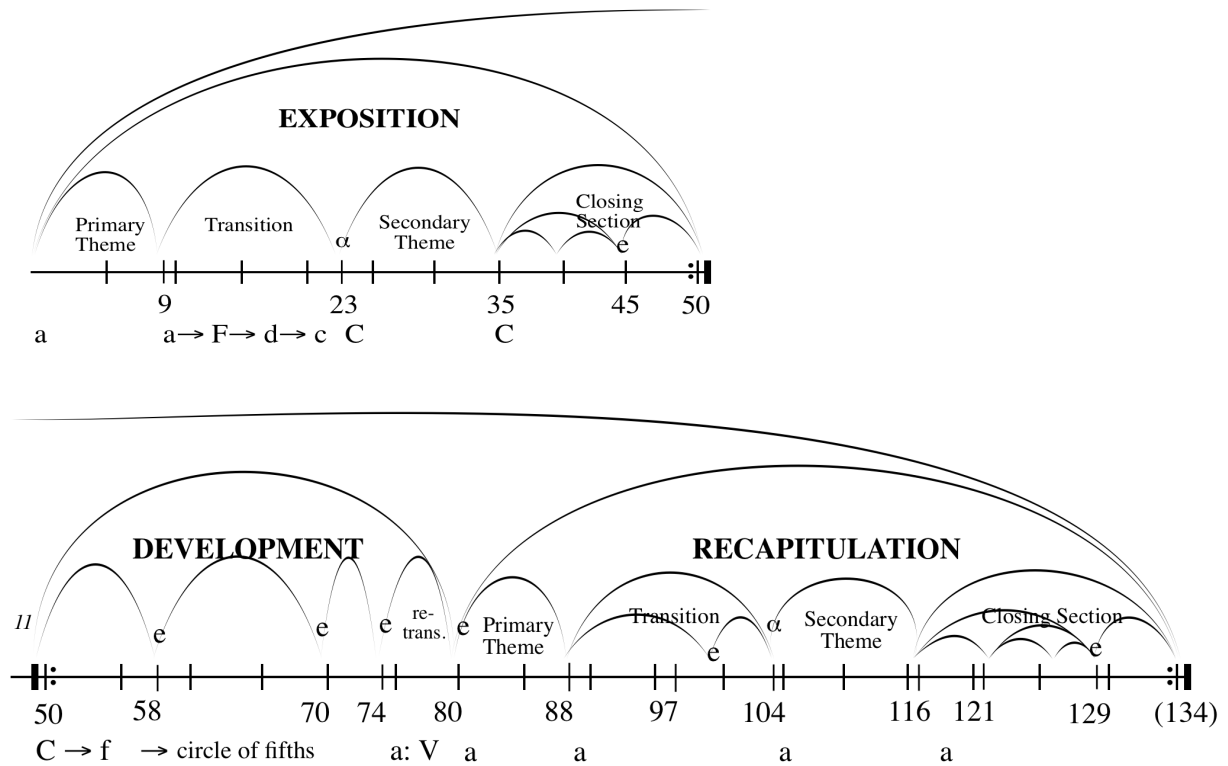
2. The development section can be broken down as follows:

Measures 50–57	C major (mm. 50–52) → tonicization of f minor (chromatic median key relation) (mm. 53–56); V ⁷ of F becomes GER ⁺⁶ of e minor (closely related key) through enharmonic reinterpretation.	Primary theme is developed in mm. 50–53; mm 54–55 use the arcing arpeggio figure from the transition (see m. 13).
----------------	--	---

Measures 58–69	Here over a circle-of-fifths harmonic sequence, consisting of B major (the V of e minor), mm. 58–61; E major (the V of a minor), mm. 62–65; and A major (the V of d minor), mm. 66–69.	The repeated dotted eighth–sixteenth figure of the transition (see mm. 16 and 18) is used here.
Measures 70–73	A new descending harmonic sequence.	This passage is characterized by the “trill and turn” figure first heard in mm. 42–43 of the exposition.
Measures 74–79	A retransition, using a pedal prolongation of E major (the V of a minor).	The “trill and turn” figure continues here, against an accompaniment of rapid arpeggios.

3. There is no coda. There is no introduction.

4.



Chapter 21 Self-Test

21.1.

Sonata form pertains to a *single* movement, extended from rounded binary form to comprise a repeated exposition and a (sometimes repeated) development and recapitulation. Sonata form usually follows a tonal plan wherein the exposition consists of (usually) two contrasting themes, the first in the tonic and the second in a closely related key (usually the dominant if the tonic is major or relative major if the tonic is minor). The development section is usually harmonically and thematically unstable, developing material from the exposition. The recapitulation returns to the primary and secondary themes, this time both in the tonic.

The **form of a sonata**, on the other hand, refers to the plan of a *multi-movement* work, as follows:

1. An allegro or fast first movement (usually in sonata form), in the tonic;
2. A slower or andante second movement that might be in ternary form or rondo

form, in a closely related key (often the dominant);

3. An allegro third movement, usually in compound ternary form, often in the tonic or in another closely related key;
4. An allegro or presto (very fast) movement that might be in rondo form or sonata form, in the tonic.

21.2.

- a. Exposition – Second tonal area (tonally stable, but in the dominant of the tonic revealed by the key signature).
- b. Development section (tonally unstable—sequences, etc.)
- c. Closing section (in the dominant of the tonic revealed by the key signature; also characterized by repetition of $i_4^6 - V - i$ cadential gestures).
- d. Exposition – First tonal area (harmonically stable; in tonic).
- e. Transition (passage begins in tonic and modulates to dominant by the end).

Chapter 21 Apply This!

21.1.

EXPOSITION

1. c minor.
2. Measure 19. Although the change of texture at measure 9 implies the beginning of a transition, this passage is substantially replicated in the recapitulation. Comparing measure 19 to measure 118, however, the two gestures have very different outcomes.
3. Measure 36. It is returned to in the tonic at measure 131.
4. E♭ major, the relative major of c minor. This is an expected tonal plan for a minor-key sonata exposition.
5. Measure 67 is more cadential in nature, and thus better fits a closing section. Measure 59 begins a longer phrase that drives toward the cadence at measure 63, with a phrase elision to a repetition of melodic material an octave higher. The drive of this passage suggests a culmination of the secondary theme, not the beginning of a new section.
6. No.

DEVELOPMENT

7. Measures 75–76 replicate the opening gesture of measures 1–2. Here, however, the gesture is answered by a different outcome bringing us to f minor.
8. f minor. The thematic material comes from the transition (measures 23–26).
9. 83–84: f: i 85–86: V⁷/ii
 87–88: ii 89–90: vii^{o4}₃/V (= vii^{o4}₃ in c minor by chromatic modulation)
 91–92: c: i⁶ 93–94: V⁶₅
 95: vii^{o6}₅ 96–97: vii^{o7} 98–99: V⁶₅ (or vii^{o7} → V⁶₅)

RECAPITULATION

10. Comparing measures 118–130 with its exposition counterpart at measures 19–35, we see that measures 118–120 present the opening arpeggio motive canonically; measures 23–26 are also replaced by different transitional material at measures 121–125.
11. Measures 168–185 function as a coda to the movement.

Level Mastery 22.1.

The refrain is first heard measures 1–22; it is in continuous simple binary form, concluding with a perfect authentic cadence.

