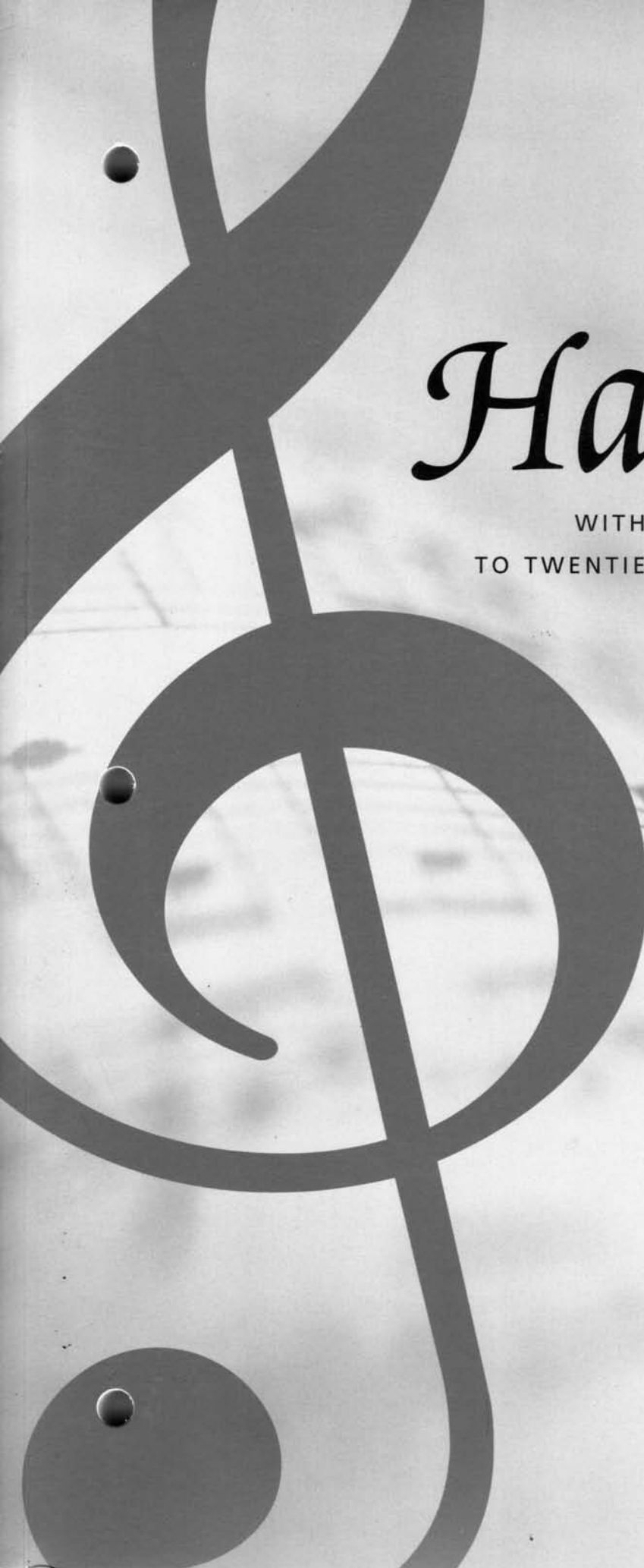




WORKBOOK FOR

Tonal Harmony

WITH AN INTRODUCTION
TO TWENTIETH-CENTURY MUSIC
FIFTH EDITION

*Stefan Kostka
Dorothy Payne*

Workbook for

Tonal Harmony

with an Introduction to Twentieth-Century Music

Fifth Edition

Stefan Kostka

The University of Texas at Austin

Dorothy Payne

The University of South Carolina



Boston Burr Ridge, IL Dubuque, IA Madison, WI New York San Francisco St. Louis
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This icon denotes a listening example. For a list of the recorded examples, see the last page of the workbook.

Part I

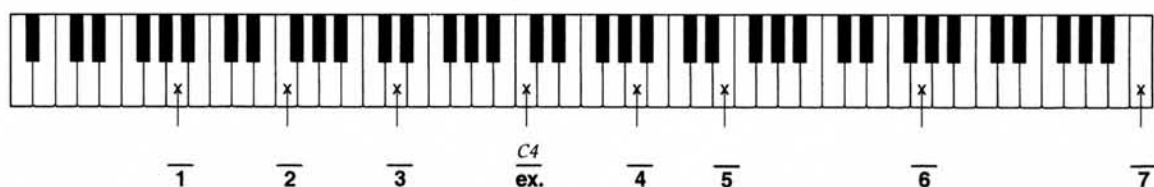
Fundamentals

Chapter 1

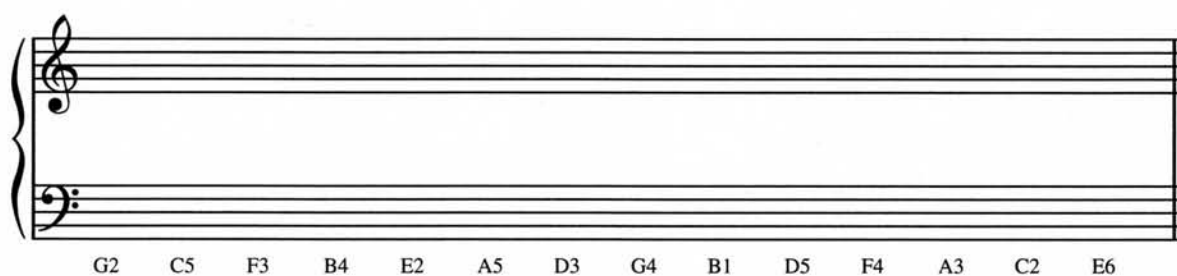
ELEMENTS OF PITCH

EXERCISE 1-1

A. Name the pitches in the blanks provided, using the correct octave register designations.



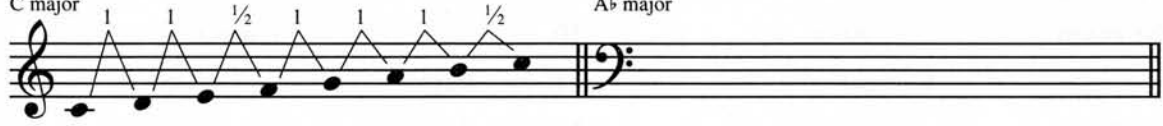
B. Notate the indicated pitches on the staff in the correct octave.



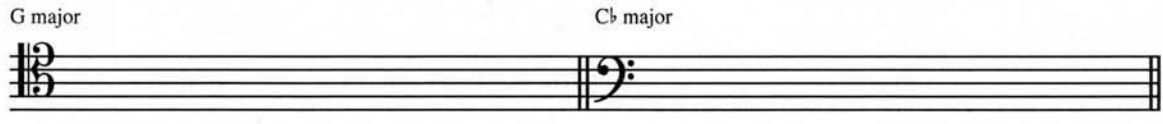
EXERCISE 1-2

- A. Notate the specified scales using accidentals, not key signatures. Show the placement of whole and half steps, as in the example.

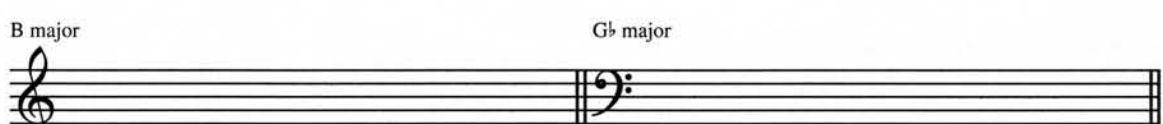
C major A $\flat$ major



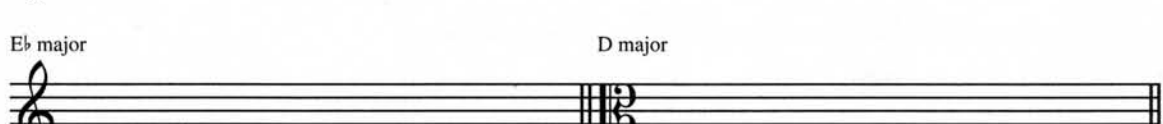
G major C $\flat$ major



B major G $\flat$ major



E $\flat$ major D major



- B. Identify these major key signatures.



C major 1 major 2 major 3 major 4 major 5 major 6 major 7 major

ex. 1 2 3 4 5 6 7

- C. Notate the specified key signatures.



A $\flat$ major E major F major C major



G $\flat$ major G major E $\flat$ major C $\sharp$ major

D. Fill in the blanks.

<i>Key signature</i>	<i>Name of key</i>	<i>Key signature</i>	<i>Name of key</i>
1. _____	D $\flat$ major	8. seven flats	_____ major
2. _____	G major	9. _____	F major
3. five sharps	_____ major	10. _____	E major
4. _____	E $\flat$ major	11. two sharps	_____ major
5. two flats $\flat$	_____ major	12. three flats	_____ major
6. three sharps $\sharp$	_____ major	13. _____	G $\flat$ major
7. _____	C $\sharp$ major	14. six sharps	_____ major

E. Fill in the blanks, using the example as a model.

<i>Major key</i>	<i>Key signature</i>	<i>Scale degree</i>	<i>Is this note</i>
Ex. <u>C</u>	<u>0$\sharp$/0$\flat$</u>	<u>$\hat{5}$</u>	<u>G</u>
1. <u>E</u>	_____	<u>$\hat{3}$</u>	_____
2. _____	<u>2$\sharp$</u>	_____	<u>C$\sharp$</u>
3. _____	_____	<u>$\hat{4}$</u>	<u>E$\flat$</u>
4. <u>G$\flat$</u>	_____	_____	<u>E$\flat$</u>
5. _____	<u>3$\sharp$</u>	<u>$\hat{2}$</u>	_____
6. _____	<u>6$\sharp$</u>	_____	<u>C$\sharp$</u>

EXERCISE 1-3

- A. Notate the specified scales using accidentals, not key signatures. The melodic minor should be written both ascending and descending.

c (natural) e (harmonic)



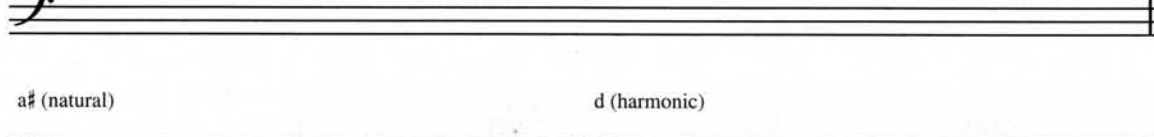
b (natural) a $\flat$ (harmonic)



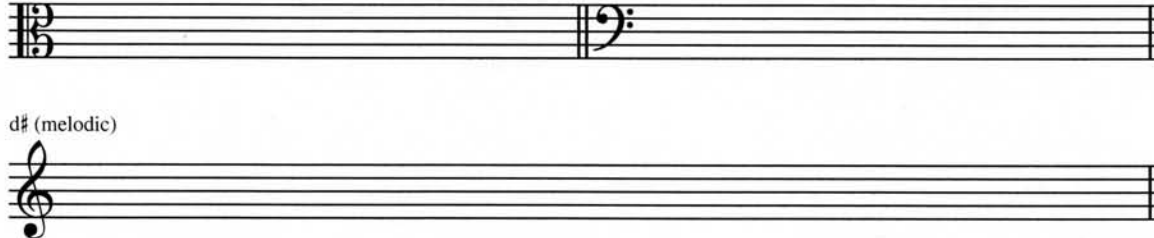
g (melodic)



a $\sharp$ (natural) d (harmonic)

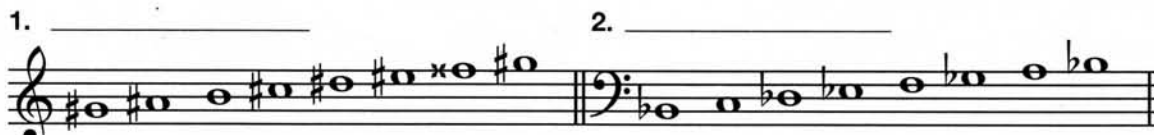


d $\sharp$ (melodic)

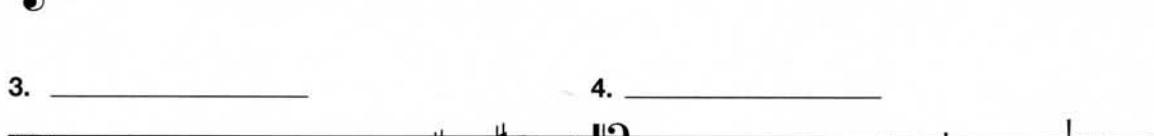


- B. Identify the type of each scale as major, natural minor, harmonic minor, or melodic minor. Any melodic minor scales will be shown in the ascending version only.

1. _____ 2. _____



3. _____ 4. _____



5. _____ 6. _____



C. Identify these minor key signatures.



a minor 1 minor 2 minor 3 minor 4 minor 5 minor 6 minor 7 minor
ex.

D. Notate the specified minor key signatures.



e♭ minor

c♯ minor

g minor

a minor



e minor

a♯ minor

d♯ minor

f minor

E. Fill in the blanks.

Key signature

Name of key

1. three sharps

f♯ minor

2. _____

e♭ minor

3. _____

c♯ minor

4. five flats

_____ minor

5. _____

a minor

6. four flats

_____ minor

7. seven sharps

_____ minor

Key signature

Name of key

8. _____

g minor

9. two sharps

_____ minor

10. seven flats

_____ minor

11. _____

e minor

12. one flat

_____ minor

13. _____

c minor

14. _____

g♯ minor

EXERCISE 1-4

A. Provide the numerical names of the intervals by using the numbers 1 through 8.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

EXERCISE 1-5

A. All the intervals below are 4ths, 5ths, unisons, or octaves. Put a "P" in the space provided *only* if the interval is a perfect interval.



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



11 5 12 5 13 8 14 5 15 4 16 1 17 4 18 8 19 5 20 4

B. All the intervals below are 2nds, 3rds, 6ths, or 7ths. Put an "M" or an "m" in each space, as appropriate.



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



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

21² 22³ 23² 24⁶ 25⁷ 26² 27⁷ 28⁶ 29³ 30²

C. Notate the specified intervals above the given notes.

P4 1
m3 2
m6 3
M2 4
P4 5
P5 6
m2 7
P5 8
M7 9
m7 10

M3 11
P8 12
M6 13
m7 14
M3 15
M7 16
P8 17
P5 18
M6 19
m2 20

m3 21
M2 22
M7 23
M3 24
M6 25
m7 26
P4 27
M7 28
M6 29
m2 30

M6 31
M3 32
m3 33
M3 34
P5 35
m2 36
m6 37
m7 38
M7 39
M2 40

m6 41
M2 42
P4 43
m3 44
m7 45
P5 46
m6 47
P5 48
M7 49
m2 50

P5 51
P4 52
m3 53
m7 54
M2 55
P4 56
M6 57
m6 58
m2 59
M3 60

EXERCISE 1-6

A. Most of the intervals below are either augmented or diminished. Name each interval.

1 2 3 4 5 6 7 8 9 10

11 12 13 14 15 16 17 18 19 20

B. Label what each interval becomes when it is inverted.

- | | |
|---------------------|---------------------|
| 1. m3 becomes _____ | 5. M2 becomes _____ |
| 2. +5 becomes _____ | 6. +4 becomes _____ |
| 3. M6 becomes _____ | 7. P5 becomes _____ |
| 4. °7 becomes _____ | 8. m7 becomes _____ |

C. Notate the specified interval *below* the given note. (You might find it helpful to invert the interval first in some cases.)

M7 P4 m6 +2 m7 M3 +6 °5 +4 M6

1 2 3 4 5 6 7 8 9 10

m2 M3 +6 M2 °5 m3 °7 P4 +2 +4

11 12 13 14 15 16 17 18 19 20

Top staff intervals: m7 21, P5 22, m3 23, m2 24, P4 25, M7 26, m2 27, °5 28, M2 29, +6 30

Bottom staff intervals: m6 31, P4 32, M3 33, P5 34, +2 35, m3 36, P5 37, °7 38, M2 39, M6 40

D. Label each interval in this melody (from Wagner's *Götterdämmerung*).

Top staff intervals: 1, 2, 3, 4, 5, 6, 7, 8, 9

Bottom staff intervals: 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

E. Beneath each harmonic interval below, indicate whether it is consonant ("c"), dissonant ("d"), or dissonant only if the bass has the bottom note of the interval ("d bass").

	1. m3	2. M7	3. +6	4. P5	5. M6
c	_____	_____	_____	_____	_____
d	_____	_____	_____	_____	_____
d bass	_____	_____	_____	_____	_____
	6. °5	7. P4	8. P8	9. m2	10. M3
c	_____	_____	_____	_____	_____
d	_____	_____	_____	_____	_____
d bass	_____	_____	_____	_____	_____

Chapter 2

ELEMENTS OF RHYTHM

EXERCISE 2-1

A. Show how many notes or rests of the shorter duration would be required to equal the longer duration.

ex. $\text{♩} \times 2 = \text{♩}$

1. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

2. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

3. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩} \text{ } \text{♩}$

4. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

5. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

6. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

7. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

8. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

9. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

10. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

11. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

12. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

13. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

14. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

15. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

16. $\text{♩} \times \underline{\hspace{1cm}} = \text{♩}$

B. Sing aloud each of the songs listed below. Then identify the meter type of each, using the terms *duple*, *triple*, and *quadruple*.