The movement is an example of a five part rondo (ABA'CA'); subsequent refrains after the first do not include the repeats and have more drastic dynamic changes. The first episode (B) is confined to closely related keys: a minor, e minor, and G major. The second episode (C) begins with an abrupt change to the parallel minor (c minor) and its closely related keys (g minor and E_b major)—none of which, however, are closely related to the tonic.

There are no transitions from refrains to episodes, although there is a phrase elision at measures 92–93 between the second refrain and second episode. Both episodes have retransitions prolonging the dominant, G major (V of C): The retransition from the B episode is found at measures 63–71 (after a “false retransition” at measures 52–56), and the retransition from the C episode occurs at measures 115–124. There is also a coda (measures 147–170). Each of the episodes uses rhythmic (and sometimes melodic) motives from the refrain, so it would be justifiable to describe this piece as a monothematic rondo.

- | | | |
|---|-----------|---|
| A | mm. 1–22 | C major |
| B | mm. 23–71 | : a minor → e minor : C major → G major (AAB form); |

		retransition, mm. 63–71
A'	mm. 72–93	C major (no repeats); elision into C episode mm. 92–93
C	mm. 93–124	c minor → g minor → E \flat major; ascending sequence; retransition, mm. 115–124
A'	mm. 125–146	C major (no repeats)
Coda	mm. 147–170	C major (cadence on V ⁷ of F at measure 156 suggests another harmonic departure)

Chapter 22 Self-Test

22.1.

The French *rondeau* prefigures the Classic rondo in its use of a recurring refrain, always found in the tonic. It differs from the later rondo in its open-ended number of episode sections.

22.2.

A refrain is tonally self-contained in that it normally ends on a perfect authentic cadence in the tonic. It is often in some type of binary form, or at least a period of some type.

22.3.

A *transition* occurs from a *refrain* to an *episode*; it often begins in the tonic, and almost always modulates, often ending on a half cadence in the key of the episode. A *retransition* occurs from an *episode* to a *refrain*; it often serves to prepare the listener for the return of the refrain by prolonging the dominant.

22.4.

A sonata-rondo is a type of seven-part rondo (ABACAB'A). It resembles sonata form in that the second episode (C) resembles a development section by developing previously heard material, often in a harmonically unstable (frequently modulating) context. The B' in the above form is in the tonic, and in this respect it resembles the return of the secondary theme in a sonata-form recapitulation. Sonata-rondo differs from sonata form primarily in that the first AB is not repeated (or, only A is), and there is an “extra” A at the end; more important, it is not in binary form.

Chapter 22 Apply This!

22.1.

- a. Haydn, Piano Sonata no. 50 in D major, Hob. XVI/37 (3rd mvt.). This is a five-part rondo.

A	mm. 1–20	D	phrase group; continuous rounded binary form
B	mm. 21–40	d → F; g → d	phrase group; continuous rounded binary form
A	mm. 41–60		
C	mm. 61–80	G	mm. 61–68: parallel period; mm. 69–80: phrase group; simple rounded binary form
Retrans.	mm. 81–93	e → A	V of D
A	mm. 94–134	D	written-out repeats; one-measure cadential extension

- b. Mozart, Horn Quintet in E-flat major, K.407 (3rd mvt.) This is a five-part rondo, with transitions and retransitions and a lengthy coda.

A	mm. 1–16	E \flat	Parallel period, repeated in the manner of a concerto—theme played by soloist first and then by ensemble
Trans.	mm. 17–31	E \flat → B \flat	Phrase elision into first episode
B	mm. 32–52	B \flat	References to refrain, mm. 39–42 and 46–51
Retrans.	mm. 53–57	V of E \flat	
A	mm. 58–73	E \flat	As first time
C	mm. 74–105	c → E \flat ; A → E \flat → c	Continuous rounded binary form
Retrans.	mm. 106–127	V of E \flat	At mm. 120–127

A	mm. 128–143	E \flat
	As first time, but with elision to coda at m. 143	
Coda	mm. 143–188	E \flat

c. Schumann, “Grillen” from *Phantasiestücke*. This is a seven-part rondo.

A	mm. 1–16	D \flat
	Parallel period	
B	mm. 17–44	f – A \flat – f
	Ternary form, articulated by dynamics, texture, and key	
A	mm. 45–60	D \flat
C	mm. 61–96	G \flat
A	mm. 97–112	D \flat
B'	mm. 113–140	b \flat – D \flat – b \flat
A	mm. 141–156	D \flat

Level Mastery 23.1.

Mozart’s 12 Variations on “Ah, vous dirais-je, Maman” is an example of sectional variation.

Theme: The theme is in sectional rounded binary form, with a two-part quarter-note texture.

- Variation 1: This is a good example of ornamental variation. The left hand is substantially the same as the left hand of the Theme; the right hand is heavily decorated with passing and neighbor tones in a sixteenth-note texture. Only at cadential points do the sixteenth notes cease.
- Variation 2: The sixteenth-note activity of Variation 1 is here transferred to the left hand. The right hand presents the theme harmonically embellished with suspensions. This variation has a four-part texture. The theme itself is also chromatically altered and reharmonized with secondary diminished and dominant chords at measures 68–70.
- Variation 3: A new rhythmic element—triplets—is introduced. The suspension activity introduced in Variation 2 is found here in the context of compound melody (measures 77–78 and 93–94).

- Variation 4 combines the triplet rhythm of Variation 3 (now in the left hand) with the three-part suspension chain of Variation 2.
- Variation 5 returns to the simple texture of the theme, but with right and left hand alternating attacks in a primarily eighth-note rhythm. Syncopation is introduced into the melody in measures 125–127, and the diatonic descent of the Theme in measures 9–16 is replaced by a chromatic descent here (measures 129–136). The reprise of the opening phrase is further embellished with sixteenth notes.
- Variation 6: The theme is heard here in eighth-note attacks, harmonized with the chain of suspensions first heard in Variation 2. The left hand resembles Variation 2 in its sixteenth-note activity with passing- and neighbor-tone embellishments. The left and right hands switch parts for measures 153–160; this is the first time the theme is heard in the left hand. The harmony is mostly diatonic, closely resembling the harmony of the Theme.
- Variation 7: This variation is “farthest” from the theme so far, the opening phrase replaced by a rapidly ascending scale. The contrasting phrase of the theme (measures 9–16) is replaced by a descending scale.
- Variation 8: This variation is in the parallel minor. The suspension chain first heard in Variation 2 is also found here, and for the first time the theme is presented in an imitative texture (left hand imitating the right at the fifth below, with a time interval of two measures). The contrasting phrase (measures 201–208) features three-part imitative counterpoint, each voice entering an octave below the previous voice, with a mostly chromatic descent as found in Variation 5.
- Variation 9 returns to the major mode, retaining the imitative counterpoint heard in Variation 8 but also returning to the simpler texture of the theme.
- Variation 10 employs hand crossings and sixteenth-note figurations. Harmonically this variation resembles Variation 2 in its use of secondary chords. The contrasting phrase contains a suggestion of the imitative counterpoint heard in Variations 8 and 9, the chromatic descent in the Theme at measures 249–252 imitated in the bass in measures 251–254 (in *stretto*).
- Variation 11 changes tempo for the first time (*Adagio*). It is also the most melodically embellished variation.
- Variation 12 returns to *allegro* and features a change of meter (to $\frac{3}{4}$) for the first time. The sixteenth-note accompaniment is reminiscent of Variation 2, and this figuration dominates the contrasting phrase (measures 297–304). Measures 313–323 make up a short coda.

Chapter 23 Self-Test

23.1.

Various answers are possible.

23.2.

Beethoven's "32 Variations on an Original Theme" more closely resemble a chaconne, based on the harmonic progression that is used for each variation.

23.3.

Various answers are possible. Here is one possible segmentation, based on addition and subtraction of layers in the texture ("Radio Edit" version). The harmonic progression remains the same throughout. The meter is interpreted as $\frac{4}{4}$ with a tempo of 120 beats per minute.

[0:00–0:23]	3 × 4 measures	bass and synth, gradually opening low-pass filter
[0:23–0:55]	4 × 4 measures	"wah-wah" clavinet keyboard added at 0:40
[0:55–1:27]	4 × 4 measures	"around the world" synth vocal; change in hi-hat rhythm at 1:12
[1:27–1:35]	4 measures	Instrumental break
[1:35–1:50]	2 × 4 measures	"around the world" synth vocal returns; change in hi-hat rhythm
[1:50–2:22]	4 × 4 measures	
[2:22–2:38]	2 × 4 measures	Instrumental break
[2:38–2:54]	2 × 4 measures	Vocal break ("around the world" + hi-hat and synth claps only; no drums)
[2:54–3:10]	2 × 4 measures	Synthesizers added doubling and harmonizing "around the world" vocal synth pattern
[3:10–3:59]	6 × 4 measures	Drums, bass added; fade out at end

Although the basic phrase unit is four measures of $\frac{4}{4}$ meter, as in so much electronic dance music, note that the larger groupings of phrases are not strictly symmetrical.

Chapter 23 Apply This!

23.1.

The musical score is in 3/4 time and consists of three systems of piano accompaniment. The key signature has two flats (B-flat and E-flat).

- System 1 (Measures 1-5):** Features a melodic motif in the right hand and a bass line in the left hand. The first measure is marked *f* (forte) and the fifth measure is marked *p* (piano). The bass line is labeled "(statement 1, in bass)".
- System 2 (Measures 6-11):** The melodic motif is now in the upper register of the right hand, labeled "(statement 3, in upper register)". The bass line continues with a rhythmic pattern, labeled "2, in bass)".
- System 3 (Measures 12-15):** The melodic motif is in the middle register of the right hand, labeled "(statement 4, in middle register)". The bass line continues. The first measure of this system is marked with a dynamic *f*. The final measure of the system includes a trill (*tr*) on the right hand.

Additional annotations include "(elaborated $\hat{5} - \hat{1}$)" in the first system and " $\hat{5}$, no resolution to $\hat{1}$)" above the first measure of the third system.

17

Musical score for measures 17-20. It features four staves: two vocal staves and two piano accompaniment staves. The vocal parts have lyrics: "Je - su, der du mei - ne See - - - -" and "Je - su, der du mei - ne -". The piano accompaniment includes a dynamic marking *p* and a note: "(statement 5, middle register; no resolution of 5̂ to 1̂)".

21

Musical score for measures 21-24. It features four staves: two vocal staves and two piano accompaniment staves. The vocal parts have lyrics: "Je - su, der du mei - - - ne See - le", "- - - le, Je - su, der du mei - ne See - le hast durch dei - nen", "See - le, Je - su, der du mei - ne See - le hast durch", and "Je - su, der du mei - ne See - - - le". The piano accompaniment includes dynamic markings *f* and *p*, and a note: "(statement 6, in bass)".

27

in alto)

bit - tern Tod, hast durch dei nen bit - tern Tod,

tr tr

dei - nen bit - tern Tod, durch dei - nen bit - tern Tod,

(statement 8, transposed to c minor, in bass; no resolution)

hast durch dei - nen bit - tern Tod,

33

tr

hast durch dei - nen bit - tern Tod

— hast durch dei - nen bit - tern Tod

— hast durch dei - nen bit - tern Tod

of $\hat{5}$ to $\hat{1}$)

— hast durch dei - nen bit - tern Tod

f tr p

(statement 9, in bass; ornamented $\hat{5}$ - $\hat{1}$ resolution, as at beginning) (statement

(statement 11, in upper register; no resolution)

38

10, in bass)

(statement 12, in upper register; ornamented resolution of $\hat{5}$ to $\hat{1}$)

44

of $\hat{5}$ to $\hat{1}$)

49

aus des Teu - fels fin - strer Höh - - - -

aus des Teu - fels fin - - - - strer

(statement 13 in middle register; ornamented resolution of $\hat{5}$ to $\hat{1}$)

53

aus des Teu - fels fin - strer Höh - - - le
- - - le, aus des Teu - fels fin - strer Höh - le und der schwe-ren
Höh - le, aus des Teu - fels fin - strer Höh - le und der
(statement 14 in bass) (statement)

aus des Teu-fels fin-strer Höh - - - le

f *p*

Detailed description: This block contains the musical score for measures 53 through 58. It features four vocal staves and a piano accompaniment. The vocal parts are in G minor. The lyrics are: 'aus des Teu - fels fin - strer Höh - - - le', '- - - le, aus des Teu - fels fin - strer Höh - le und der schwe-ren', 'Höh - le, aus des Teu - fels fin - strer Höh - le und der', and 'aus des Teu-fels fin-strer Höh - - - le'. The piano accompaniment includes dynamic markings *f* and *p*. A note in the bass staff is labeled '(statement 14 in bass)'.

59

See - len - noth, und der schwe - - - ren See - len
schwe-ren See - len - noth, der schwe - ren See - len noth, und der schwe-ren See - len - noth,
15 in tenor, inverted) (statement 16 in bass, transposed to c minor; no resolution of 5)

und der schwe-ren See - len - noth,

Detailed description: This block contains the musical score for measures 59 through 64. It features four vocal staves and a piano accompaniment. The vocal parts are in G minor. The lyrics are: 'See - len - noth, und der schwe - - - ren See - len', 'schwe-ren See - len - noth, der schwe - ren See - len noth, und der schwe-ren See - len - noth,', and 'und der schwe-ren See - len - noth,'. The piano accompaniment includes a dynamic marking *str*. A note in the bass staff is labeled '(statement 16 in bass, transposed to c minor; no resolution of 5)'. The piano part features a complex rhythmic pattern with many sixteenth notes.

65

und der schwe - ren See - len - noth

noth, und der schwe - ren See - len - noth

— und der schwe - ren See - len - noth

to $\hat{1}$) (statement 17 in bass; no resolution of $\hat{5}$ to $\hat{1}$)

— und der schwe - ren See - len - noth

(statement 18 in upper register, *tr*)

71

kräf - tig -

kräf - tig - lich her - aus ge -

transposed to d minor; no resolution of $\hat{5}$ to $\hat{1}$)

(statement 19 in middle register, transposed to d *p*)

75

lich her - aus ge - ris - - - - - sen, her - aus -
 ris - - - - - sen, kräf - tig - lich her - aus -
 kräf - tig - lich her - aus ge - ris - sen, kräf - tig -

minor; 5 resolves down to 3)
 (statement 20 in bass,)

78

ge - ris - - - - - sen, her - aus - ge -
 ge - ris - - - - - sen, her - aus - ge -
 lich her - aus ge - ris - sen, her - aus ge - ris - sen,
 lich her - aus ge - ris - sen, her - aus ge - ris - sen,

transposed to d minor; 5 resolves to 1 with octave displacements)