1. "Auld Lang Syne" _____
2. "Star-Spangled Banner" _____
3. "Pop Goes the Weasel" _____
4. "America" ("My Country, 'Tis of Thee") _____
5. "Swing Low, Sweet Chariot" _____

C. Scale review. Fill in the blanks, using the melodic minor for all minor-key examples.

ex. $\hat{6}$ is $F\sharp$ in A (M)

1. $\downarrow\hat{7}$ is C in ____ (m)

2. $\hat{4}$ is ____ in $c\sharp$

3. ____ is A in F

4. $\hat{5}$ is $C\sharp$ in ____ (m)

5. $\hat{2}$ is ____ in E

6. $\hat{7}$ is A in ____ (M)

7. $\downarrow\hat{6}$ is ____ in c

8. ____ is $C\sharp$ in b

9. $\hat{6}$ is C in ____ (M)

10. ____ is $F\sharp$ in g

11. $\hat{4}$ is G in ____ (M)

12. $\hat{5}$ is ____ in G

13. ____ is $A\flat$ in f

14. $\uparrow\hat{6}$ is $C\sharp$ in ____ (m)

EXERCISE 2-2

A. Fill in the blanks.

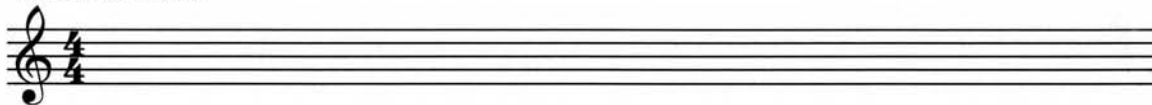
	<i>Beat and meter type</i>	<i>Beat note</i>	<i>Division of the beat</i>	<i>Time signature</i>
1.				C
2.	Simple triple			
3.	Simple duple			
4.				2
5.	Simple quadruple			

B. Renotate the excerpts from Example 2-1 using the specified time signatures.

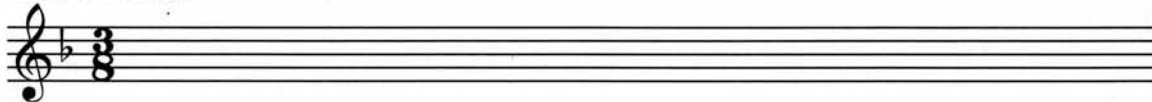
"Jingle Bells"



"America the Beautiful"



"Home on the Range"



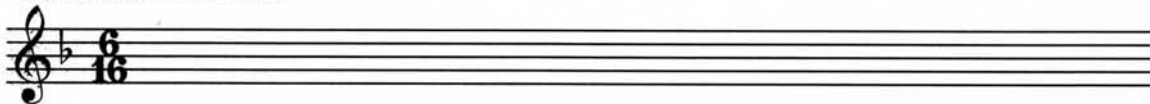
EXERCISE 2-3

A. Fill in the blanks.

	<i>Beat and meter type</i>	<i>Beat note</i>	<i>Division of the beat</i>	<i>Time signature</i>
1.	Compound triple			
2.				6 16
3.				12
4.	Compound duple			
5.				9

B. Renotate the excerpts from Example 2-2 using the specified time signatures.

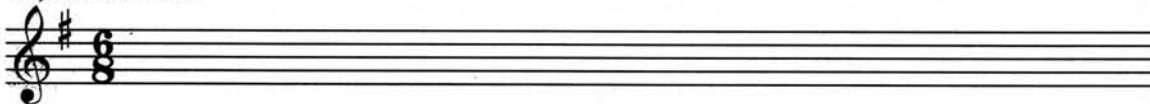
"Take Me Out to the Ball Game"



"Down in the Valley"



"Pop Goes the Weasel"



EXERCISE 2-4

A. Fill in the blanks.

	<i>Beat and meter type</i>	<i>Beat note</i>	<i>Division of the beat</i>	<i>Time signature</i>
1.	Compound quadruple			
2.	Simple triple			
3.				4
4.				6
5.				♩
6.				9

B. Each measure below is incomplete. Add one or more rests to complete the measure.

1. $\frac{6}{4}$  |
2. C  |
3. $\frac{2}{16}$  |
4. $\frac{12}{16}$  |
5. $\frac{3}{8}$  |
6. $\frac{9}{8}$  |
7. C  |
8. $\frac{9}{4}$  |
9. $\frac{3}{2}$  |
10. $\frac{12}{8}$  |
11. $\frac{4}{8}$  |
12. $\frac{6}{4}$  |

- C. Provide the best time signature for each measure. In some cases more than one correct answer might be possible.

1. 	7. 
2. 	8. 
3. 	9. 
4. 	10. 
5. 	11. 
6. 	12. 

- D. Each fragment below is notated so that the placement of the beats is obscured in some fashion. Without changing the way the music will sound, rewrite each one to clarify the beat placement.

1. $\frac{4}{4}$ 	$\frac{4}{4}$ _____
2. $\frac{3}{2}$ 	$\frac{3}{2}$ _____
3. $\frac{9}{8}$ 	$\frac{9}{8}$ _____
4. $\frac{2}{4}$ 	$\frac{2}{4}$ _____
5. $\frac{12}{16}$ 	$\frac{12}{16}$ _____
6. $\frac{6}{2}$ 	$\frac{6}{2}$ _____

E. Add stems as required.

1. Each duration is a half note.



2. Each duration is a sixteenth note. Beam them in groups of four.



F. Scale review. Fill in the key, scale degree, or note, whichever is missing. Assume the melodic minor form for all minor keys.

ex. 1 2 3 4

D: 3 (m) $\sharp 7$ F: 4 c: A: 2

5 6 7 8 9

 (m) $\sharp 7$ d: 4 Eb: f: $\sharp 6$ (m) 3

10 11 12 13 14

Bb: (M) 6 g: $\sharp 6$ b: (M) 5

G. Interval review. Notate the specified interval above the given note.

1 2 3 4 5 6 7 8 9

M6 $\sharp 4$ M2 M3 m6 $\circ 7$ M7 $\sharp 2$ P5

H. Interval review. Notate the specified interval below the given note.

1 2 3 4 5 6 7 8 9

$\circ 5$ m6 m7 P4 M3 M7 m2 P5 $\sharp 6$

Chapter 3

INTRODUCTION TO TRIADS AND SEVENTH CHORDS

EXERCISE 3-1

A. Spell the triad, given the root and the type.

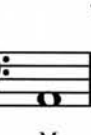
- | | | | |
|-------------------------|-------------------------|--------------------------|--------------------------|
| 1. g _____ | 4. a ^o _____ | 7. C ⁺ _____ | 10. f [#] _____ |
| 2. E ^b _____ | 5. f _____ | 8. a ^{#o} _____ | 11. B ⁺ _____ |
| 3. d ^o _____ | 6. D ^b _____ | 9. E _____ | 12. e ^b _____ |

B. Fill in the blanks.

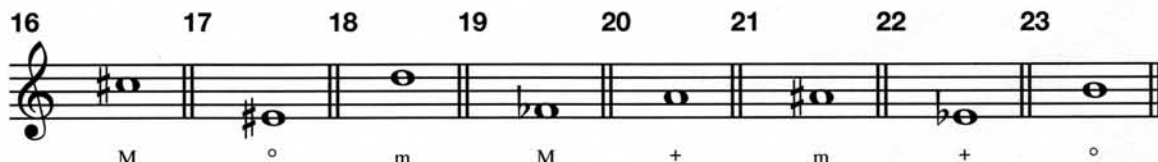
	ex.	1	2	3	4	5	6	7	8	9	10
5th:	G [#]	A ^b	_____	F [#]	_____	_____	_____	_____	_____	B	_____
3rd:	E	_____	_____	_____	_____	E ^b	_____	_____	B ^b	_____	A
Root:	C [#]	_____	D	_____	A ^b	_____	G [#]	E ^b	_____	_____	_____
Type:	m	M	+	m	m	o	m	M	+	m	o

C. Notate the triad, given the root and the type.

ex.	1	2	3	4	5	6	7
							
m	M	o	M	+	m	m	o

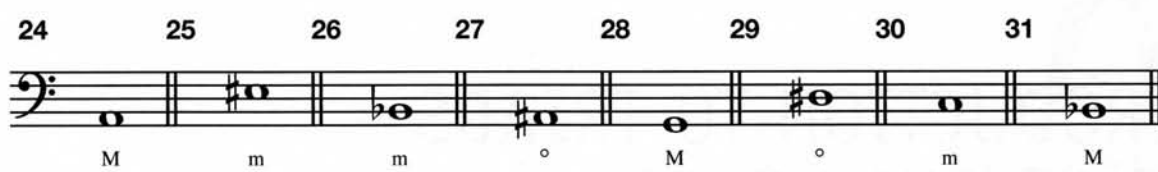
8	9	10	11	12	13	14	15
							
m	+	M	M	m	o	M	m

16 17 18 19 20 21 22 23



M m m M + m + m

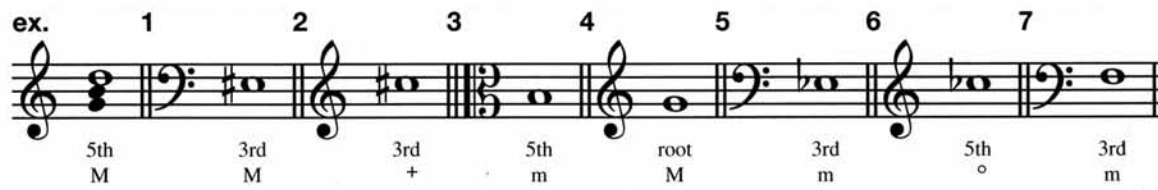
24 25 26 27 28 29 30 31



M m m m M m m M

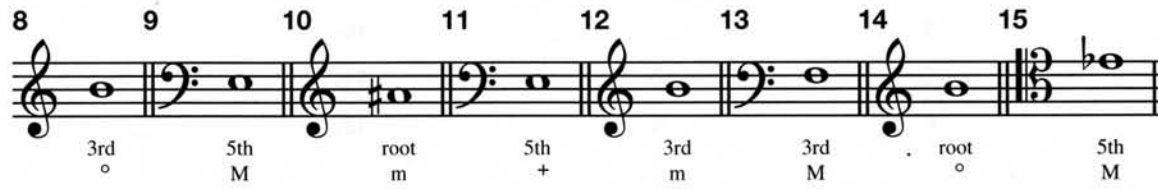
D. Given the chord quality and one member of the triad, notate the remainder of the triad.

ex. 1 2 3 4 5 6 7



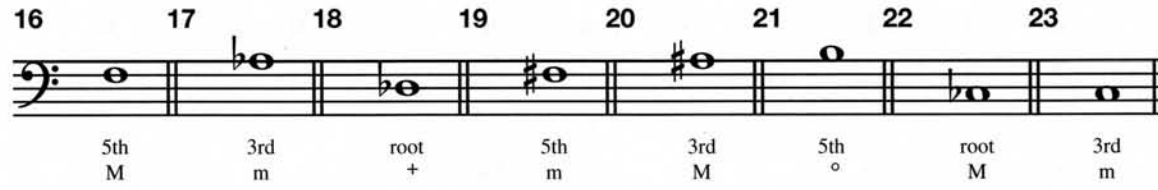
5th M 3rd M 3rd + 5th m root M 3rd m 5th m

8 9 10 11 12 13 14 15



3rd m 5th M root m 5th + 3rd m 3rd M root m 5th M

16 17 18 19 20 21 22 23



5th M 3rd m root + 5th m 3rd M 5th m root M 3rd m

24 25 26 27 28 29 30 31



root m 3rd M 5th + 3rd m root M 3rd + 5th m 5th m

EXERCISE 3-2

A. Identify the type of seventh chord, using the abbreviations given in Example 3-3.

ex. 1 2 3 4 5 6 7

8 9 10 11 12 13 14 15

B. Notate the seventh chord, given the root and type.

ex. 1 2 3 4 5 6 7

8 9 10 11 12 13 14 15

C. Given the seventh-chord quality and one member of the chord, notate the rest of the chord.

ex. 1 2 3 4 5 6 7

5th m7 7th M7 3rd m7 5th ø7 5th m7 3rd Mm7 7th ø7 root M7

8 9 10 11 12 13 14 15

7th ø7 root Mm7 3rd M7 3rd m7 5th ø7 root m7 7th ø7 5th ø7

Detailed description: The exercises are presented in two rows. The first row contains exercises 1 through 7, and the second row contains exercises 8 through 15. Each exercise consists of a single note on a musical staff, with a key signature (number of flats) and a chord quality label (e.g., m7, M7, ø7, Mm7) provided below the staff. The notes are placed on various lines and spaces of the staff to represent different chord members.

Exercise	Staff	Key Signature	Chord Quality
1	Treble	2 flats	5th m7
2	Bass	1 flat	7th M7
3	Treble	0 flats	3rd m7
4	Bass	1 flat	5th ø7
5	Treble	2 flats	5th m7
6	Bass	3 flats	3rd Mm7
7	Treble	2 flats	7th ø7
8	Bass	1 flat	root M7
9	Treble	0 flats	7th ø7
10	Bass	2 flats	3rd M7
11	Treble	1 flat	3rd m7
12	Bass	0 flats	5th ø7
13	Treble	1 flat	root m7
14	Bass	2 flats	7th ø7
15	Treble	3 flats	5th ø7

EXERCISE 3-3

A. Identify the root and type of each chord and show the correct inversion symbol.

Root	_____	_____	_____	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____	_____	_____	_____

Root	_____	_____	_____	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____	_____	_____	_____

B. Fill in the blanks below each figured bass with the root and chord type that would be played at the corresponding point in the excerpt by using lead sheet symbols. The figures 5 and $\frac{5}{3}$ both mean to use a root position triad.

1. Bach, "Gott lebet noch" (adapted)

1	2	3	4	5	6	7	8	9	10	11	12	13
---	---	---	---	---	---	---	---	---	----	----	----	----

2. Bach, "Dich bet' ich an, mein höchster Gott"

(The first C#3 in the bass is not to be harmonized.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----

3. Corelli, Sonata V, Op. 2, Sarabande

6 6 $\frac{5}{3}$ $\frac{6}{4}$ 5 6 6

1 2 3 4 5 6 7 8 9 10 11 12 13 14

7 6 7 $\flat$ 6 6 7 $\sharp$

15 16 17 18 19 20 21 22 23 24 25 26 27

$\sharp$ 6 7 $\flat$ 6 5 6 $\flat$

28 29 30 31 32 33 34 35 36 37 38 39 40

C. Notate using half notes on the bottom staff the chords indicated by the lead sheet symbols. Notate all chords in root position.



Terry, "Serenade to a Bus Seat"

B $\flat$ Bdim7 Am7 $\flat$ 5 D7 Gm7 C7 F

By Clark Terry. © 1958 (renewed 1986) Orpheum Music, Berkeley, CA.

EXERCISE 3-4

- A. Identify the root and type of each chord and show the correct inversion symbol. All the notes in each example belong to the same chord. The lowest note in each example is the bass note for the purpose of analysis.

1 2 3 4

Root	_____	_____	_____	_____
Type	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____

5 6 7 8 9

Root	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____

B. The excerpts below are to be analyzed in a similar way. Each chord is numbered. Put your analysis of the chords in the blanks below the excerpt. Notes in parentheses should be ignored for the purposes of this exercise.

 1. Bach, "Wer weiss, wie nahe mir mein Ende"

Root	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Root	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____	_____
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34



2. Schumann, "Ich will meine Seele tauchen," Op. 48, No. 5

Leise

p

Ich will mei - ne See - le tau - chen in den

Root

Type

Inversion
symbol

1

2

3

4

Kelch der Li - lie hin - ein, die

Root

Type

Inversion
symbol

5

6

7

8

5

Li - lie soll klin - gend hau - chen ein

Root	_____	_____	_____	_____
Type	_____	_____	_____	_____
Inversion symbol	9	10	11	12

Lied von der Lieb - sten mein. Das

Root	_____	_____	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____	_____	_____
Inversion symbol	13	14	15	16	17	18	19



3. Gottschalk, "Jerusalem"

Root	_____	_____	_____	_____
Type	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____
	1	2	3	4

Root	_____	_____	_____	_____	_____
Type	_____	_____	_____	_____	_____
Inversion symbol	_____	_____	_____	_____	_____
	5	6	7	8	9

Chapter 4

DIATONIC CHORDS IN MAJOR AND MINOR KEYS

EXERCISE 4-1

- A. Given the key and the triad, supply the roman numeral. Be sure your roman numeral is of the correct type (uppercase or lowercase). Inversion symbols, where required, go to the upper right of the roman numeral (as in I⁶).

ex. 1 2 3 4 5 6 7

Ab: vii^o Eb: _____ F#: _____ E: _____ g: _____ F: _____ G: _____ c: _____

8 9 10 11 12 13 14 15

A: _____ c#: _____ Bb: _____ g: _____ Db: _____ c: _____ f#: _____ E: _____

- B. In the exercise below you are given the name of a key and a scale degree number (in parentheses). *Without using key signatures*, notate the triad on that scale degree and provide the roman numeral. In minor keys be sure to use the triad types circled in Example 4-7 (p. 61).

ex. 1 2 3 4 5 6 7

eb: VI ab: _____ Cb: _____ G: _____ c: _____ F#: _____ e: _____ F: _____
(6) (2) (7) (7) (3) (2) (6) (3)

8 9 10 11 12 13 14 15

f: _____ C#: _____ g#: _____ Db: _____ f#: _____ Bb: _____ D: _____ Eb: _____
(7) (3) (6) (4) (5) (2) (6) (7)

C. Analysis. Write roman numerals in the spaces provided, making sure each roman numeral is of the correct type and includes an inversion symbol if necessary.