81

kräf - - - tig - lich her - aus ge - ris -

ris-sen, her-aus, her-aus, her-aus-ge ris -

ris-sen, her-aus, her-aus, her-aus ge -

(statement 21 in bass, transposed to F major)

kräf - tig - lich her - - - aus ge - - - ris - - -

85

sen

sen und mich Sol-ches las-sen

ris-sen

sen

(statement 22 in bass, transposed to F major)

(measures 90–94: no statements)

93

und mich
- - - ches las - sen wis - - - - - sen, mich Sol - ches las - sen
wis - - - - - sen, und mich Sol - - - - ches las - sen
(statement 24, in bass,
- - - ches las - sen wis - - - - - sen, und mich

96

Sol - ches las - - - - - sen - wis - - - - - sen
wis - - - - - sen
wis - - - - - sen, und mich Sol - ches las - sen wis - sen
transposed to Bb major)
Sol - ches las - sen wis - - - - - sen
p
(statement

100

25, in bass, transposed to B \flat major)

104

(measures 107–117: Imitative development of first six notes of the ground bass)

118

durch dein an - ge - neh - mes Wort:

Wort, durch dein an - ge - neh - - - mes Wort:

Wort, durch dein an - ge - neh - - mes Wort:

Wort, durch dein an - ge - neh - - mes Wort:

(statement 26, in bass; no resolution of 5 to 1)

(measures 122–124: imitative development of first six notes of the ground bass)

(measures 125–135: no statements)

135

sei doch jetzt, o

Hort, o Gott, mein Hort, sei doch jetzt, o Gott, o Gott, mein Hort,

Hort, Gott, mein Hort, sei doch jetzt, o Gott, mein Hort, o Gott, mein Hort, o

(statement 27, in bass)

Hort, Gott, mein Hort, sei doch jetzt, o Gott, o

139

Gott, mein Hort!

o Gott, mein Hort!

Gott, o Gott, mein Hort!

Gott, mein Hort!

(statement 28, in bass)

Level Mastery 24.1.

1.

F:

b:

Bb:

c#:

Eb:

Ab:

2. Spacing may vary.

c#:

g:

B:

f#:

eb:

bb:

Level Mastery 24.2.

1.

a: GER⁺⁶ f#: FR⁺⁶ D: IT⁺⁶ f: FR⁺⁶ A: FR⁺⁶ g: GER⁺⁶ e: IT⁺⁶ F: IT⁺⁶ c#: FR⁺⁶ Eb: GER⁺⁶

2. Various spacings are possible.

E: FR⁺⁶ V Db: GR⁺⁶ V eb: IT⁺⁶ V

Bb: IT⁺⁶ V b: GR⁺⁶ V d: FR⁺⁶ V

Chapter 24 Self-Test

24.1.

1. close 2. open 3. close 4. close

a: N⁶ V f#: N⁶ V g: N⁶ $\frac{6-5}{4-\#}$ V D: N⁶ vii⁰7/V V

5. open 6. open 7. close 8. close

B: N⁶ V eb: N⁶ V c#: N⁶ vii⁰7/V V Ab: N⁶ $\frac{6-5}{4-3}$ V

24.2. Various spacings are possible.

1. 2. 3. 4.

f: IT⁺6 V A: FR⁺6 V eb: GER⁺6 $\overset{6}{i}4$ G: ++4 $\overset{6}{I}4$ ₃

5. 6. 7. 8.

ab: FR⁺6 V b: GER⁺6 $\overset{6}{i}4$ F#: ++4 $\overset{6}{I}4$ ₃ Ab: IT⁺6 V

9. 10. 11. 12.

B: $\begin{matrix} ++4 \\ 3 \end{matrix}$ $\overset{6}{I4}$ c#: FR⁺⁶ V Gb: IT⁺⁶ V d: GER⁺⁶ $\overset{6}{i4}$

Chapter 24 Apply This!

24.1.

a.

Mässig [Moderate]

Wo ein treu - es Her - ze in Lie - be ver -

p UN

g: i V (G ped.)

6 geht, da wel - ken die Li - lien auf je - - - dem Beet; da

i N⁶ V i

11

muss in die Wol - ken der Voll - mond gehn, da - mit sei - ne

V⁷/iv iv V⁷/III III i

16

Thrä - nen die Mensch - en nicht seh'n da

N⁶ vii^{o7}/V V

b.

Maestoso

f

c: i⁶₄ V⁶₄ i⁶ V⁶₄ i⁶ N i V⁶₄ i

- c. Measures 16 and 18 may also be analyzed as an arpeggiated iv chord with the C \sharp and A \sharp acting as a measure-long neighbor group; however, the distinctive “Neapolitan” flavor of the neighbor-group turn invites the arpeggiated N 7 analysis shown here.

Adagio sostenuto.

Si deve suonare tutto questo pezzo delicatissimamente e senza sordino.
 [The entire piece must be played very delicately and without muting.]

sempre pp e senza sordino

c#: i i VI N⁶

pp

V⁷ i⁴ V 7 i V⁵

i iv E: ii V I

b: iv V³/N N SUS 7 6 PT (X) PT V⁵

24.2. Analysis

- a. Beethoven, Symphony no. 5 in C Minor, as transcribed by Franz Liszt (1st mvt.),
mm. 6–21.

6 *p* *p*

c: i V⁶

15 *cresc.* *f*

(i) V (i) V V⁶ i IT⁺⁶ V

- b. The Beatles, “I Want You (She’s So Heavy).”

d: i i⁶ V⁹/V GER⁺⁶ V^{#5}

c. Haydn, Piano Sonata in C-Sharp Minor, Hob. XVI/36 (1st mvt.), mm. 56–59.

56

A: ct^o_3 $^{++4}_3$

58

$^6_{14}$ ct^o_5

Level Mastery 25.1.

1. b: V^9 A: ii^{11} B \flat : vi^9 g#: V^{13}
 f: VI^9 D: V^9 F: V^{13} D \flat : V^{11} e: V^{13}

2.

(4ths voicing to avoid parallel 5ths)

B \flat : ii^9 V^7 E: V^{11} I^7 A \flat : ii^{13} V^7 f#: i^9 iv c: V^9 i
 (omit 5th) (omit 5th)

(4ths voicing to avoid parallel 5ths)

A: vi^9 ii F: vi^9 IV g: III^{13} VI^9 B: ii^{11} V^7 E \flat : vi^9 ii
 (omit 3rd) (omit 5th) (omit 5th) (omit 5th) (omit 5th)

Level Mastery 25.2.

1.

e: $\underline{V\#5}^7$ g: $\underline{V\flat5}^7$ A: $\underline{V\#5/IV}^7$ Eb: $\underline{V\#5}^7$ c#: $\underline{V\flat5/V}^7$ bb: $\underline{V\flat5}^7$ Ab: $\underline{V\#5}^7$ D: $\underline{V\#5/vi}^7$ c: $\underline{V\flat5}^7$ G: $\underline{V\flat5/vi}^7$

2. Other voicings are possible.

(open) (close) (open) (close) (open)

G: $\underline{V\#5}^7$ Eb: $\underline{V\flat5}^7$ a: $\underline{V\#5}^7$ f#: $\underline{V\flat5}^7$ C#: $\underline{V\#5}^7$

(close) (open) (close) (open) (close)

eb: $\underline{V\flat5/iv}^7$ Bb: $\underline{V\#5/V}^7$ E: $\underline{V\flat5/iii}^7$ F: $\underline{V\#5}^7$ D: $\underline{V\flat5/vi}^7$

Chapter 25 Self-Test

25.1. Spacings may vary.

1. 2. 3. 4.

d: V_7^9 i E \flat : V_9^{13} I 9 b: VII_7^{11} III 7 F: ii_7^9 V 7

5. 6. 7. 8.

c#: V_9^{11} i G: ii_7^{11} V g: V_7^9 VI 7 e: V_7^{11} i

9. 10. 11. 12.