1. Handel, "Wenn mein Stündlein vorhanden ist"

Bb: 1 2 3 4 5 6 7 8



2. Handel, "Wenn mein Stündlein vorhanden ist"

Bb: 1 2 3 4 5 6 7 $\frac{I}{8}$

D. Fill in the blanks, using the example as a model.

Key	This chord	Has this bass note
ex. C	I ⁶	E
1. a	V ⁶	
2.	IV ⁶	C
3. c [#]	ii ^{o6}	
4. B	$\frac{6}{4}$	C [#]
5.	i ⁶ ₄	D
6. F	vii ^{o6}	

EXERCISE 4-2

A. Given the key and the seventh chord, provide the roman numeral. Be sure your roman numeral is the correct type and includes an inversion symbol if necessary.

ex. 1 2 3 4 5 6 7

a: *vii*^{o7} G: _____ c#: _____ f: _____ Bb: _____ e: _____ Ab: _____ g: _____

8 9 10 11 12 13 14 15

d: _____ E: _____ F: _____ A: _____ Eb: _____ b: _____ c: _____ D: _____

B. In the exercises below you are given the name of a key and a scale degree number (in parentheses). Without using key signatures, notate the seventh chord on that scale degree in root position and provide the roman numeral. In minor keys, be sure to use the chord types shown in Example 4-9 (p. 65).

ex. 1 2 3 4 5 6 7

G: *iii*⁷ Bb: _____ F: _____ b: _____ f#: _____ A: _____ g: _____ D: _____
(3) (4) (1) (3) (2) (7) (7) (6)

8 9 10 11 12 13 14 15

c: _____ E: _____ G: _____ Eb: _____ c#: _____ f: _____ e: _____ Ab: _____
(1) (4) (2) (3) (5) (5) (2) (6)

C. Analysis. Put roman numerals in the spaces provided, making sure each roman numeral is of the correct type and includes an inversion symbol, if needed.



1. Beethoven, "Variations on a Theme" by Paisiello



2. Brahms, "Minnelied," Op. 44, No. 1

Con moto *p*

Soprano I
1. Der Hold - se - li - gen son - der Wank

Soprano II
p

Alto I
p
2. Ach, bin in - nig - lich min - ne - wund,

Alto II
p

I _____ *I*

Part II

Diatonic Triads

Chapter 5

PRINCIPLES OF VOICE LEADING

EXERCISE 5-1

A. Criticize each melody in terms of the rules for simple melodies discussed on pages 71–72.

1

F: I - V I IV - I IV I

2

e: i - V i V i V i iv V i

3

D: I IV V I V I - IV I

B. Compose simple melodies that will conform to these progressions.

1

Bb: I IV I V vi IV ii - V I

2



d: i V VI iv i V i iv V i

3



G: I iii IV I V I IV V I

EXERCISE 5-2

- A. Analyze the excerpt below, using roman numerals. Then show beneath each roman numeral the structure of the chord by writing "C" or "O" for close or open structure. The notes in parentheses are not part of the chord and should be ignored for the purpose of harmonic analysis.



Schumann, "Roundelay," Op. 68, No. 22

Moderato

A: _____ ψ^7 _____

- B. Review the two conventions concerning spacing on pages 74–75. Then point out in the example below any places where those conventions are not followed.

- C. Fill in the circled missing inner voice(s) to complete each root position triad, being sure that each note of the triad is represented. Follow the spacing conventions and stay within the range of each vocal part.

1 2 3 4

S
A

B

d: iv Eb: ii b: i D: V

5 6 7 8

S
A

T
B

G: IV e: V Bb: iii g: i

- D. In the examples below you are given the soprano note for each chord. Supply the alto, tenor, and bass notes to complete the specified triad in close or open position, as indicated. Be sure to double the root of each chord and to follow the spacing conventions.

1 Close 2 Open 3 Close 4 Close

5 Open 6 Open 7 Close 8 Open

A: ii F: vi c: V D: I

g: VI a: iv Bb: V f#: III

EXERCISE 5-3

- A. Label the chords in the excerpt below with roman numerals. Then label any examples of parallelism (objectionable or otherwise) that you can find.



Bach, "Ermuntre dich, mein schwacher Geist"



- B. Find and label the following errors in this passage:

1. Parallel 8ves
2. Parallel 5ths
3. Direct 5th
4. Consecutive 5ths by contrary motion
5. Spacing error (review pp. 74–75)



C. Find and label the following errors in this passage:

1. Parallel 8ves
2. Parallel 5ths
3. Direct 8ve
4. Spacing error



Chapter 6

ROOT POSITION PART WRITING

EXERCISE 6-1. *Using repeated triads*

Fill in the inner voice or voices in the second chord of each exercise. The key is F major throughout. Double the roots of the triads in the four-voice examples.

1 four parts

Exercise 1: four parts. The exercise consists of five measures of music. The first measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The second measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The third measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The fourth measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The fifth measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass.

2 three parts

Exercise 2: three parts. The exercise consists of five measures of music. The first measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The second measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The third measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The fourth measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass. The fifth measure shows a C major triad (C4, E4, G4) in the treble and a C major triad (C3, E3, G3) in the bass.

EXERCISE 6-3. *Using roots a 4th (5th) and 3rd (6th) apart*

A. Add alto and tenor parts to each exercise below. Use the smoothest voice leading in each case. For roots a 4th (5th) apart, state which method you have used.

1 2 3

F: I vi IV ii g: i V i VI iv i D: I vi ii V I

4 5

E $\flat$: I iii vi ii V I e: i VI iv i V i

B. Add an alto part to each exercise below. Be careful to observe the conventions concerning parallels, spacing, and doubling.

1 2 3

E $\flat$: IV ii V I b: i III VI iv i G: I V I IV ii V I

4 5

F: I IV ii V I d: i iv i VI iv i V i

EXERCISE 6-4. *Using all root relationships*

- A. Complete each progression. Make two versions of each: one for three parts (adding an alto) and one for four parts (adding alto and tenor). In the four-part versions, state which method you have used for any progression by 4th or 5th.

1 three parts four parts

g: i III VI i III VI

2

D: ii V vi ii V vi

3

a: iv V VI iv V VI

4

Bb: V I vi V I vi

5

G: I vi V I vi V

6

F: vi ii V vi ii V

B. Fill in alto and tenor parts in these exercises.

1

A: I vi IV V I IV ii V - I

2

f: i V i VII III iv V - i

3

e: i VII III iv i V VI iv V - i

4

Bb: I - - V I V vi IV V I

5

d: i IV V i III iv V i VI iv V i

(*not*
iv)

C. Name the keys and analyze the chords specified by these figured basses. Then compose a good melody line for each. Finally, fill in alto and tenor parts to make a four-part texture.

1

2

D. Write the following short progressions in root position for combinations of three and four parts.

1 three parts

Eb: ii V I c#: i VI iv A: IV V vi

2 four parts

Eb: ii V I c#: i VI iv A: IV V vi

3 three parts

F: I iii IV D: vi ii V g: VI iv V

4 four parts

F: I iii IV D: vi ii V g: VI iv V

EXERCISE 6-5

- A. Notate the chords below for the specified instruments. Each chord is written at concert pitch, so transpose as needed for the performers. Use the correct clef for each instrument. Note that the instruments are listed in score order, the order used in Appendix A, which is not always the same as order by pitch.

Fl. Vla. T. Sax. Vl. Ob. Hn. in F Clar. in B $\flat$ Tpt. in B $\flat$ Vc. Trb. Bsn. D.B. A. Sax Hn. in F Tuba

Fl. Ob. Clar. in B $\flat$ Bsn. A. Sax

T. Sax.	Hn. in F	Tpt. in B $\flat$	Trb.	Hn. in F
Vla.	Vl.	Vc.	D.B.	Tuba

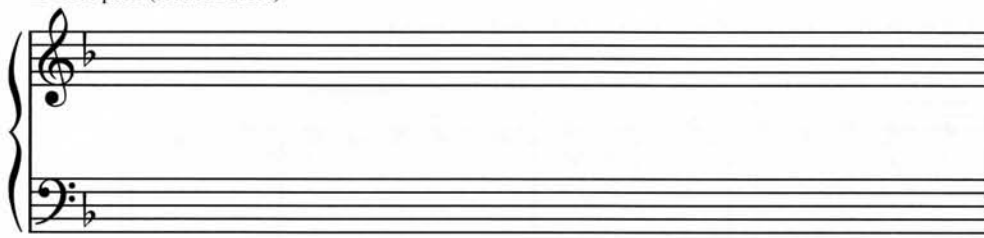
- B. Set the following progression for combinations of three and four parts. If possible, score for instruments in your class. Use root position only.

1 three parts (reduced score)

The image shows a reduced score for three parts in D minor. It consists of two staves, a treble clef staff and a bass clef staff, both with a key signature of one flat (Bb). The progression of chords is indicated by Roman numerals below the staves: d, i, iv, V, VI, iv, V, i.

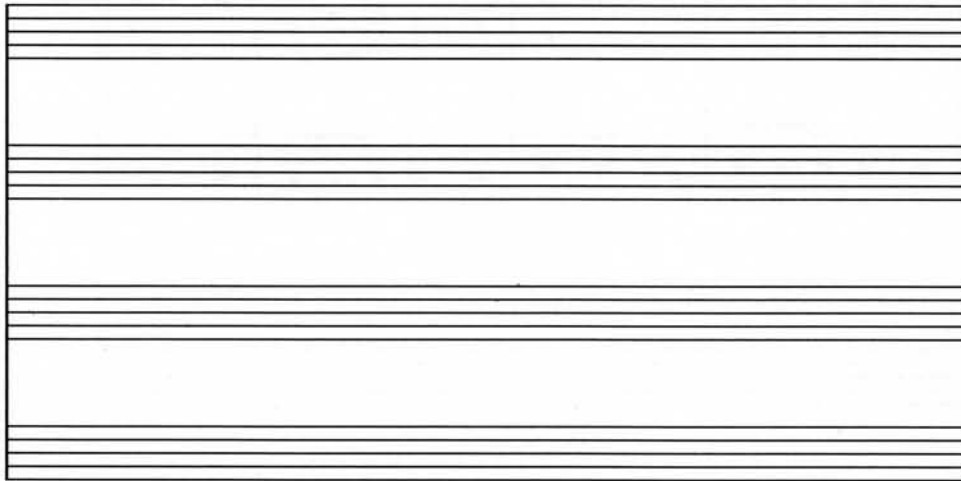
(full score)

The image shows a full score template with three systems of staves. Each system consists of a grand staff (treble and bass clefs) and two additional staves, for a total of six staves per system. The staves are blank, intended for the student to write the full score for the progression.

2 four parts (reduced score)

d: i iv V VI iv V i

(full score)



- C. Write a version of the excerpt below on a grand staff by transposing the parts to concert pitch. Play your version on the piano and analyze the harmonies if you can.

Ob.

Clar.
in B $\flat$

Bsn.

Hn.
in F

Chapter 7

HARMONIC PROGRESSION

EXERCISE 7-1

- A. Complete each progression to conform with the chord diagrams on pages 103–109. The chord in the blank should be different from those on either side of it. In most cases, there is more than one correct answer.

- | | |
|---------------------------------|------------------------------|
| 1. IV ? I (or) | 4. iii ? V () |
| 2. vi ? I () | 5. vii° ? vi () |
| 3. I ? ii (or) | 6. vi ? ii () |

- B. Bracket any portions of these progressions that do not conform to the chord diagrams on pages 103–109.

- | | | | | | | | |
|------|------|----|------|----|----|------|---|
| 1. i | vii° | i | iv | VI | V | i | |
| 2. I | vi | ii | IV | I | V | I | |
| 3. I | iii | IV | vii° | I | IV | V | I |
| 4. i | III | iv | i | iv | V | vii° | i |

- C. Analysis: Label all chords with roman numerals and bracket any successions of chords that do not agree with the chord diagrams on pages 103–109.

-  1. Bach, “Du Friedensfürst, Herr Jesu Christ”





2. Vivaldi, Cello Sonata in G Minor, Prelude. Unfigured bass realization by S. Kostka.

Non-chord tones in the solo part have not been put in parentheses, but the harmonic analysis can be done by concentrating on the accompaniment. The key is g minor, despite what appears to be an incorrect key signature. Key signatures had not yet become standardized when this work was composed.

The musical score is presented in two systems. The first system contains measures 39, 40, and 41. Measure 39 begins with a treble clef and a key signature of one flat. The solo part (top staff) starts with a quarter note G4, followed by eighth notes A4, B4, and C5, then a quarter rest. The accompaniment (bottom staves) consists of a bass line with a half note G3 and a treble line with a half note B3. Measure 40 continues the solo part with eighth notes D5, E5, and F5, followed by a quarter rest. The accompaniment has a half note C4 in the bass and a half note D4 in the treble. Measure 41 shows the solo part with eighth notes G5, F5, and E5, followed by a quarter rest. The accompaniment has a half note E3 in the bass and a half note F3 in the treble. The second system contains measures 42, 43, 44, and 45. Measure 42 features a solo part with a quarter note G4, followed by eighth notes A4, B4, and C5, then a quarter rest. The accompaniment has a half note G3 in the bass and a half note B3 in the treble. Measure 43 shows the solo part with eighth notes D5, E5, and F5, followed by a quarter rest. The accompaniment has a half note C4 in the bass and a half note D4 in the treble. Measure 44 features a solo part with eighth notes G5, F5, and E5, followed by a quarter rest. The accompaniment has a half note E3 in the bass and a half note F3 in the treble. Measure 45 shows the solo part with a quarter note G4, followed by eighth notes A4, B4, and C5, then a quarter rest. The accompaniment has a half note G3 in the bass and a half note B3 in the treble. The final measure, 46, shows the solo part with a quarter note G4, followed by eighth notes A4, B4, and C5, then a quarter rest. The accompaniment has a half note G3 in the bass and a half note B3 in the treble. The key signature remains one flat throughout.

- D. Analyze the chords specified by these figured basses and add inner voices to make a four-part texture. Bracket all circle-of-fifths progressions, even those that contain only two chords. Before beginning, review the partwriting for deceptive progressions.

1

- E. Analyze this figured bass, then add a good soprano line and inner voices. Bracket all circle-of-fifths progressions.



- F. Add an alto part (only) to mm. 1 to 2. Then compose a good soprano line for mm. 3 to 4 and fill in an alto part.

F: I V I vi IV V I vi ii V I V I

- G. Below are two unfigured bass lines. Using triads in root position and first inversion *only*, show a good harmonization of each one by placing roman numerals beneath the bass line. Be sure to refer to the diagrams on p. 109 while you work on your harmonizations.

1



2



- H. Harmonize the melodies below by using root position major or minor (not diminished) triads in an acceptable progression. Try to give the bass a good contour while avoiding parallel and direct 5ths and 8ves with the melody. Be sure to include analysis. Finally, add one or two inner parts to make a version for SAB three-part chorus or SATB four-part chorus, as indicated.

1 SATB



G:

2 SAB



D:
or b:

3 SATB



E $\flat$:

4 SAB



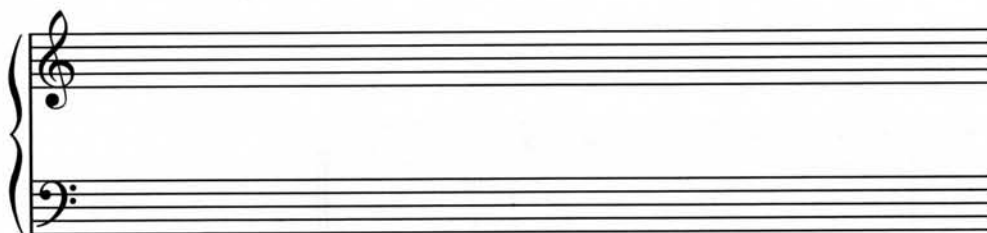
d:

5 SATB



E:

- I. Compose a *simple* melody, then follow the instructions for Part H. You might need to revise the melody as you work on the harmonization.



- J. Review: Label the chords with roman numerals and inversion symbols (where needed).



ex. 1 2 3 4 5 6 7
c: iv^6 f: ____ Bb: ____ G: ____ d: ____ b: ____ E: ____ Ab: ____



8 9 10 11 12 13 14 15
f#: ____ g: ____ Eb: ____ D: ____ e: ____ c#: ____ F: ____ A: ____

Chapter 8

TRIADS IN FIRST INVERSION

EXERCISE 8-1

A. Analysis.

1. Bracket the longest series of parallel sixth chords (triads in first inversion) that you can find in this excerpt. Do not attempt a roman-numeral analysis. Does the voice leading in the sixth-chord passage resemble more closely Example 8-8 (p. 121) or Example 8-9 (p. 122)?



Beethoven, Sonata Op. 2, No. 1, III

53 55 60 65 70

ff

p *pp* *p*

Men. D.C.

2. Label all chords with roman numerals. Then classify the doubling in each inverted triad according to the methods shown in Example 8-10 (p. 123).



Bach, "Was frag' ich nach der Welt"

3. Label all chords with roman numerals. Bracket the circle-of-fifths progression (review pp. 101–102).



Handel, Passacaglia

- B. The excerpt below is from Mozart's String Quartet K. 428. Supply the missing tenor line (viola in the original).

27

Chord labels below the staff: Eb: I⁶ 5 6 IV I⁶ IV v⁴₃ I v⁶ 5

C. Supply alto and tenor lines for the following passages.

1 2 3

g: i⁶ iv⁶ ii^{o6} V A: V I⁶ V⁶ I f: i vii^{o6} i⁶ ii^{o6} V

4 5 6

d: i i⁶ iv i⁶ b: i IV vii^{o6} i Eb: I IV⁶ V⁶ I

7 8 9

E: I vii^{o6} I⁶ ii⁶ G: I V⁶ I I⁶ Bb: I⁶ ii⁶ V I

10 11 12

F: I I⁶ IV V D: I⁶ V⁶ I IV c: i ii^{o6} V VI

D. Supply alto lines for the following passages.

1 2 3

g: i⁶ iv⁶ ii^{°6} V A: V I⁶ V⁶ I f: i vii^{°6} i⁶ ii^{°6} V

4 5 6

d: i i⁶ iv i⁶ b: i IV vii^{°6} i Eb: I IV⁶ V⁶ I

E. Analyze the harmonies implied by the soprano/bass lines below and add one or two inner parts, as specified by your instructor.

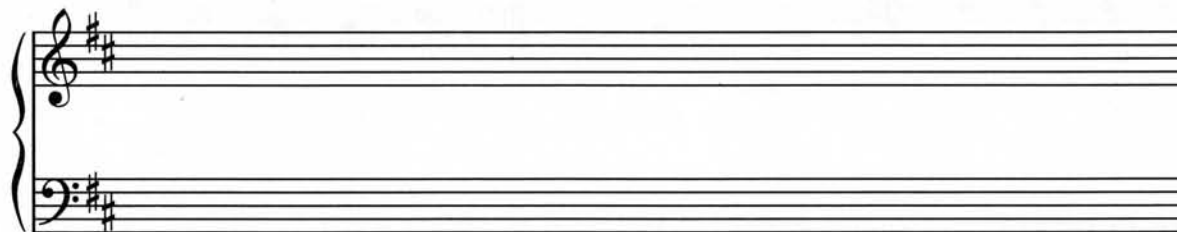
F:

e:

- F. The following passage is reduced from Beethoven's Sonata Op. 10, No. 3, III. Analyze the implied harmonies (more than one good solution is possible) and add an alto line (only). Use only triads in root position and first inversion.



- G. Continue your solution to Part D with a second eight-measure segment. The second part should be similar to the first, but if it starts exactly like it, objectionable parallels will result. Maintain the three-part texture.



H. Review the figured bass information on pages 45–46. Then realize the figured basses below by following these steps:

- Provide the roman numerals specified by the figured bass.
- Compose a simple melody that will conform to the progression and at the same time will create a good counterpoint with the bass.
- Make two completed versions of each, one for three parts and one for four parts.

1 Three parts

6 6 6 6

Bb:

Four parts

6 6 6 6

Bb:

2 Three parts (The horizontal line beneath the last measure means that the 3rd above the bass should be retained in the next chord.).

6 # 6 6 5 6

e:

Four parts

6 # 6 6 5 6

e:

- I. Review the chord diagrams on pages 103–109. Then assign roman numerals to each of the bass notes in the exercises below, using triads (only) in root position and first inversion to create a good tonal progression. Then follow steps b and c for Part H. If possible these settings should be for vocal or instrumental combinations found in your class.

1



F:

2



a:

3



D:

4



e:

- J. Select roman numerals with which to harmonize this melody, changing chords every place there is a blank. Be sure your progression is a good one. Then write out the melody with a bass line, using first inversion triads where appropriate. Make sure that the bass creates a good counterpoint with the melody and that there are no objectionable parallels. Finally, make a piano setting, using the bass line you composed. Keep the piano texture simple, perhaps like that in Example 8-3 (p. 118).



TRIADS IN SECOND INVERSION

A. Analysis. In addition to the specific instructions for each example, label each six-four chord by type.

- 

A musical score for the song 'The Rose Tree'. The score is written for voice and piano. The voice part is in the upper staff, and the piano accompaniment is in the lower staff. The key signature is one sharp (F#), and the time signature is 6/8. The piano part features a prominent bass line with chords and single notes. The voice part consists of a single line of music. The score is divided into four measures. The first measure is marked *mf* (mezzo-forte) and the second measure is marked *sf* (sforzando). The third and fourth measures are also marked *sf*. The piano part includes a variety of chords and single notes, including a prominent bass line with chords and single notes. The voice part consists of a single line of music.

- 

A musical score for the song 'The Rose Tree'. It features a treble and bass staff. The treble staff has a key signature of one flat (B-flat) and a common time signature. The melody is written in a simple, folk-like style. The bass staff provides a harmonic accompaniment, primarily using chords and single notes. The score is divided into three measures by vertical bar lines. The first measure contains four notes in the treble and four in the bass. The second measure contains four notes in the treble and four in the bass. The third measure contains a single note in the treble and a single note in the bass.

3. Label the chords with roman numerals and put parentheses around all non-chord tones.



Clara Wieck Schumann, Scherzo, Op. 15, No. 4

un poco più tranquillo

Published 1976 by Willy Müller-Süddeutscher Verlag and 1994 by Breitkopf & Härtel.

4. In this excerpt, six-four chords are formed by arpeggiations in m. 1 and by a melodic bass in m. 2 (the bass in mm. 2–3 imitates the soprano melody in mm. 1–2). Put roman numerals in the blanks provided and put parentheses around all non-chord tones. Then show where any six-four chords occur, no matter how briefly.



Bach, English Suite No. 2, Courante

5. Label the chords with roman numerals. As before, identify the type of any six-four chord you encounter.



Haydn, Symphony No. 100, I

32 35

Vln. I *p* *f*

Vln. II *p* *f*

Vla. *p* *f*

Vc. Cb. *p* *f*

tr *tr*

6. Label the chords with roman numerals, and identify the type of any six-four chord you encounter.



Beethoven, Piano Concerto No. 1, Op. 15, I

First system of musical notation (measures 1-6) for Piano Concerto No. 1, Op. 15, I. The system includes staves for Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello/Double Bass (Vc. Cb.). The tempo is marked *pp* (pianissimo). Measure numbers 1, 2, 3, 4, 5, and 6 are indicated above the staves.

Second system of musical notation (measures 7-15) for Piano Concerto No. 1, Op. 15, I. The system includes staves for Violin I (Vln. I), Violin II (Vln. II), Viola (Vla.), and Violoncello/Double Bass (Vc. Cb.). The tempo is marked *pp* (pianissimo). Measure numbers 10, 15, and 15 are indicated above the staves. Dynamics include *cresc.* (crescendo), *f* (forte), and *ff* (fortissimo).

B. Fill in one or two inner parts, as specified. Identify any six-four chords by type.

1 Add Alto and Tenor **2 Add Alto** **3 Add Alto and Tenor**

d: i (V_4^6) i^6 iv V Eb: vi IV $\underbrace{I_4^6 \text{ V}}_V$ vi f#: i^6 iv V (i_4^6) V

4 Add Alto and Tenor **5 Add Alto**

Bb: I (IV_4^6) I vii $^{\circ}6$ I^6 IV V a: i v^6 iv^6 (i_4^6) ii $^{\circ}6$ V i

C. Realize these figured basses for three or four voices, as specified, striving to create good outer-voice counterpoint. Notice the frequent use of $\frac{5}{3}$ (or the equivalent, such as $\frac{7}{4}$) to indicate root-position triads following an inverted chord. Analyze with roman numerals and label six-four types.

1 Add Soprano, Alto, and Tenor **2 Add Soprano and Alto**

6 6 $\frac{6}{4}$ $\frac{5}{3}$ $\frac{6}{4}$ $\frac{5}{3}$ 6 6

3 Add Soprano, Alto, and Tenor **4 Add Soprano, Alto, and Tenor**

6 6 $\frac{6}{4}$ 6 $\frac{5}{3}$ 6 $\frac{6}{4}$ $\frac{5}{3}$ 6

- D. Harmonize each unfigured bass with a good tonal progression. Then compose a soprano line that will both fit the progression and create a good outer-voice counterpoint with the bass. Finally, fill in alto and tenor parts to make a four-part texture. Be sure to include a six-four chord in each one and identify the six-four type.

1

F. Continue the accompaniment of this violin melody. Non-chord tones are in parentheses. Be sure to use at least one cadential, passing, or pedal six-four chord. Include a harmonic analysis.

VI. I

VI. II

Vc.

Bb:	I	6
-----	---	---

A musical score for the song 'The Rose Tree'. It consists of three staves: a treble staff, a middle staff (likely for a vocal line), and a bass staff. The key signature is one flat (B-flat). The melody is written in the treble staff. The first staff contains the main melody, with a triplet of eighth notes in the second measure. The second staff is empty. The third staff contains a bass line, with a triplet of eighth notes in the second measure. The score is divided into four measures by vertical bar lines.

Chapter 10

CADENCES, PHRASES, AND PERIODS

EXERCISE 10-1

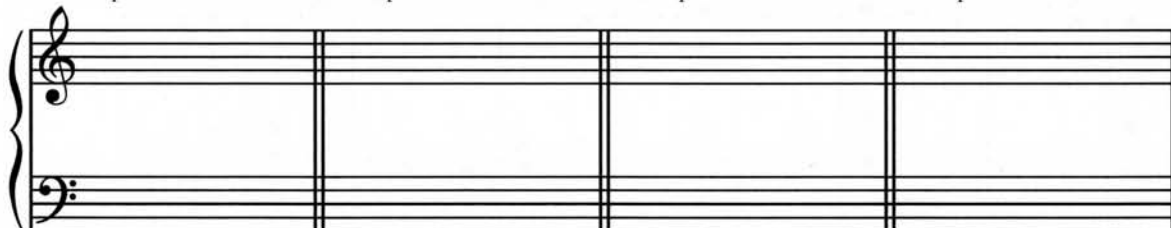
A. Cadences. Using only triads in root position and first inversion, compose examples of the following cadences. Each example should include three chords—the two cadence chords plus one chord preceding the cadence chords. Include key signatures and roman numerals.

1 three parts

2 four parts

3 three parts

4 four parts



A: _____
(root position IAC)

g: _____
(DC—careful!)

F: _____
(HC)

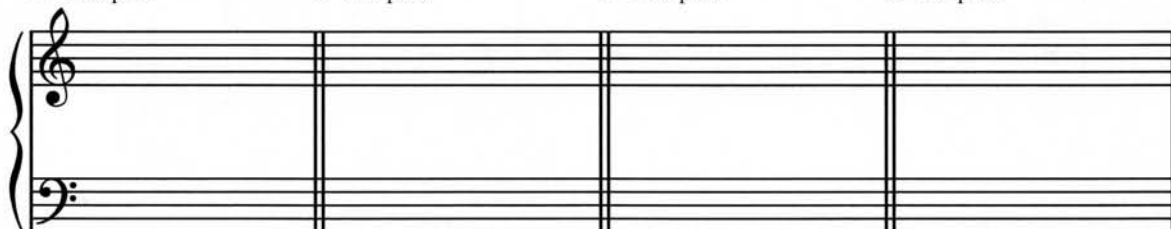
b: _____
(inverted IAC)

5 three parts

6 four parts

7 three parts

8 four parts



G: _____
(PAC)

d: _____
(PC)

Bb: _____
(leading-tone IAC)

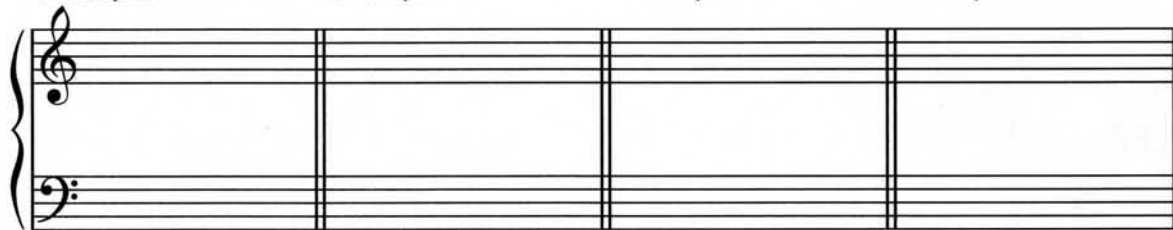
e: _____
(Phrygian HC)

9 three parts

10 four parts

11 three parts

12 four parts



a: _____ C: _____ f: _____ D: _____
 (DC—careful!) (PAC) (PC) (HC)

B. Analysis. The cadence chords have been analyzed for you in each example. Make a diagram of each excerpt similar to the diagrams used in the text. Include phrase labels (a, b, and so on), cadence types and measures, and the form of the example.

1. Be sure to listen to this stirring theme in its original orchestral version as well.



Schumann, Symphony No. 1, Op. 38, III (piano reduction)

Molto vivace

2. Diagram and name the form of this excerpt. Also:

- Bracket all sequences in the melody.
- Find the best example of imitation between the melody and the bass.
- Label the chords implied by the two voices. Non-chord tones are in parentheses in the bass (only). Note: The best choice for m. 5 is *not* a ii chord. (Compare m. 5 with m. 13.)



Anonymous: Minuet in G, from the *Notebook for Anna Magdalena Bach*

IV I⁶ I V

IV I⁶ V I

3. Do the two phrases here begin with similar material? Compare mm. 9 to 10 with mm. 13 to 14. Diagram and name the form.



Mozart, Violin Sonata K. 377, III

F: ii⁶ V

Measures 1-4 of a musical excerpt. The key signature has one flat. The melody in the right hand includes a triplet of eighth notes (measures 2-3) and a triplet of sixteenth notes (measure 4). The left hand provides harmonic support. Roman numerals v^7 and I are indicated below the bass staff.

4. Diagram and name the form of this excerpt, and copy out any rhythmic motives found in both of the phrases. The progression at x resembles an IAC in what key? What is the relationship between that key and e minor?



Mendelssohn, *Song without Words*, Op. 62, No. 3

Measures 5-14 of Mendelssohn's *Song without Words*, Op. 62, No. 3. The key signature has one sharp. The score includes dynamic markings (mf , sfz , p , $dim.$) and performance instructions (*tranq. e legato*). Roman numerals $ii^\circ 6$, i_4^6 , V , $vii^\circ 4_3$, and i are indicated below the bass staff. A bracket labeled x is placed under the bass line in measure 13.

5. This excerpt is in the form of a three-phase period (some would call it a phrase group). Would it be better to say that it has two antecedent phrases or two consequent phrases? Why? Which phrase features a circle-of-fifths sequence? Analyze all the chords in that phrase and diagram the form of the excerpt.



Mozart, Sonata K. 545, I

G:

16 v^4_2

20 v^6

1

25 *tr*

v7 I

6. Diagram the form of this excerpt in four ways, all of which are possible interpretations: (1) all four-measure phrases: 4+4+4+4+4; (2) four phrases, the last one extended: 4+4+4+8; (3) two long phrases plus a short final phrase: 8+8+4; and (4) two phrases, the second extended: 8+12. Which interpretation do you prefer? Why?



Mozart, Sonata K. 310, III

Presto

p

p

f

i V i V i V i

15 20

V VI f V i

7. Diagram and name the form of this theme, then label the first five chords. Also, see if you can find a disguised sequence hidden in the soprano and another in the bass in mm. 1 to 8.



Beethoven, Sonata Op. 13, II

Adagio cantabile

p

V

5

3

V⁷

I

10

V

14 15

v7 I

C. Review. Notate the chords in the keys and bass positions indicated.

1 2 3 4 5 6 7 8 9 10

E: I⁶ Bb: vi⁷ G: IV⁶₄ D: ii⁴₃ f: VI d: vii⁶₅ Ab: iii Eb: vii⁷ f#: V⁴₂ A: IV^{M7}

Chapter 11

NON-CHORD TONES 1

EXERCISE 11-1

A. Analysis.

1. Go back to Example 8-19 (p. 128), which shows NCTs in parentheses, and identify in the blanks below the type of each NCT found in the solo horn part. Always show the interval classification (4-3 and so on) when you analyze suspensions.

m. 6 _____ m. 7 _____ m. 8 _____
m. 10 _____ m. 11 _____

2. Analyze the chords and NCTs in this excerpt. Then make a reduction similar to those seen in the text by (1) removing all NCTs, (2) using longer note values or ties for repeated notes, and (3) transposing parts by a P8 where necessary to make the lines smoother. Study the simplified texture. Do any voice-leading problems appear to have been covered up by the embellishments? Discuss the reasons for the leap in the tenor in m. 3.