B: V_7^{13} I A \flat : vi_7^{11} ii 7 f#: III_7^9 iv 7 D \flat : iii^{11} vi 7

25.2. Voicings may vary.

open close close open close

D: $V_{\#5}^7$ d: $V_{\flat 3/iv}^{\frac{6}{5}}$ Ab: $V_{\flat 5}^7$ bb: $V_{\flat 5/V}^7$ g: $V_{\flat 6/4}^{\flat 6}$

open open close open close

B: $V_{\#5/IV}^7$ F: $V_{\flat 5/ii}^7$ c: $V_{\#3/V}^{\frac{6}{5}}$ E: $V_{\#6/4}^{\#6}$ g#: $V_{\flat 5}^7$

25.3. Voicings may vary.

open close close open

F: IT⁺6 V f#: N⁶ V g: FR⁺6 V D: GER⁺⁺⁴₃ I₄⁶

open open close close

E: FR⁺6 V bb: N⁶ V e: GER⁰³ i₄⁶ Eb: IT⁺6 V

open close open close

eb: IT⁺6 V b: N⁶ V f: FR⁺6 V G: GER⁺⁺⁴₃ I₄⁶

Chapter 25 Apply This!

25.1. Analysis

$\hat{7} - \hat{6}$
 $\hat{4} - \hat{3}$
 $\hat{2} - \hat{1}$

G: Ped. I * Ped. IV₄⁶ * Ped. vii^o₃⁴ * Ped. I *

chromatically raised tones resolve upward
 chord 7th resolves down by step
 chord 7th resolves down by step
 chord 7th resolves down by step →

Ped. V#5/IV * Ped. IV * IV₂⁴ * Ped. ii * ii₂⁴ * Ped. V₅⁶ *

$\hat{2} - \hat{1}$ (in a)
 $\hat{7} - \hat{1}$ (in a)
 $\hat{6} - \hat{5}$ (in a)
 $\hat{4} - \hat{3}$ (in a)
 chord 7th resolves down by step
 chromatically raised tone resolves upward

Ped. vii^o₇/ii * Ped. ii * ii₅⁶ * Ped. V₇ * Ped. V#5 * Ped. I *

Level Mastery 26.1

1. 2. 3. 4. 5.

F: $ct^0 2$ V⁷ A: $ct^0 7$ I⁶ c#: $ct^0 5$ i⁴ Bb: $ct^0 2$ IV Ab: $ct^0 3$ I⁴

6. 7. 8. 9. 10.

e: $ct^0 2$ V⁷ c: $ct^0 2$ V⁷ b: $ct^0 2$ i Db: $ct^0 5$ V³ d: $ct^0 5$ i⁴

Note: Where voices resolve to an octave or unison, inversion of these voices is also possible. Thus, for example, #2 may be approached from a $ct^0 4_3$ as well as a $ct^0 7$.

Level Mastery 26.2.

a.

1. P 2. R 3. R 4. P
5. R 6. P 7. L 8. R
9. PL 10. RP 11. LP 12. RP
13. PR 14. LP 15. RP 16. PL

b.

1. LP 2. PR 3. PR 4. PL

5. PL 6. RP 7. PR 8. LP

* (enharmonically, B \flat major is acceptable) (by strict spelling, b \sharp minor is acceptable)

Chapter 26 Self-Test

26.1.

a: ct⁰⁷ i⁶₄ E: ct⁰⁷ I⁶ D: ct⁴₂ V⁷ e: ct⁴₃ V⁶₄

F: ct⁴₂ I Ab: ct⁴₃ I⁶₄ Eb: ct⁴₂ I G: ct⁶₅ I⁶

G: ct⁴₂ V⁷ f \sharp : ct⁰⁷ i⁶₄ B \flat : ct⁰⁷ I⁶ E: ct⁴₂ V⁷

26.2.

Eb major E major G major Bb major B major
 d minor d# minor f# minor a minor a# minor
 ab minor a minor c minor eb minor e minor
 C major C# major E major G major Ab major (enh.)

26.3.

a.

- 1. R 2. L 3. L 4. P
- 5. R 6. P 7. L 8. R

b.

PL RP LP PR
 S PL LP RP

Chapter 26 Apply This

1. In stil - ler Nacht, zur er - sten Wacht, ein' Stim be - gunnt zu kla - gen, der

2. Der schö - ne Mond will un - ter gahn, für Leid nicht mehr mag schei - nen, die

Eb: I iv I iv I ii⁶ $\begin{matrix} 6 - 5 \\ 4 - 3 \\ V \end{matrix}$ V⁷

5 nächt' - ge Wind hat süss und lind zu mir den Klang ge - tra - gen; von

Ster - ne lan ihr Glit - zen stahn, mit mir sie wol - len wei - aen. Kein'

ct⁰₂⁴ V⁷ ct⁰₂⁴ V⁷ I

Level Mastery 27.1.

- a. Beethoven, Piano Sonata no. 8 in C minor (“Pathétique”), Op. 13 (1st mvt.), measures 134–136.

g: vii^{o4}/₃ e: vii^{o4}/₂

- b. Paul Simon, “Tenderness” [0:53–1:14], chord progression only.

[0:53] [1:09]

C: vii^{o4}/₃ f#: vii^{o7}(enh.)

c. Schumann, Symphony no. 2, Op. 61 (2nd mvt.), measures 1–8, strings only.

Allegro vivace

Violin I *mf*

Violin II *mf*

Viola *mf*

Cello *mf*

Bass *mf*

C: *mf*

5

cresc.

cresc.

cresc.

cresc.

cresc.

C: $\text{vii}^{\text{o}3}/\text{V}^{\text{4}}$

E \flat : $\text{ct}^{\text{o}3}/\text{3}^{\text{4}}$

cresc.

Level Mastery 27.2.

1.

$f\#:$ i i^4_2 iv^6 δ (7) b 6 b^6_4 - 5 b
 $g:$ V^7 i N^6 V i

2.

$Eb:$ I iii vi 7 (δ) 6 - b^5 7 b^5
 $d:$ GER^{+6} V VI vii^{o7}/V V

3.

$e:$ i $ii^{\circ 6}_5$ i^6_4 7 b^6 b^6_4 - 5 b
 $f:$ vii^{o3} i^6 N^6 V i
 vii^{o7}/V

Chapter 27 Self-Test

27.1. e

27.2.

The exercise consists of four measures of music in C major. The first measure contains a half note C4 in the treble and a half note C3 in the bass. The second measure contains a half note D4 in the treble and a half note D3 in the bass. The third measure contains a half note E4 in the treble and a half note E3 in the bass. The fourth measure contains a half note F4 in the treble and a half note F3 in the bass.

c: vii^o₂⁴ i⁶ a: vii^o⁷ i f#: vii^o₅⁶ i eb: vii^o₃⁴ i⁶

Chapter 27 Apply This!