Bach, "Hilf, Herr Jesu, lass gelingen"

Reduction

- B. After reviewing pages 172–176, decide what *one* suspension would be best in each excerpt below. Then renotate with the suspension and at least one other embellishment. Remember to put parentheses around NCTs and to label NCTs and arpeggiations.

1 2 3 4

b: V⁶ i ii^{o6} V A: IV⁶ I V I⁶ g: i iv i⁶ vii^{o6} Eb: IV V⁶ I V⁶

- C. The example below is a simplified excerpt from a Bach chorale harmonization. Label the chords with roman numerals and activate the texture with stepwise NCTs, including at least one suspension. Label all embellishments.

Bb:

- D. In the figured basses below, the symbols “4 #” call for a 4-3 suspension, with a sharp applied to the note of resolution. The symbols “6 –” indicate that a first inversion triad is to be used above both C’s in the bass.

For each figured bass, do the following:

1. Analyze the harmonies with roman numerals.
2. Compose a simple but musical soprano line.
3. Fill in one or two inner parts, as specified.
4. Add some stepwise NCTs to each example and label them.

1

S
A
T

6 6 6 4

#

a:

2

S
A

6 6 6 — # 4

iii

- E. Using the following progressions, compose a good soprano/bass framework, using inversions where desired. Next add one or two inner parts, as specified. Show with an *x* every possible location for a 9-8, 7-6, 4-3, or 2-3 suspension. Finally, create an elaborated version of the simple texture, including at least one suspension. Other embellishments should be limited to arpeggiations and stepwise NCTs.

1. Three-part texture. (Remember that diminished triads should be used in first inversion.)

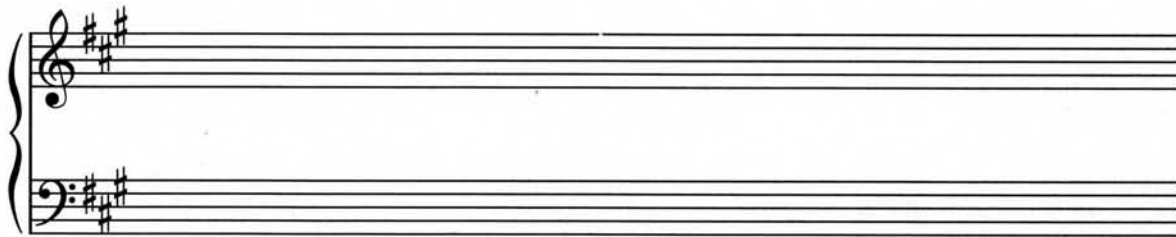
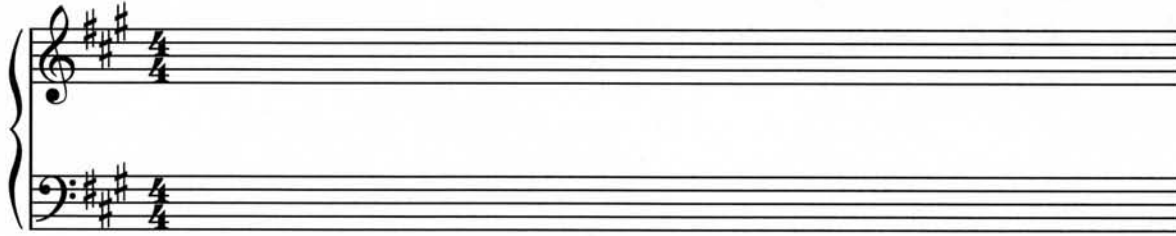
e: i vii^o i iv i iv i ii^o V i

$\frac{3}{4}$ ♩ | ♩ | ♩ | ♩ | ♩ | ♩ | ♩ | ♩ | ♩ | ♩ ||

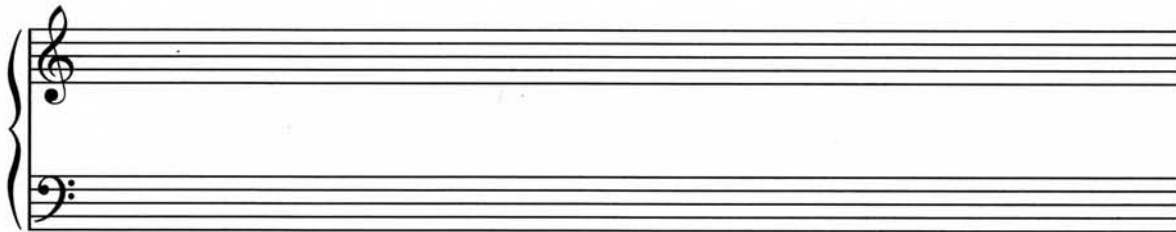
2. Four-part texture.

A: I V vi ii V vi IV V I

$\frac{4}{4}$     |     |  ||



- F. Compose your own harmonic progression and follow the instructions for part E. Try a two-, three-, or four-part texture.



G. Analyze the chords implied by this two-voice framework. Then embellish the framework in an arrangement for string quartet. A suggested beginning is given.



VI. I

VI. II

Vla.

Vc.

A string quartet arrangement for the first four measures. The Violin I part (VI. I) plays a half note G4, followed by a triplet of eighth notes A4, B4, and C5. The Violin II part (VI. II) plays a half note G4, followed by quarter notes A4, B4, and C5. The Viola part (Vla.) plays a half note G4, followed by quarter notes A4, B4, and C5. The Violoncello part (Vc.) plays a half note G2, followed by quarter notes A2, B2, and C3.

H. Continue your solution to Part G to form a parallel period.

Four empty staves for continuing the string quartet arrangement, corresponding to Violin I, Violin II, Viola, and Violoncello.

Chapter 12

NON-CHORD TONES 2

EXERCISE 12-1

A. Analysis.

1. Go back to Example 7-18 on page 108 of the text, where NCTs are shown in parentheses, and identify the type of each NCT in the blanks below. Always show the interval classification (7-6 and so on) when you analyze suspensions.

m. 1 _____ m. 3 _____

2. Do the same for Example 10-14 on page 158 of the text.

m. 10 _____ m. 11 _____ m. 13 _____

m. 14 _____ m. 15 _____ m. 16, violin: _____ piano: _____

3. Do the same for Example 9-12 on page 142.

VI. I: m. 23 _____ m. 24 _____ m. 25 _____ m. 26 _____

VI. II: m. 23 _____ m. 26 _____

4. Label chords and NCTs in this excerpt.



Mozart, Piano Sonata, K. 545, II



G: _____

5. The chords in this excerpt have been labeled for you. Put parentheses around all NCTs in mm. 1 to 6 (only) and label them. The roman numerals in parentheses are part of a “nonfunctional” series of parallel sixth chords (review pp. 120–122), and some other chords have been left unlabeled because they are too advanced for you at this point. The last three measures are included for context, but they are not part of this exercise.



Clara Wieck Schumann, *Larghetto*, Op. 15, No. 1

Larghetto

F: I ii v⁷ I I (v⁶)

(IV⁶) (iii⁶) (ii⁶) I⁶ v⁴₃ I ← omit → v⁷(I⁶) v⁷ I

Published 1976 by Willy Müller-Süddeutscher Verlag and 1994 by Breitkopf & Härtel.

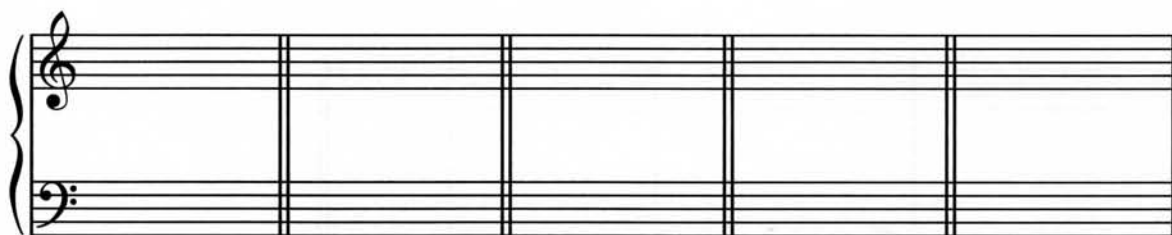
6. The chords in this excerpt have been analyzed using lead sheet symbols. Put parentheses around all NCTs and label them.



Brahms, *Intermezzo*, Op. 76, No. 7

E Am G⁷ C Bdim Am E Am E Am

- B. Using a three-part texture, write authentic cadences in five different keys, employing a different NCT from the following list in each cadence: p, n, ant, app, e.



- C. Analyze the chords in this phrase with roman numerals. Then renotate the phrase on the staves below, adding at least 4 NCTs, at least 2 of which should be suspensions. Label all the NCTs, and show the interval classifications of the suspensions.



- D. Compose a simple melody for each figured bass below and fill in inner voices to make a four-part texture. Include some of the NCTs studied in this chapter. Analyze chords and NCTs.



In this example, use a V chord on beat 3 of m. 1. Also, the symbols “6 –” mean that a first inversion chord is to be maintained throughout m. 2.

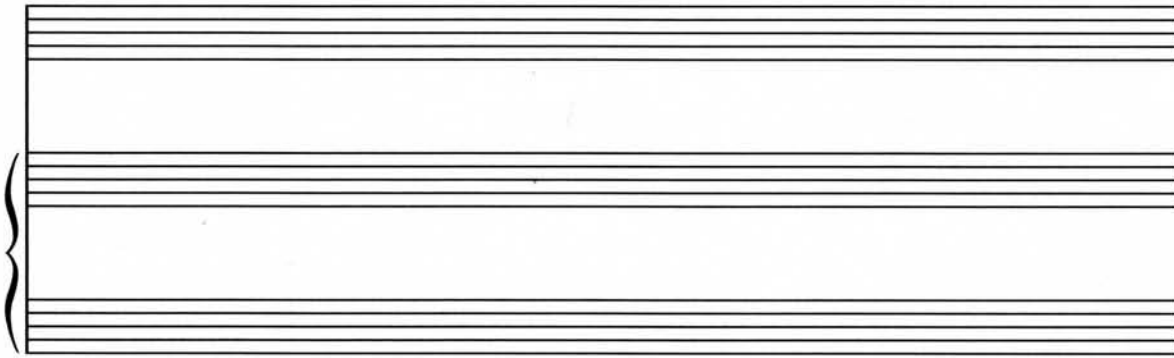
2

F:

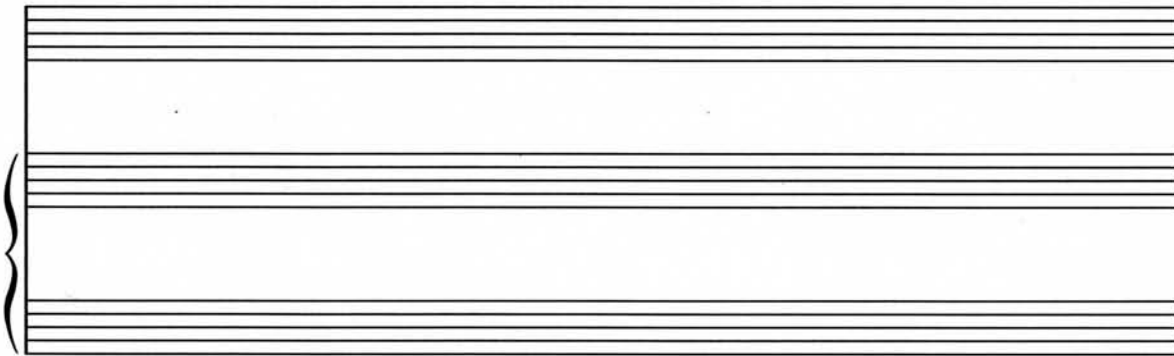
- E. Compose a passage in four parts in the key of b minor employing a 7-6 suspension near the beginning and a tonic pedal near the end.

- F. Compose eight measures to continue Part A, number 3, on page 72 of this workbook. Maintain a similar texture and end with a PAC. Include an NCT studied in this chapter.

- G. The framework below is a simplified version of a passage from Mozart's *Magic Flute*. Embellish the framework, turning it into a vocal part (to be sung on neutral syllables) with piano accompaniment. Try to include at least one chromatic NCT.



- H. Continue your solution to Part G to form a parallel period.



Part III

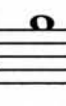
Diatonic Seventh Chords

Chapter 13

THE V⁷ CHORD

EXERCISE 13-1

- A. The note given in each case is the root, 3rd, 5th, or 7th of a V⁷ chord. Notate the chord in root position and name the major key in which it would be the V⁷.

1	2	3	4	5	6	7	8
							
5th	3rd	7th	root	3rd	5th	root	7th
_____	_____	_____	_____	_____	_____	_____	_____

- B. Analyze chords and NCTs in the excerpt below. Then discuss the voice leading in the two V⁷ chords. (Note: You might have analyzed the B's in the V chords as passing tones, but consider them to be chord 7ths for the purposes of your discussion.)



Bach; "Wir Christenleut' "



C. Resolve each chord to a root position I. (Note: *c* means complete chord, *i* means incomplete chord.)

1 2 3 4 5

E: V^7 I c: V^7 i
(c) (c) D: V^7 I Ab: V^7 I Bb: V^7 I
(c) (i) (i) (c) (c) (c)

6 7 8 9 10

G: V^7 I f: V^7 i C: V^7 I D: V^7 I g: V^7 i
(c) (c) (c) (i) (i) (c) (i) (c)

11 12 13 14 15

Eb: V^7 I f#: V^7 i B: V^7 I d: V^7 i A: V^7 I
(i) (c) (c) (i) (c) (i) (c) (c)

D. Notate the key signature and the V^7 chord and then resolve it.

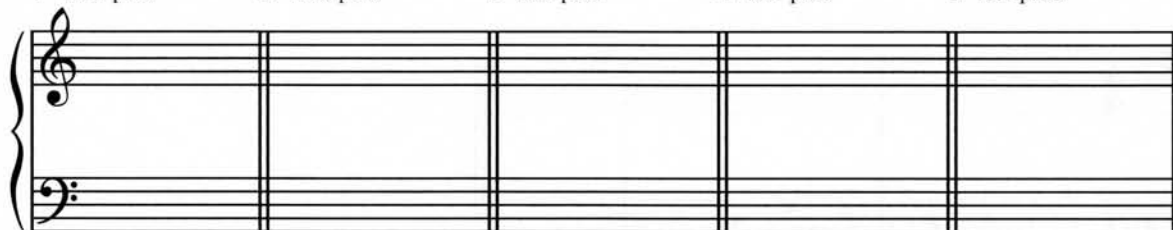
1 three parts

2 three parts

3 four parts

4 four parts

5 four parts



G: V^7 I d: V^7 i E: V^7 I A $\flat$: V^7 I f $\sharp$: V^7 i
(c) (i) (c) (c) (i) (c)

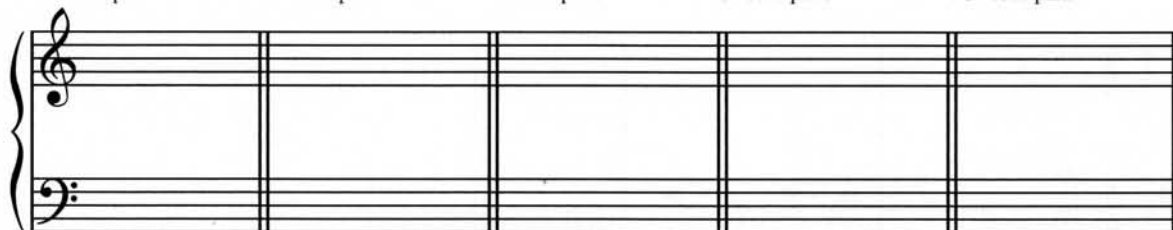
6 three parts

7 three parts

8 four parts

9 four parts

10 four parts



E $\flat$: V^7 vi A: V^7 vi f: V^7 VI B $\flat$: V^7 VI D: V^7 vi

- E. Analyze the chords specified by this figured bass. Then make two harmonizations, one for SAB chorus and one for SATB chorus.

1

S
A

B

6 6 # 7#

2

S
A

T
B

6 6 # 7#

- F. Analyze the chords implied by the soprano and bass lines below. Then fill in inner parts. Remember that the tenor part sounds a P8 lower than written.

S

A

T

B

7

G. Analyze the harmonies implied by these soprano/bass frameworks. Then make four-part versions with embellishments and at least one root position V^7 chord.

1

Exercise 1 shows a soprano and bass line in G major (one sharp) and common time. The soprano line consists of quarter notes G4, A4, B4, C5, followed by a half note G4 with a fermata. The bass line consists of quarter notes G3, A3, B3, C4, followed by a half note G3 with a fermata. The key signature is G major (one sharp) and the time signature is common time. The notation is for measures 1 through 3, with the third measure containing the final notes and fermatas.

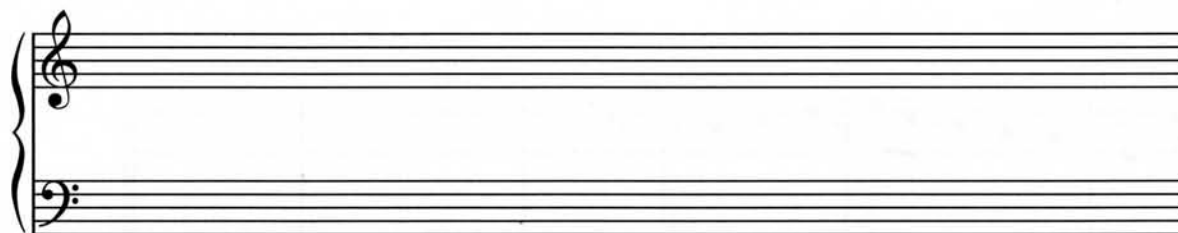
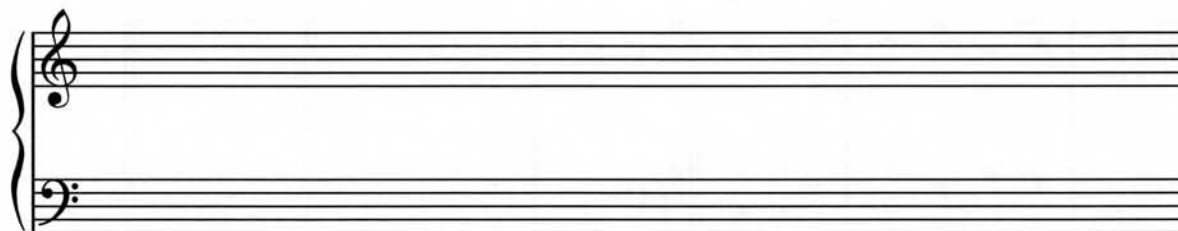
2

Exercise 2 shows a soprano and bass line in G major (one sharp) and common time. The soprano line consists of quarter notes G4, A4, B4, C5, followed by a half note G4 with a fermata. The bass line consists of quarter notes G3, A3, B3, C4, followed by a half note G3 with a fermata. The key signature is G major (one sharp) and the time signature is common time. The notation is for measures 1 through 3, with the third measure containing the final notes and fermatas.

3

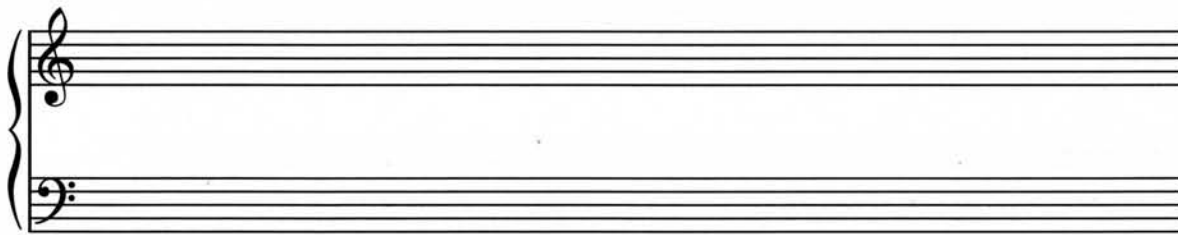
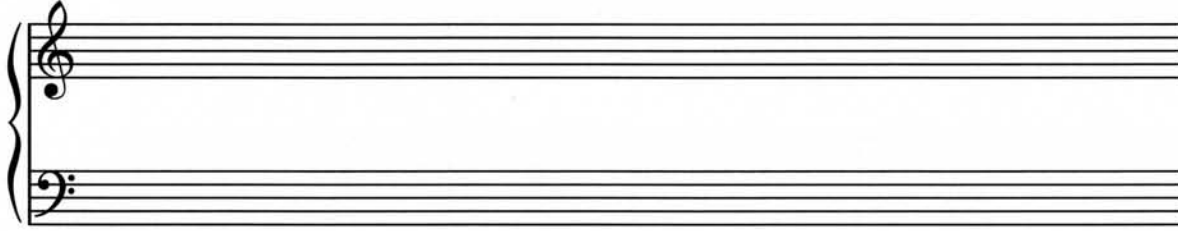
Exercise 3 shows a soprano and bass line in G major (one sharp) and common time. The soprano line consists of quarter notes G4, A4, B4, C5, followed by a half note G4 with a fermata. The bass line consists of quarter notes G3, A3, B3, C4, followed by a half note G3 with a fermata. The key signature is G major (one sharp) and the time signature is common time. The notation is for measures 1 through 3, with the third measure containing the final notes and fermatas.

- H. Set a short text for four-part chorus. The text might be a poem, a headline from a newspaper, or anything. Include at least one V^7-I progression. Try to keep the motion going through the use of elaborations.

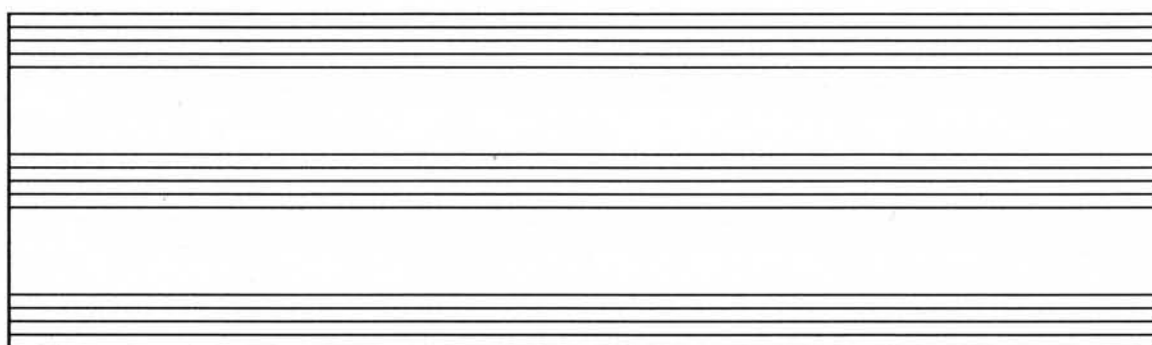
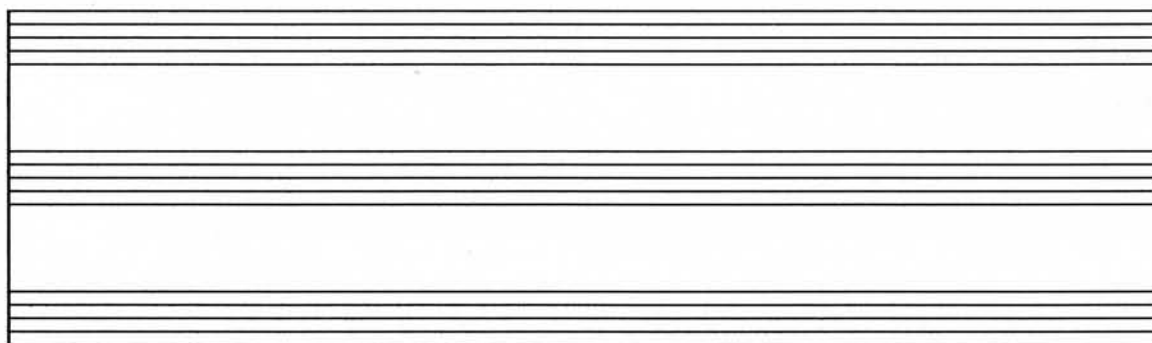


- I. Compose a period in a simple three-part texture. End the first phrase with a V^7-vi DC, the second with a V^7-I PAC. Then create a version for three instruments, the top part being elaborated by arpeggiations and NCTs, the other two parts in an accompanying role. Turn in both versions.

1. Simple version



2. Elaborated version



EXERCISE 13-2

A. Notate the specified chords. Use accidentals instead of key signatures.

1	2	3	4	5	6	7	8
							
D $\flat$: V $\frac{6}{5}$	a: V $\frac{4}{3}$	E $\flat$: V $\frac{4}{2}$	D: V $\frac{4}{3}$	c: V $\frac{4}{2}$	F: V $\frac{6}{5}$	b: V $\frac{4}{2}$	E: V $\frac{6}{5}$

B. Label chords and NCTs in the excerpts below. Comment on the treatment of the leading tone and 7th in any V 7 chords in root position or inversion.

Notice that in Exercises 1 and 3 the key signature does not agree with the given key. This is because in each case the music has modulated (changed key) to the dominant. Modulation will be introduced in Chapter 18.

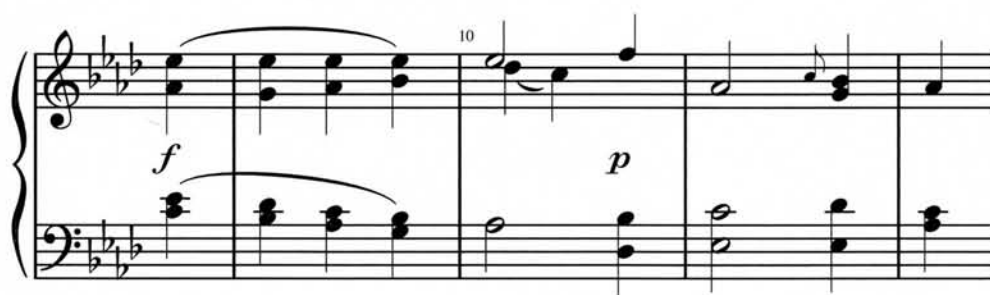
 1. Bach, "Ich dank' dir, lieber Herre"

(Which is the more sensible analysis of beat 4 of m. 3: iii $\frac{6}{4}$ or V 6 ?)



F:

 2. Beethoven, Sonata Op. 2, No. 1, III



**3.** Mozart, Quintet K. 452, I (piano reduction)

Bb:

**4.** Schumann, "Im Westen," Op. 25, No. 23

(Do not label NCTs in this excerpt.)

15 *ritard.*

mich und mein Kind - lein an's Herz ged - rückt.

C. Resolve each chord to a tonic triad (except as indicated). Analyze both chords.

1 2 3 4 5

Bb: D: c: G: f: VI

6 7 8 9 10

C: f#: e: g: Ab:

11 12 13 14 15

El: vi d: (c) (c) E: Db: b:

D. Supply the key signature. Then notate and resolve the specified chord. Finally, begin the passage with a chord that will allow good voice leading and provide the indicated approach to the 7th. Notate as quarter notes. Label all unlabeled chords.

1 n **2** p **3** s **4** app

E $\flat$: _____ V_5^6 _____ g: _____ V_2^4 _____ D: _____ V^7 _____ b: _____ V_3^4 _____

5 s **6** n **7** s **8** p

G: _____ V^7 _____ vi f: _____ V_5^6 _____ B $\flat$: _____ V^7 _____ c#: _____ V_3^4 _____ i 6

9 app **10** s **11** p **12** n

E: _____ V^7 _____ c: _____ V_2^4 _____ A $\flat$: _____ V_3^4 _____ I f#: _____ V^7 _____ VI

- E. Show with roman numerals the chords that this figured bass calls for. Then complete the realization in four voices.

Figured bass notation below the bass staff:

$\frac{6}{4}$ 3 6 6 $\frac{4+}{2}$ 6 6 6 $\sharp$

- F. Analyze the chords implied by each soprano/bass framework. Then add inner parts and embellishments to make a four-part choral texture. Include an inverted V^7 chord.

1

Exercise 1: Soprano and Bass framework in G major, 4/4 time. The soprano line consists of a half note G4, followed by quarter notes A4, B4, and a dotted half note C5. The bass line consists of a half note G2, followed by quarter notes A2, B2, and a dotted half note C3. The key signature has one sharp (F#) and the time signature is common time (C).

2

Exercise 2: Soprano and Bass framework in G major, 4/4 time. The soprano line consists of a half note G4, followed by quarter notes A4, B4, and a dotted half note C5. The bass line consists of a half note G2, followed by quarter notes A2, B2, and a dotted half note C3. The key signature has one sharp (F#) and the time signature is common time (C).

- G. Analyze the chords implied by this soprano/bass framework. Then create a piano texture by filling out some of the chords and adding embellishments. Arpeggiations will be especially useful for prolonging the I chord in mm. 1 to 2. Be sure to include an inverted V^7 chord.

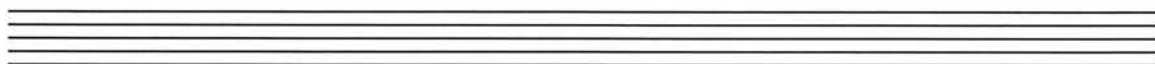
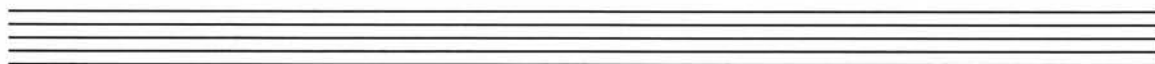
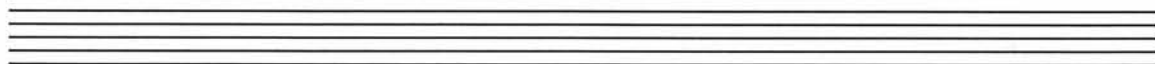
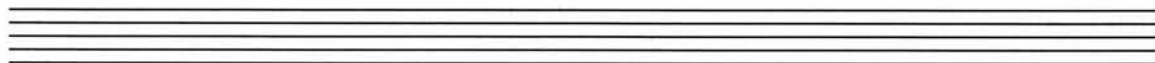
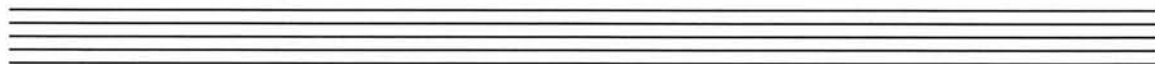
A musical score for Soprano and Bass staves in 3/4 time, key of B-flat major. The Soprano staff contains the following notes: mm. 1-2: Bb, D; m. 3: F, Ab; m. 4: Bb, D; m. 5: F, Ab; m. 6: Bb, D; m. 7: F, Ab; m. 8: Bb, D. The Bass staff contains the following notes: mm. 1-2: Bb, D; m. 3: F, Ab; m. 4: Bb, D; m. 5: F, Ab; m. 6: Bb, D; m. 7: F, Ab; m. 8: Bb, D.

Two empty musical staves (Soprano and Bass) in 3/4 time, key of B-flat major, provided for the student to create a piano texture.

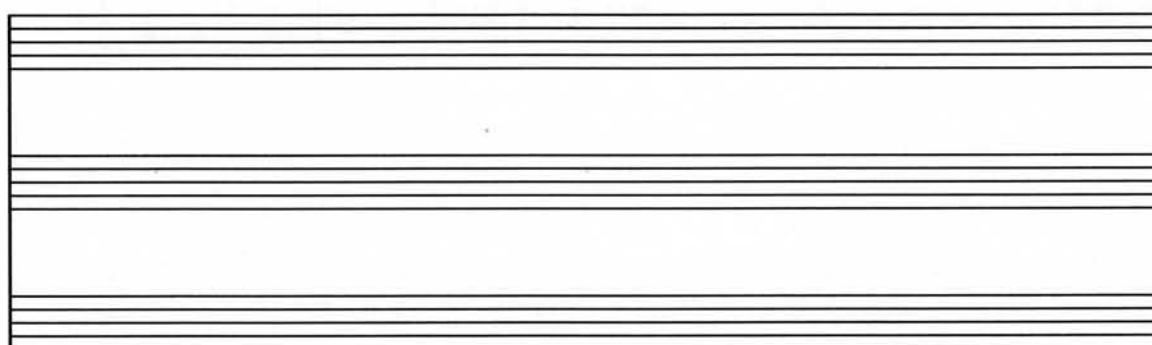
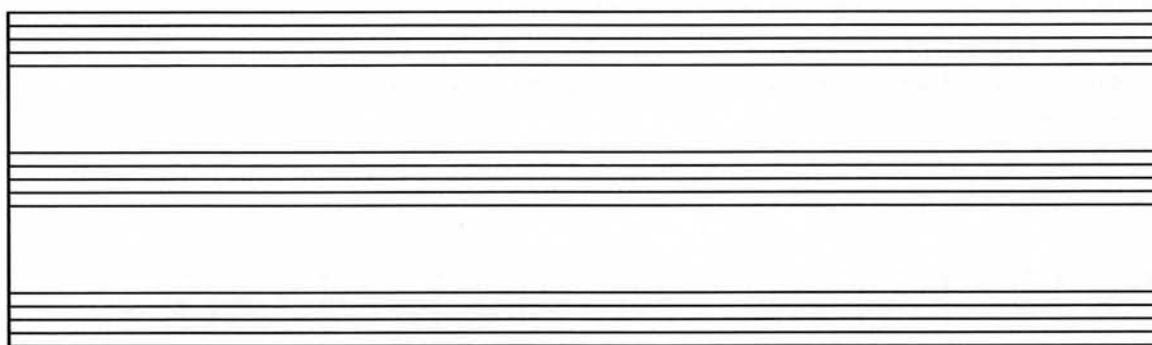
Two empty musical staves (Soprano and Bass) in 3/4 time, key of B-flat major, provided for the student to create a piano texture.