27.1. Analysis

The score is in 3/4 time and consists of two measures. The first measure is marked [1:38] and the second [1:40]. The Trpts part has a triplet of eighth notes in the second measure. The Trbs part has a triplet of eighth notes in the second measure. The Piano part has a triplet of eighth notes in the first measure and a triplet of eighth notes in the second measure. The Vlins part has a half note in the first measure and a half note in the second measure.

Harmonic analysis below the score:

F:	v ⁷		
e:	GER ⁺⁶ (enh.)	i ⁶	GER ^{o3} (enh.)
			c#: GER ⁺⁶ (enh.)
			D: V ⁷

$c\#:$ i^6_4 GER⁰³ | B: V⁷ | F: V⁷/ b III
 $b\flat:$ GER⁺⁶(enh.) i^6_4 GER⁰³ | A b : V⁷ |

CPT CPT CPT CPT
 F: V⁷/ b III V^4_2 / b III V^4_2 V^6_4 I

27.2. Composition

Various answers are possible.

27.3. Improvisation

Various answers are possible.

Level Mastery 28.1.

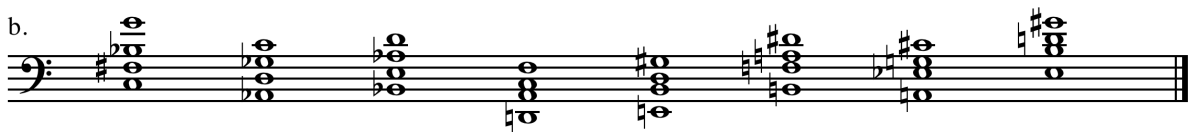
1.

a.



Musical staff a: Treble clef, 8 measures of chords. The chords are: G major (G, B, D), A major (A, C, E), B major (B, D, F#), C major (C, E, G), D major (D, F#, A), E major (E, G, B), F# major (F#, A, C), and G major (G, B, D).

b.



Musical staff b: Bass clef, 8 measures of chords. The chords are: G major (G, B, D), A major (A, C, E), B major (B, D, F#), C major (C, E, G), D major (D, F#, A), E major (E, G, B), F# major (F#, A, C), and G major (G, B, D).

c.



Musical staff c: Bass clef, 8 measures of chords. The chords are: G major (G, B, D), A major (A, C, E), B major (B, D, F#), C major (C, E, G), D major (D, F#, A), E major (E, G, B), F# major (F#, A, C), and G major (G, B, D).

2.

a. M m M M m m m M

b. mm⁷ mm⁷ Mm⁷ MM⁷ ø⁷ MM⁷ mm⁷ mm⁷

c.

Level Mastery 28.2.

1. E	2. 0	3. 8	4. T	5. 8	6. 6
7. E	8. 3	9. 9	10. 2	11. 6	12. 4
13. 6	14. 5	15. 9	16. 2	17. 3	18. 3
19. E	20. 6	21. 4	22. 0	23. 6	24. 8
25. 3	26. 1	27. 8	28. T	29. 5	30. 6

Level Mastery 28.3.



1.

1.  2. 
 G OCT_{1,2} Ab whole-tone scale



3.  4. 
 C whole-tone scale Eb Mode 6 (Mode of Limited Transposition)

5.  6. 
 D Lydian G# OCT_{2,3}

7.  8. 
 C Phrygian F# Mode 3 (Mode of Limited Transposition)

9.  10. 
 Bb Mode 4 (Mode of Limited Transposition) D# OCT_{0,1}

11.  12. 
 E whole-tone scale F Mode 7 (Mode of Limited Transposition)




13.  14. 
 G OCT_{0,1} D Mode 5 (Mode of Limited Transposition)

Level Mastery 28.4.

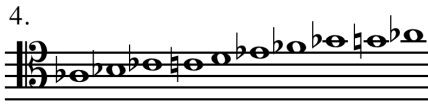


- | | | | | |
|-----------------|--------------|--------------|--------------|------------------|
| 1. <u>QT-QN</u> | 2. <u>QN</u> | 3. <u>QT</u> | 4. <u>QN</u> | 5. <u>QT-QN</u> |
| 6. <u>QT-QN</u> | 7. <u>QT</u> | 8. <u>QT</u> | 9. <u>QN</u> | 10. <u>QT-QN</u> |

Chapter 28 Self-Test




28.1.

1.  2.  3. 




B \flat OCT_{1,2} F# Mixolydian D Mode 4 (Mode of Limited Transposition)

4.  5.  6. 


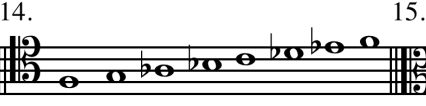

A \flat Mode 3 (Mode of Limited Transposition) E OCT_{0,1} B Lydian

7.  8.  9. 




C# whole-tone scale F Phrygian C# OCT_{0,1}

10.  11.  12. 

A Locrian G Mode 6 (Mode of Limited Transposition) C OCT_{2,3}

13.  14.  15. 

A \flat Mode 7 (Mode of Limited Transposition) F Aeolian B \flat whole-tone scale

16.  17.  18. 

F whole-tone scale B Dorian G OCT_{1,2}

Chapter 28 Apply This!

28.1. Composition

Various answers are possible.

Level Mastery 29.1.a. R: R_0 I: I_0 RI: RI_0


b. Rows labeled using traditional method.

	I_0	I_1	I_9	I_{11}	I_8	I_{10}	I_4	I_5	I_6	I_2	I_3	I_7	
P_0	4	5	1	3	0	2	8	9	10	6	7	11	R_0
P_{11}	3	4	0	2	11	1	7	8	9	5	6	10	R_{11}
P_3	7	8	4	6	3	5	11	0	1	9	10	2	R_3
P_1	5	6	2	4	1	3	9	10	11	7	8	0	R_1
P_4	8	9	5	7	4	6	0	1	2	10	11	3	R_4
P_2	6	7	3	5	2	4	10	11	0	8	9	1	R_2
P_8	0	1	9	11	8	10	4	5	6	2	3	7	R_8
P_7	11	0	8	10	7	9	3	4	5	1	2	6	R_7
P_6	10	11	7	9	6	8	2	3	4	0	1	5	R_6
P_{10}	2	3	11	1	10	0	6	7	8	4	5	9	R_{10}
P_9	1	2	10	0	9	11	5	6	7	3	4	8	R_9
P_5	9	10	6	8	5	7	1	2	3	11	0	4	R_5
	RI_0	RI_1	RI_9	RI_{11}	RI_8	RI_{10}	RI_4	RI_5	RI_6	RI_2	RI_3	RI_7	



Row a: I_4 Row b: R_6 Row c: RI_1 Row d: P_1 **Level Mastery 29.2.**

- $\{3, 6, 8, 9\}$
- $\langle 6, 2, 5, T, 4 \rangle$
- $\langle 8, 4, 3, 2, 5, 7 \rangle$
- $\langle E, 3, 2, T, 6 \rangle$
- $\{0, 2, 4, 6, 9, T\}$
- $\{0, 1, 3, 4, 6, 7, 9, E\}$
- $\langle T, 9, E, 1, 8, 4 \rangle$
- $\{0, 5, 7, T\}$
- $\langle 5, 4, T, 8 \rangle$
- $\{0, 1, 6, 7, T\}$
- $\{1, 2, 3, 4, 6, 8, 9, T\}$
- $\langle 7, 4, 3, 6, 1, 5, 2 \rangle$
- $\{2, 6, 8, T\}$
- $\langle 3, 2, 5 \rangle$
- $\{1, 2, 3, 4, 7, 8, E\}$

Level Mastery 29.3.