H. Make one or more settings of the following song.

1. Write an arrangement for two B $\flat$ trumpets, unaccompanied. Analyze the harmonies implied by the two lines. Include at least one inverted V⁷.
2. Make an arrangement for four-part chorus. Try to elaborate the other voices slightly. Include at least one inverted V⁷. Watch out for parallel 8ves and 5ths throughout.
3. Compose a version for piano solo, including at least one inverted V⁷. Be prepared to play it or find someone else in the class who will do so.



- I. Compose a period for a string trio (violin, viola, cello) or for some other combination of instruments in your class. Include at least two inverted V^7 chords.



Chapter 14

THE II⁷ AND VII⁷ CHORDS

EXERCISE 14-1

A. Notate the following chords. Use accidentals, not key signatures.

1	2	3	4	5	6	7	8
g: vii ^o 7	C: ii ⁷	e: vii ^o 4 ₂	Eb: ii ⁴ ₃	D: vii ^o 6 ₅	f#: ii ^o 4 ₃	G: vii ^o 7	Ab: ii ⁷

9	10	11	12	13	14	15	16
c: vii ^o 6 ₅	d: ii ^o 4 ₂	Bb: vii ^o 6 ₅	b: ii ^o 6 ₅	a: vii ^o 6 ₅	A: ii ⁶ ₅	F: ii ⁴ ₂	c#: vii ^o 7

B. Analyze the following chords. Be sure your symbols indicate chord quality and inversion.

1	2	3	4	5	6	7	8
f: _____	G: _____	f#: _____	D: _____	Eb: _____	e: _____	C: _____	g: _____

- C. Analyze the chords and NCTs in the following excerpts. Whenever a ii^7 ($ii^{\circ 7}$) or $vii^{\circ 7}$ ($vii^{\circ 7}$) chord in root position or inverted is encountered, discuss the voice leading into and out of the chord.



1. Bach, "Jesu, der du meine Seele"



2. Bach, "Herzliebster Jesu, was hast du verbrochen"

b:



3. Bach, *Well-Tempered Clavier*, Book I, Prelude I

C:

4. Label the chords in the blanks provided. Do not label NCTs in this excerpt. The *m.v.* dynamic markings stand for *mezza voce*, "half voice," which means approximately the same thing as *mezzo forte*, or *mf*. The tempo is *Poco Adagio*.



Haydn, Quartet Op. 50, No. 6, II

5. Label the chords and NCTs in this excerpt. These are the third and fourth phrases of the double period that makes up the opening theme. Although too long to be quoted here, the entire theme (mm. 1–30) is worth studying.



Haydn, Quartet Op. 20, No. 4, I

D. Notate, introduce, and resolve the specified chords. Approach each chord 7th as a suspension, a neighbor, or a passing tone, as specified. Include key signatures and roman numerals.

1 n 2 p 3 s 4 s

f#: ____ vii^{o4}₃ ____ C: ____ ii⁶₅ ____ D: ____ vii^{o4}₃ ____ g: ____ ii^{o7} ____

5 n 6 s 7 n 8 p

e: ____ vii^{o6}₅ ____ c#: ____ ii^{o4}₃ ____ F: ____ vii^{o7} ____ Eb: ____ ii⁴₂ ____

9 s 10 s 11 p 12 s

b: ____ vii^{o4}₂ ____ d: ____ ii^{o6}₅ ____ A: ____ ii⁷ ____ c: ____ ii^{o4}₂ ____

E. Analyze these figured basses and continue the realizations, keeping the keyboard texture but following conventional partwriting procedures.

1.

7 8# 7 6 5 4 #

e: i

2. Bach, St. Matthew Passion, No. 20

69 (Andante) 70 71

7 b 6 6 6 6 6 5 [b] 4 5 b

c: V⁷

F. Harmonize these chorale phrases for four-part chorus.

1. Include a root position ii^7 .

A musical staff in G major (one sharp) and common time. The melody consists of a half note G, followed by a quarter note A, a quarter note B, a quarter note C, a quarter note D, a quarter note E, and a half note F# with a fermata. The bass staff is empty for harmonicization.

G:

2. Include a root position $vii^{\circ 7}$ and a 4-3 suspension.

A musical staff in G minor (two flats) and common time. The melody consists of a half note G, followed by a quarter note A, a quarter note B, a quarter note C, a quarter note D, a quarter note E, and a half note F with a fermata. The bass staff is empty for harmonicization.

g:

3. Include a $ii^{\circ 4}_2$ and a deceptive cadence. Some eighth-note chords will be necessary.

A musical staff in G minor (two flats) and common time. The melody consists of a half note G, followed by a quarter note A, a quarter note B, a quarter note C, a quarter note D, a quarter note E, a quarter note F, and a half note G with a fermata. The bass staff is empty for harmonicization.

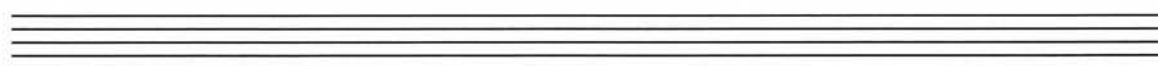
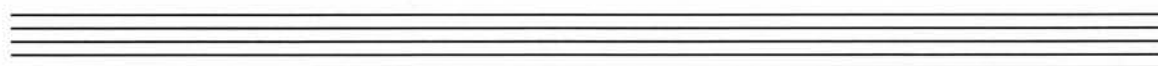
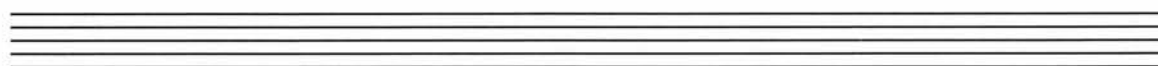
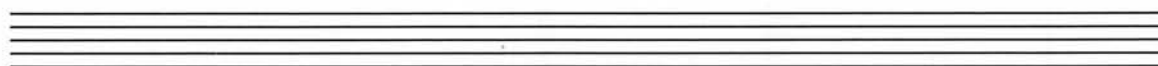
d:

4. Include a $vii^{\circ 4}_3$ and a passing tone.

A musical staff in C major (no sharps or flats) and 3/4 time. The melody consists of a half note C, followed by a quarter note D, a quarter note E, a quarter note F, a quarter note G, a quarter note A, a quarter note B, and a half note C with a fermata. The bass staff is empty for harmonicization.

C:

- G. Make a setting of the folk song below for some combination of voices and/or instruments available in your class. Include one of the chords discussed in this chapter.



Chapter 15

OTHER DIATONIC SEVENTH CHORDS

EXERCISE 15-1

A. Notate the following chords. Use accidentals, not key signatures.

1	2	3	4	5	6	7	8
A $\flat$: I M^7	g: $\sharp vi^{\flat 7}$	G: $vi^{\flat 6}_5$	f: III M^6_5	b: i^7	B $\flat$: IV M^4_3	a: VI M^7	e: iv^4_2

9	10	11	12	13	14	15	16
E $\flat$: IV M^4_2	c: i^4_3	c $\sharp$: IV 7	F: vi^7	E: I M^6_5	f $\sharp$: iv^4_3	d: VI M^6_5	A: iii^4_2

B. Analyze the following chords. Be sure your symbols indicate chord quality and inversion.

1	2	3	4	5	6	7	8
E: _____	a: _____	G: _____	E $\flat$: _____	f: _____	C: _____	f $\sharp$: _____	d: _____

C. Analyze the chords in the excerpts below. Comment on the voice leading involving any of the chords discussed in this chapter.

 1. Chopin, Mazurka in a minor, Op. Posth.

A musical score for the song 'The Rose Tree'. The score is written for voice and piano. The voice part is in the treble clef, and the piano accompaniment is in the bass clef. The key signature has one sharp (F#), and the time signature is 7/8. The score consists of two systems. The first system has two measures, and the second system has three measures. The piano accompaniment features a prominent triplet of eighth notes in the right hand of the first measure of each system. The melody is simple and folk-like, with a mix of quarter and eighth notes. The lyrics 'The Rose Tree' are written below the voice staff.

 2. Bach, “Herr Jesu Christ, du höchstes Gut”

A musical score for the song 'The Rose Tree'. It is written for voice and piano. The key signature has two flats (B-flat and E-flat), and the time signature is common time (C). The score consists of three measures. The first measure shows the vocal melody and piano accompaniment. The second measure continues the melody and accompaniment. The third measure shows the vocal melody and piano accompaniment, with a repeat sign at the end of the piano part.

 3. Corelli, Concerto Grosso Op. 6, No. 1, VII

A musical score for the song 'The Rose Tree'. It consists of four staves: two for the vocal melody (treble clef) and two for the piano accompaniment (treble and bass clef). The key signature is one sharp (F#), and the time signature is 6/8. The melody is simple and catchy, with a mix of quarter and eighth notes. The piano accompaniment provides a steady harmonic foundation with chords and moving lines in both hands. The score is presented in a clean, black-and-white format.

D: iii



4. Haydn, Piano Sonata No. 30, I

After you finish labeling all of the chords, complete the three-part reduction of mm. 86–92 that follows the excerpt. The neighbor figures in 16th notes in mm. 84–91 are NCTs, not the sevenths of chords.

f#:

Textural reduction

D. Continue this four-part elaboration of Example 15-19 (p. 238).

f: iv⁷ VII⁷ III^{M7} VI^{M7} ii^{ø7} V⁷ i

E. Notate, introduce, and resolve the specified chords. Approach each chord 7th as a suspension, a neighbor, or a passing tone, as specified. Include key signatures and roman numerals.

1 p **2** s **3** p **4** s

F: iii⁷ E: IV^{M6}₅ g: i⁶₅ b: #vi^{ø7}

5 n **6** s **7** p **8** s

f: III^{M7} c#: iv⁴₃ Eb: I^{M4}₂ D: vi⁷

9 s **10** s **11** s **12** n

G: ⁶₅ IV^{M4}₂ ⁶₅ c: ⁷ VI^{M4}₃ ⁷ Bb: ⁷ I^{M7} ⁷ d: IV⁶₅

(circle of fifths) (circle of fifths) (circle of fifths)

- F. Analyze the chords called for by the figured bass below. Remember that the figured bass symbols are part of the music, not part of the harmonic analysis, which should be written beneath it. Then continue the four-part realization of that figured bass. Note: Be sure to review pages 176–177 before proceeding. (Figures in the fifth measure added by the authors.)



Corelli, Concerto Grosso Op. 6, No. 12, V

Concertino

VI. I *p* *f*

VI. II *p* *f*

Vc. *p* *f*

7 7 7 7 7 7 7 4 3

Concerto grosso

VI. I *p* *f*

VI. II *p* *f*

Vla. *p* *f*

D.B. *p* *f*

7 7 7 7 7 7 [6 5] 4 3 7 4 3

Realization

G. Analyze this figured bass and continue the realization, keeping the keyboard texture but following conventional partwriting procedures.

Corelli, Concerto Gross, Op. 6 No. 9, "Preludio"

Largo

A musical score for the song 'The Rose Tree'. The score is written for a grand piano (indicated by a large brace on the left) and is in common time (C). The key signature has one flat (B-flat). The melody is in the right hand, and the accompaniment is in the left hand. The melody consists of a series of eighth and sixteenth notes, while the accompaniment features a steady eighth-note pattern. The score is divided into four measures by vertical bar lines.

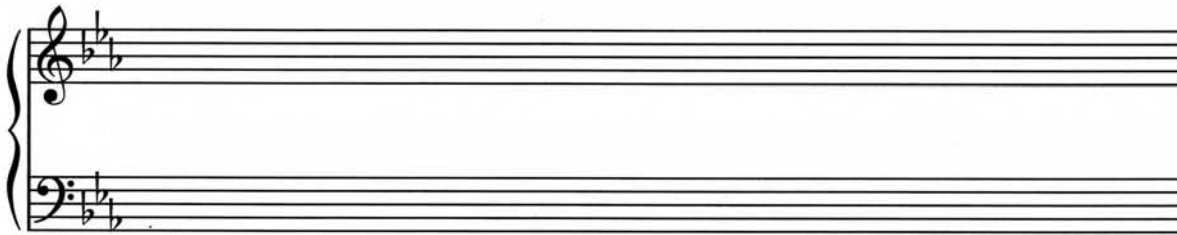
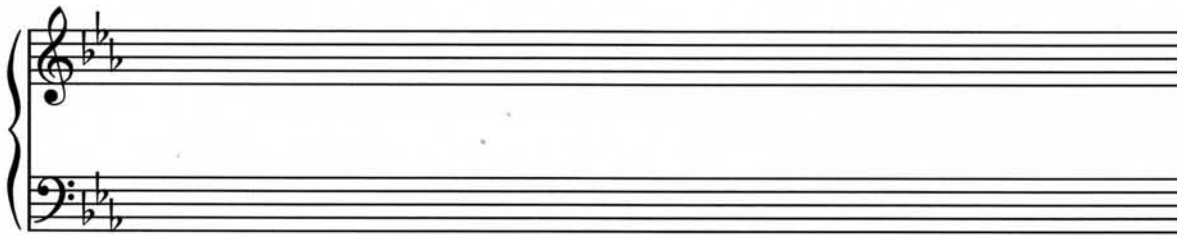
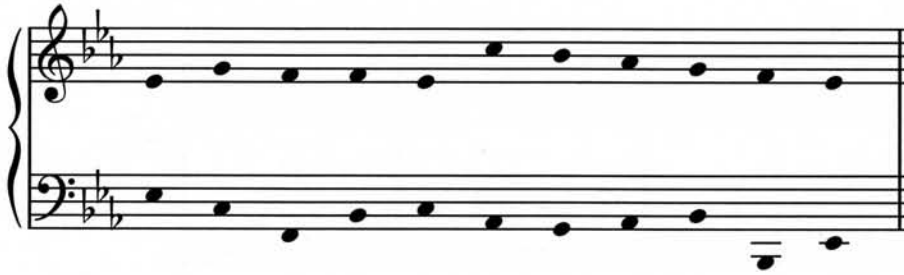
6 7 7 7 7 6 $\frac{4}{2}$ 6 7 7

F: I

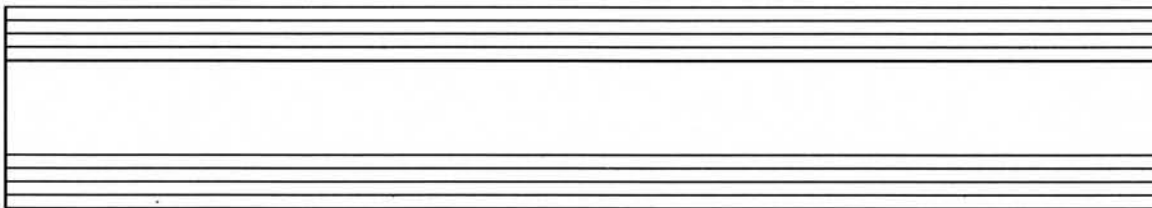
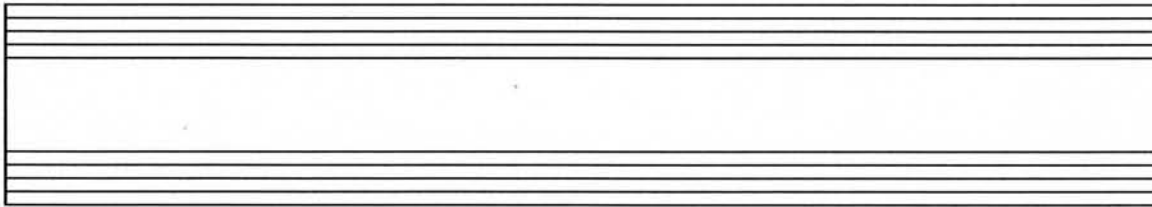
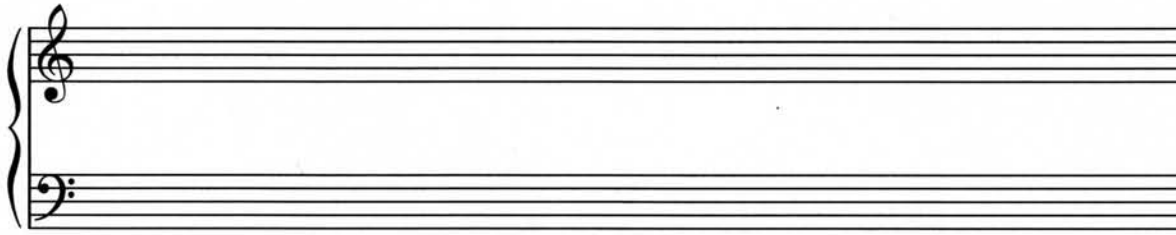
- H. Compose a passage for three voices or instruments containing a sequence of seventh chords similar to that used in the excerpt of Part F.

[illegible][illegible]

- I. The following is a simple note-against-note contrapuntal framework. Analyze the implied harmonies, then elaborate it into a passage containing several seventh chords. Use four parts or a free keyboard texture. Your final version might be complex, but the original framework should be retained. Include roman numerals and NCT analysis.