1.  2.  3.  4.  5. 

6.  7.  8.  9.  10. 

11.  12.  13.  14.  15. 

Level Mastery 29.4.

a.

1. {8, 9, 1}	←T ₆ I→	<u>{5, 9, T}</u>
2. {2, 5, 6, T}	T ₂ →	<u>{4, 7, 8, 0}</u>
3. {2, 3, 6, 8}	←T ₇ I→	<u>{E, 1, 4, 5}</u>
4. {3, 4, 7}	←T ₀ I→	<u>{5, 8, 9}</u>
5. {1, 2, 5, 9}	T ₇ →	<u>{8, 9, 0, 4}</u>
6. {4, 6, E}	T ₆ →	<u>{T, 0, 5}</u>
7. {4, 5, 8}	←T ₆ I→	<u>{T, 1, 2}</u>
8. {0, 2, 4, 6, 8}	T ₃ →	<u>{3, 5, 7, 9, E}</u>
9. {0, 1, 3, 4, 6}	T ₅ →	<u>{5, 6, 8, 9, E}</u>
10. {1, 3, 7}	←T ₃ I→	<u>{8, 0, 1}</u>

b. Sets are labeled below in integer notation to show work.

1. {4, 5, T}	←T ₅ I→	{7, 0, 1}
2. {7, 8, E, 3}	T ₆ →	{1, 2, 5, 9}
3. {9, T, 0, 3}	←T ₈ I→	{5, 8, T, E}
4. {T, 0, 1, 4}	T ₄ →	{2, 4, 5, 8}
5. {E, 0, 4, 6}	T ₃ →	{2, 3, 7, 9}
6. {2, 3, 4, 6}	T ₆ →	{8, 9, T, 0}
7. {8, T, 1, 4}	←T ₅ I→	{1, 4, 7, 9}

8.	{4, 5, 6, 9}	$T_9 \rightarrow$	{1, 2, 3, 6}
9.	{2, 3, 5, 9}	$\leftarrow T_{10} I \rightarrow$	{1, 5, 7, 8}
10.	{T, E, 2, 4}	$T_5 \rightarrow$	{3, 4, 7, 9}
11.	{8, 9, E, 2}	$T_2 \rightarrow$	{T, E, 1, 4}
12.	{3, 4, 6, 8}	$\leftarrow T_9 I \rightarrow$	{1, 3, 5, 6}
13.	{6, 7, T, 1}	$\leftarrow T_5 I \rightarrow$	{4, 7, T, E}
14.	{5, 6, T, 1}	$T_7 \rightarrow$	{0, 1, 5, 8}
15.	{7, 8, 9, 2}	$T_3 \rightarrow$	{T, E, 0, 5}

Level Mastery 29.5.

1. (036)	2. (027)	3. (0236)	4. (0167)	5. (0156)
002001	010020	112101	200022	200121
6. (0146)	7. (02479)	8. (023579)	9. (013579)	10. (0134679T)
11111	032140	143241	142422	448444

Level Mastery 29.6.

Most of the vertical sonorities in the passage (sometimes piano alone, sometimes including voice) are of set class (0268), which is intervallically symmetrical. (0268) is also symmetrical by transposition, meaning that the same unordered set results when transposed by a tritone. Note, for example, that the progression begins with the chord {B \flat , D, A \flat , E} and ends, in measure 4, with the chord {E, D, G \sharp , B \flat } (including the voice). In tonal terms, this is analogous to the resolution pattern of a French augmented sixth chord being similar to a second-inversion flatted-fifth altered dominant seventh chord (the so-called “tritone substitution” in jazz).

One vestige of traditional tonality in this passage—besides the key signature—is the fact that, with the bass line moving up by perfect fourth or down by perfect fifth—the passage resembles a chromatic circle-of-fifths sequence with flatted-fifth altered dominant chords.

Chapter 29 Self-Test**29.1.**

1. (014)	2. (01568)	3. (0146)	4. (0157)	5. (01267)
101100	211231	111111	110121	310132
6. (0268)	7. (03458)	8. (012578)	9. (013568)	10. (01235689)
020202	212320	322242	233241	546553

29.2. Sets are labeled below in integer notation to show work.

1. {7, 8, E}	$\leftarrow T_9 I \rightarrow$	{T, 1, 2}
2. {3, 4, 6, 9}	$T_8 \rightarrow$	{E, 0, 2, 5}
3. {2, 3, 6, 9, T}	$T_2 \rightarrow$	{4, 5, 8, E, 0}
4. {8, 9, 1, 3}	$T_4 \rightarrow$	{0, 1, 5, 7}
5. {7, 9, T, 0, 2}	$T_{10} \rightarrow$	{5, 7, 8, T, 0}
6. {4, 5, 9, 0}	$T_3 \rightarrow$	{7, 8, 0, 3}
7. {1, 3, 5, 7, T}	$T_4 \rightarrow$	{5, 7, 9, E, 2}
8. {9, T, 0, 3}	$\leftarrow T_9 I \rightarrow$	{6, 9, E, 0}
9. {T, E, 0, 3, 5}	$\leftarrow T_1 I \rightarrow$	{8, T, 1, 3, 4}
10. {8, 9, T, 1, 2}	$T_9 \rightarrow$	{5, 6, 7, T, E}
11. {2, 3, 5, 8, T}	$\leftarrow T_4 I \rightarrow$	{6, 8, E, 1, 2}
12. {2, 4, 5, 6, 9}	$\leftarrow T_2 I \rightarrow$	{5, 8, 9, T, 0}
13. {7, 9, T, E, 1, 3}	$T_3 \rightarrow$	{T, 0, 1, 2, 4, 6}
14. {6, 7, 9, T, 1, 3}	$T_{11} \rightarrow$	{5, 6, 8, 9, 0, 2}
15. {E, 0, 2, 4, 6, 8}	$T_5 \rightarrow$	{4, 5, 7, 9, E, 1}
16. {3, 4, 5, 8, T, E}	$T_3 \rightarrow$	{6, 7, 8, E, 1, 2}

29.3. The pitch axis of symmetry is C4. The set class for each staff is (01234589). The two staves are related to one another at $T_0 I$.

Chapter 29 Apply This!

29.1.

	I₀	I₈	I₇	I₆	I₁₁	I₁	I₅	I₄	I₃	I₉	I₁₀	I₂	
P₀	0	8	7	6	11	1	5	4	3	9	10	2	R₀
P₄	4	0	11	10	3	5	9	8	7	1	2	6	R₄
P₅	5	1	0	11	4	6	10	9	8	2	3	7	R₅
P₆	6	2	1	0	5	7	11	10	9	3	4	8	R₆
P₁	1	9	8	7	0	2	6	5	4	10	11	3	R₁
P₁₁	11	7	6	5	10	0	4	3	2	8	9	1	R₁₁
P₇	7	3	2	1	6	8	0	11	10	4	5	9	R₇
P₈	8	4	3	2	7	9	1	0	11	5	6	10	R₈
P₉	9	5	4	3	8	10	2	1	0	6	7	11	R₉
P₃	3	11	10	9	2	4	8	7	6	0	1	5	R₃
P₂	2	10	9	8	1	3	7	6	5	11	0	4	R₂
P₁₀	10	6	5	4	9	11	3	2	1	7	8	0	R₁₀
	RI₀	RI₈	RI₇	RI₆	RI₁₁	RI₁	RI₅	RI₄	RI₃	RI₉	RI₁₀	RI₂	

The musical score is written for piano in 3/4 time and consists of four systems of music. The notation includes treble and bass clefs, dynamic markings, and various chord symbols.

- System 1 (Measures 1-4):** Starts with a P_0 chord in measure 1 (*mp*). Measure 2 contains a I_3 (first hexachord) chord. Measure 3 contains a RI_3 (first hexachord) chord. Measure 4 contains a RI_1 chord (*fz*).
- System 2 (Measures 5-8):** Measure 5 contains a fz chord. Measure 6 contains a mf chord. Measure 7 contains a R_6 chord (*f*). Measure 8 contains a R_{10} chord.
- System 3 (Measures 9-12):** Measure 9 contains a I_{11} chord (*ff*). Measure 10 contains a I_8 chord (*p*). Measure 11 contains a R_1 chord. Measure 12 contains a I_8 chord.
- System 4 (Measures 13-16):** Measure 13 contains a RI_0 chord (*mp*). Measure 14 contains a I_{10} chord (*pp*). Measure 15 contains a p chord. Measure 16 contains a mp chord. Measure 17 contains a p chord.

29.2 Composition

Various answers are possible.

29.3 Ear Training

a.

- | | |
|-----------|-----------|
| 1. (015) | 14. (015) |
| 2. (024) | 15. (024) |
| 3. (016) | 16. (013) |
| 4. (012) | 17. (012) |
| 5. (014) | 18. (014) |
| 6. (013) | 19. (015) |
| 7. (012) | 20. (013) |
| 8. (016) | 21. (014) |
| 9. (013) | 22. (016) |
| 10. (015) | 23. (014) |
| 11. (024) | 24. (016) |
| 12. (014) | 25. (013) |
| 13. (016) | 26. (015) |

b.

- | | |
|-----------|-----------|
| 1. (037) | 14. (037) |
| 2. (027) | 15. (048) |
| 3. (036) | 16. (036) |
| 4. (025) | 17. (025) |
| 5. (048) | 18. (027) |
| 6. (026) | 19. (027) |
| 7. (027) | 20. (025) |
| 8. (025) | 21. (037) |
| 9. (048) | 22. (026) |
| 10. (037) | 23. (037) |
| 11. (026) | 24. (026) |
| 12. (036) | 25. (025) |
| 13. (026) | 26. (027) |

Chapter 30 Apply This!

30.1 Composition

Various answers are possible.

30.2 Improvisation

Various answers are possible.

Chapter 31 Self-Test

31.1.

In *stylistic* intertextuality, certain musical features are used to evoke traits of a particular musical style; an Alberti bass pattern might be used to evoke *gallant* Classical style, or dotted rhythms in duple meter might be used to evoke a march genre. In *strategic* intertextuality, a *specific* musical work is referenced (directly quoted or paraphrased in a way that suggests the specific work) within a particular piece of music. For example, Beethoven's "battle symphony" *Wellington's Victory* musically portrays the Battle of Vitoria by quoting from "Rule Britannia" and "God Save the King" to depict the British Army, and quoting from the French folk song "Marlbrough s'en va-t-en Guerre" ("Marlborough has Gone to War")—also known today as "For He's a Jolly Good Fellow" or "The Bear Went over the Mountain"—to depict the French Army.

31.2.

Style indicators are those musical elements that are considered *normative* to a particular style as in, for example, the use of Alberti bass accompaniment in Classic-era piano music or rapid repeating arpeggios in the music of Philip Glass. *Genre synecdoches* are musical elements that are *foreign* to the style of the work in which they occur and which symbolize the entire genre to which they are normative; for example, the use of Alberti bass figures in a twentieth-century work would be regarded as a musical reference to Classic-era music, especially piano music.

31.3.

- a. (c), episodic marker (both passages function as "lead-ins" to the phrase that follows).
- b. (c), kinetic anaphora (a gesture indicating a rapid, tumbling fall).
- c. (b), genre synecdoche, the "horn fifths" signifying a pastoral setting and perhaps distance.

Chapter 31 Apply This!

31.1.

There are bound to be multiple interpretations and answers for this exercise. Here are some highlights to consider:

- Measure 9: The first syncopation in the piece, emphasizing C5, introduces an element of metric disturbance, mildly disrupting the flow of the *siciliano*'s gently rocking rhythm.
- Measure 17: The C5 syncopation is now harmonized in a minor, introducing a brief cadential incursion in a minor (measures 18–19) and the first appearance of harmony not diatonic to F major.
- Measure 32: The expected cadential resolution of the V⁷ in measure 32 is thwarted in measure 33, initiating a more extensive passage in a minor. (The crescendo marking here acts as an episodic marker.) These incursions of a minor foreshadow the key of the next section.
- Measure 46: The cascading sixteen-note figures mark a strongly kinetic anaphone; the a minor arpeggio is “polluted” by the added F, a reminder of the key of the opening section.
- In contrast to the tonal stability of the first section, the second section frequently uses sequences to develop material and change keys. Measures 46–53 (a minor) are sequenced down a step in measures 54–61 (g minor), and measures 62–63 (d minor) are sequenced twice by consecutive minor thirds (f minor and a \flat minor—the first foreign keys encountered thus far. This section culminates in an extended half cadence in a \flat minor (measures 70–78), followed by a slippery chromatic passage (measures 78–81) that acts as an episodic marker to the third section of the piece.
- Measure 82: The *siciliano* returns, although fragmented or “shattered.” The passage (a reprise of measures 3–7a) is cut off by a rest in measure 87. After the rest, the music resumes abruptly in a minor, reprising 34–38 from the opening. The cadence is again thwarted, as it was in measures 32–33, this time by a secondary diminished seventh chord (measures 94–95). All of this suggests that the reprise has been irrevocably altered by the turbulence of the second section.
- Measures 97–100: The return of the quarter-note–eighth-note rhythmic motive and the dominant pedal (in D \flat major) suggest a return to the placidity of the

- siciliano*. This passage is sequenced to appear in G \flat major in measures 103–106). Both keys are foreign to F major. Throughout this passage, the dotted-eighth–sixteenth–eighth note *siciliano* rhythmic figure is found, developing that motive by placing it in increasingly unstable and unfamiliar harmonic contexts (see for example measures 107–110).
- Measure 115: At the Tempo I, a false recapitulation; the *siciliano* returns, but now in E major—very close in register to F major, but in fact a quite distant key relationship on the circle-of-fifths. The passage is sequenced down by chromatic mediant to C major.
 - Measure 140: The second section’s kinetic anaphone returns in a minor. This time there is no harmonic sequence. The descending chromatic bass in measures 154–156 is reminiscent of the *lamento* bass in Renaissance and Baroque music (e.g., see the “Crucifixus” from Bach’s *Mass in B Minor* discussed in chapter 16). The descending chromatic bass tetrachord makes a full appearance in measures 176–178 and 180–182.
 - Measure 197: The *siciliano* makes one last, feeble appearance in a minor, making this a rare example of a single-movement common-practice work that ends in a key other than its opening. The piece can retroactively be seen as a struggle between the “pastoral” F major and the “invading” or hostile a minor; by the end of the piece, a minor has emerged victorious, “occupying” the *siciliano*.