- J. Create a framework similar to Exercise I but in the minor mode. Be sure that it implies a good harmonic progression. Then create an elaboration that employs some of the seventh chords discussed in this chapter. If possible, score for a combination of instruments in your class.



Part IV

Chromaticism

Chapter 16

SECONDARY FUNCTIONS 1

EXERCISE 16-1

A. Review the material on spelling secondary dominants (p. 248). Then notate these secondary dominants in the specified inversions. Include key signatures.

1 2 3 4 5



c#: V^7/iv Ab: V^6/V c: V^4_3/VI e: V^6/III F: V^4_2/ii

6 7 8 9 10



D: V^6/vi b: V^7/V A: V^6_5/iii g: V/iv a: V^4_2/V

11 12 13 14 15



Eb: V^6_5/IV f#: V^6/VII C: V^7/ii Bb: V^4_2/IV G: V^4_3/V

B. Label any chord that might be a secondary dominant according to the steps outlined on page 248–249. Label all others with an *x*.

1 2 3 4 5



f: _____ E: _____ C: _____ e: _____ g: _____

6 7 8 9 10



Eb: _____ f#: _____ D: _____ F: _____ c: _____

11 12 13 14 15



A: _____ b: _____ d: _____ Bb: _____ G: _____

EXERCISE 16-2

A. Analysis.

1. Label chords and NCTs. Identify any six-four chords by type. This excerpt contains a set of parallel 5ths in a context that Bach must have found acceptable because he used them so often in this situation. See if you can find them.



Bach, "Freuet euch, ihr Christen alle"

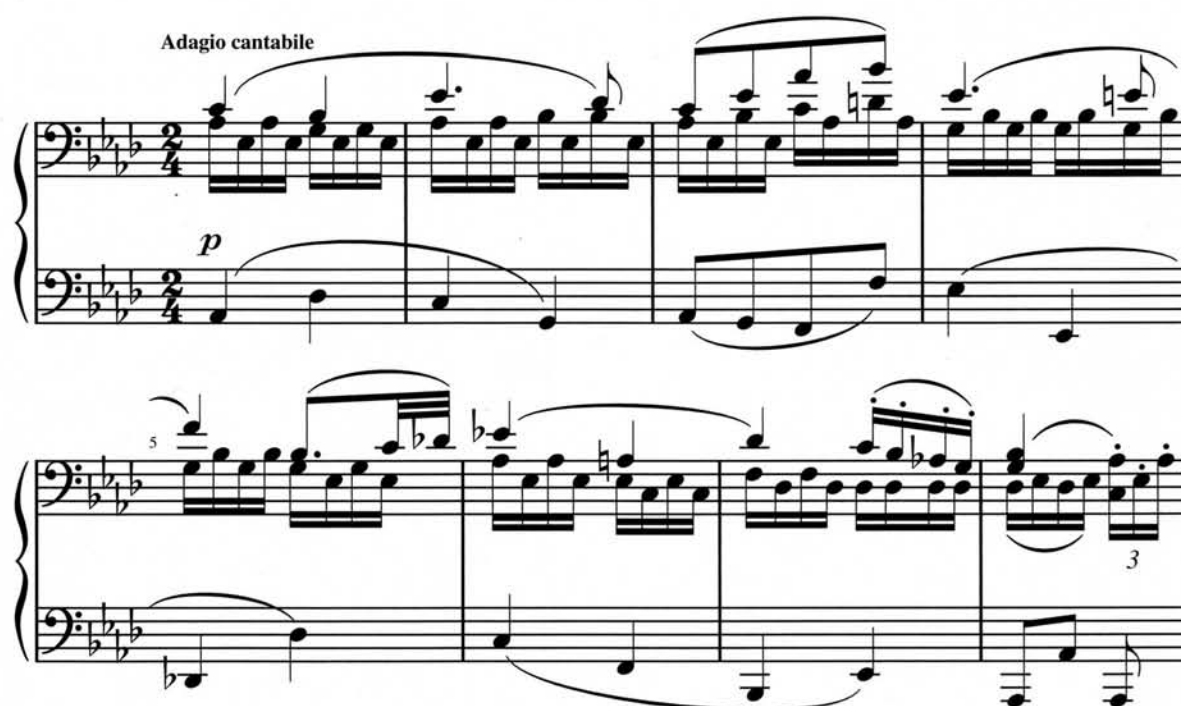


f:

2. Label chords and NCTs. Notice that the right hand is in bass clef throughout. Discuss the sequence implied by mm. 5 to 8. Is the excerpt an example of a period? If so, is it a parallel period or a contrasting period?



Beethoven, Sonata Op. 13, II





3. Label the chords with roman numerals. Thinking in terms of chord roots, find the longest harmonic sequence in this excerpt.

Beethoven, Sonata Op. 2, No. 1, I

4. Label chords and NCTs. Ignore the grace notes in your harmonic and NCT analysis; for example, the $E\flat 5$ in m. 1 is an upper neighbor ornamented by the appoggiatura grace note. Comment on Chopin's use of $F\sharp$ and $F\flat$ in this excerpt. Where do they occur? Are they ever in conflict? The form of the excerpt is a (parallel/contrasting) (period/double period).



Chopin, Mazurka Op. 67, No. 2

The musical score for Chopin's Mazurka Op. 67, No. 2, measures 1-16, is presented in a grand staff format. The key signature is B-flat major (two flats), and the time signature is 3/4. The score is divided into two main sections: a piano (*p*) section from measure 1 to 8, and a fortissimo (*sf*) section from measure 9 to 16. The melody is primarily in the right hand, featuring grace notes and appoggiaturas. The left hand provides a harmonic accompaniment with chords and single notes. Below the staff, there are handwritten annotations: "Red." and "*".

Measures 1-8 (piano): The melody begins with a grace note on $E\flat 5$ (F natural) over a B-flat. The left hand features chords and single notes, including $F\sharp$ and $F\flat$. Annotations below the staff include "Red." and "*".

Measures 9-16 (fortissimo): The melody continues with grace notes and appoggiaturas. The left hand features chords and single notes, including $F\sharp$ and $F\flat$. Annotations below the staff include "Red." and "*".

5. Label chords and NCTs. What is the form of this excerpt? (Note: Measures 1–2 are introductory.)



Beethoven, Quartet Op. 135, III

Lento assai, cantante e tranquillo

[illegible]

6. Label the chords with roman numerals. Label NCTs in the solo bassoon part only. The note under the fermata in m. 49 represents a V chord. It was at this point that the soloist improvised a cadenza. The conductor waited until he heard the soloist arrive at the G3 (often trilled), at which point he would signal the orchestra to be ready for their entrance in m. 50.



Mozart, Bassoon Concerto K. 191, II

Ob.

Hn. in F

Bsn.

Vl. I

Vl. II

Vla.

Vc. D.B.

45

Ob.

Hn.
in F

Bsn.

tr

3

VI. I

VI. II

Vla.

Vc.
D.B.

Ob.

Hn.
in F

Bsn.

tr

f

50

VI. I

VI. II

Vla.

Vc.
D.B.

f

f

f

f

f

f

- B. For each of the following problems, first analyze the given chord. Next, find a smooth way to lead into the chord. Although there are many possibilities, it will often work to use a chord whose root is a P5 above the root of the secondary dominant. Experiment with other relationships also. Then resolve each chord properly, taking special care with the leading tone and 7th resolutions. Analyze all chords.

g: _____ C: _____ G: V_5^6/V E: _____ Ab: _____

D: _____ Bb: ii^7 f: _____ c: _____ a: _____

- C. List below each note the secondary V and V^7 chords that could harmonize that note.
You might find it helpful to refer to the charts on page 247.

F#: _____ e: _____ D: _____ A: _____ Eb: _____

b: _____ Bb: _____ d: _____ F: _____ Ab: _____

- D. Provide roman numerals to show how the first note could be harmonized as a secondary dominant. The second note should be harmonized by the tonicized chord.

1 2 3 4 5

g: F: b: f: E:

6 7 8 9 10

c: C: Bb: e: A:

- E. Analyze the chords specified by each figured bass, then make an arrangement for SATB chorus. Strive for smooth voice leading, even if this results in a dull soprano line.

1

4/2 6 7 6/5 6

2

7# 6/5#4 6/4/3 4+ 6 7 7#

F. Harmonize each chorale phrase for SATB chorus. Include one or more secondary dominants in each phrase and activate the texture with some NCTs.

1

2

Eb:

d:

3

C:

4

g:

- G. Analyze the harmonies implied by the following soprano/bass framework. Then make a more interesting version for piano, beginning with the two measures given below.

Two staves of music in 3/4 time, key of B-flat major. The soprano staff contains a sequence of half notes: B-flat, A, G, F, E, D, C, B-flat. The bass staff contains a sequence of half notes: B-flat, A, G, F, E, D, C, B-flat. The first measure of the bass staff has a sharp sign above the B-flat note.

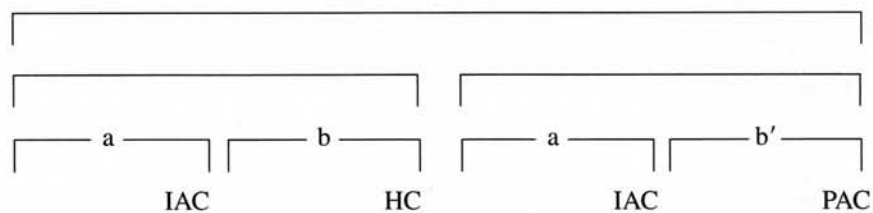
Two staves of music in 3/4 time, key of B-flat major. The first measure of the soprano staff has an accent (>) over the B-flat note. The first measure of the bass staff has a piano (p) dynamic marking. Both staves have a slur over the first two measures. The first measure of the bass staff has a sharp sign above the B-flat note. The second measure of the bass staff has a sharp sign above the B-flat note. The first measure of the bass staff has a circled B-flat note with the text "Red." below it. The second measure of the bass staff has a circled B-flat note with the text "Red." below it.

Two empty staves of music in 3/4 time, key of B-flat major, for piano accompaniment.

H. Continue the example below to make a total of at least eight measures. Include one or more secondary dominants and end with a PAC. Then score it for four instruments found in your class. Analyze all chords and NCTs.

A musical score for the song 'The Rose Tree'. The score is written for a piano, with a treble and bass staff. The key signature is one flat (B-flat) and the time signature is 3/4. The melody is in the treble staff, and the accompaniment is in the bass staff. The score consists of three measures. The first measure shows the piano introduction with a treble staff starting on a whole note and a bass staff with a whole note. The second and third measures show the vocal melody with a treble staff and a bass staff accompaniment. The melody is a simple, folk-like tune. The lyrics 'The Rose Tree' are written below the bass staff.

- I. Finish the analysis of the phrase below. This phrase is to serve as the *a* phrase of a longer theme you will compose. The theme will be in the form of a parallel double period. Include at least one secondary dominant.



The musical score is in A major (three sharps) and 6/8 time. It consists of four measures. The first measure begins with a piano (*p*) dynamic. The melody in the treble clef starts on A4, moves to B4, then C#5, and ends on A4. The bass line starts on A3, moves to B3, then C#4, and ends on A3. The second measure features a half note A4 in the treble and a half note A3 in the bass. The third measure has a quarter note G#4 in the treble and a quarter note G#3 in the bass. The fourth measure concludes with a quarter note F#4 in the treble and a quarter note F#3 in the bass, followed by a whole rest.

A: (I) (V⁷) I

Two empty musical staves, one for the treble clef and one for the bass clef, both in A major (three sharps).

Two empty musical staves, one for the treble clef and one for the bass clef, both in A major (three sharps).

Chapter 17

SECONDARY FUNCTIONS 2

EXERCISE 17-1

A. Review how to spell secondary leading-tone chords (pp. 264–265). Then notate these secondary leading-tone chords in the specified inversion. Include key signatures.

1	2	3	4	5
A: $\text{vii}^{\circ 6}/\text{iii}$	F: $\text{vii}^{\circ 6}/\text{ii}$	c: $\text{vii}^{\circ 6}/\text{VI}$	E: $\text{vii}^{\circ 6}/\text{IV}$	A $\flat$: $\text{vii}^{\circ 7}/\text{IV}$

6	7	8	9	10
d: $\text{vii}^{\circ 6}/\text{V}$	G: $\text{vii}^{\circ 7}/\text{vi}$	B $\flat$: $\text{vii}^{\circ 6}/\text{vi}$	g: $\text{vii}^{\circ 7}/\text{VII}$	F: $\text{vii}^{\circ 7}/\text{ii}$

11	12	13	14	15
C: $\text{vii}^{\circ 4}/\text{V}$	e: $\text{vii}^{\circ 6}/\text{iv}$	E $\flat$: $\text{vii}^{\circ 4}/\text{V}$	f $\sharp$: $\text{vii}^{\circ 7}/\text{III}$	D: $\text{vii}^{\circ 6}/\text{V}$

B. Label any chord that would be a secondary leading-tone chord according to the steps outlined on page 265. Label all others with an x.

1 2 3 4 5



c: _____ G: _____ A: _____ Bb: _____ e: _____

6 7 8 9 10



C: _____ d: _____ E: _____ Eb: _____ Ab: _____

11 12 13 14 15



F: _____ f#: _____ D: _____ C: _____ c#: _____

EXERCISE 17-2

A. Analysis.

1. In the brilliant and witty concluding passage below, Mozart combines the antecedent and consequent phrases from the beginning of the minuet (marked *a* and *b* in mm. 55–58).
 - a. Mark all occurrences of *a* and *b*.
 - b. Find where the *b* phrase is used in imitation.
 - c. Find inverted (upside down) statements of *a* and *b*.
 - d. Find a place where original and inverted statements of *b* occur simultaneously.
 - e. Put roman numerals in the blanks provided. NCTs are in parentheses.



Mozart, String Quartet K. 464, II

A: $\frac{1^6}{1}$ 2 3 4 5

Musical score for measures 65-69. The score is written for four staves (two treble and two bass clefs) in the key of D major (two sharps). Measure 65 is marked with a *p* (piano) dynamic. The notation includes various chords and melodic lines, with some notes beamed together. The key signature is D major.

6 7 8 I_4^6 9

Musical score for measures 10-15. The score is written for four staves (two treble and two bass clefs) in the key of D major (two sharps). Measure 10 is marked with a *p* (piano) dynamic. The notation includes various chords and melodic lines, with some notes beamed together. The key signature is D major.

10 11 12 13 14 15

2. Label the chords with roman numerals (the Italian augmented sixth chord in m. 4 will be discussed in Chapter 23). Use your imagination and your ear in analyzing the last chord in m. 2.



Schumann, "Die Löwenbraut," Op. 31, No. 1

Langsam *p*

Mit der

p *p* *pp* *ritard.*

Myr - the ge - schmückt und dem Braut - ge - schmeid, des Wä - ters Toch - ter, die ro - si - ge Maid, tritt

p *It+6*

ritard.

ein in dem Zwin - ger des Lö - wen, er liegt der Her - rin zu Fü - sen, vor der er sich schmiegt.

ritard.

The musical score is for Schumann's "Die Löwenbraut," Op. 31, No. 1. It is in 3/4 time and B-flat major. The tempo is marked "Langsam" (Slow). The score is written for voice and piano. The piano part features a prominent bass line with many chords, some of which are labeled with dynamics like *p* (piano), *pp* (pianissimo), and *ritard.* (ritardando). The voice part has lyrics in German and English. The score is divided into systems, with the first system showing the beginning of the piece and the second system showing the middle section. The piano part includes a section labeled "It+6" (Italian augmented sixth chord) in measure 4. The score ends with a final chord in measure 8.

3. Label chords and NCTs. (An optional piano accompaniment is omitted from the example.) What is the form of this excerpt?



Brahms, "Und gehst du über den Kirchhof," Op. 44

espress.

doch lei - se flü - stern die Win - de, es

espress.

espress.

doch lei - se flü - stern die Win - de, es

espress.

hat - te zu heiss, zu heiss — ge - liebt.

hat - te zu heiss, — zu heiss — ge - liebt.

hat - te zu heiss, — zu heiss — ge - liebt.

hat - te zu heiss, — zu heiss — ge - liebt.

4. Analyze chords and NCTs. Find two circle-of-fifths progressions that contain more than four chords. What is the form of this excerpt?



Tchaikovsky, "Morning Prayer," Op. 39, No. 1

Lento

p

mf

p

f

Red.

5. This short song is given here in its entirety. Analyze the chords and NCTs. There are some places where alternative analyses are possible—in m. 1, for example, where the line $G\sharp-F\sharp-E$ could be analyzed as chord tones or as passing tones. Think of two analyses for the second chord in m. 11, one of them being a secondary function.



Schumann, "Aus meinen Thränen spriessen," Op. 48, No. 2

Nicht schnell
p

Aus mei - nen Thrä - nen spries - sen viel blü - hen - de Blu - men her - vor, und mei - ne Seuf - zer

wer - den ein Nach - ti - gal - len - chor. Und wenn du mich lieb hast, Kind - chen, schenk'ich dir die Blu - men

all', und vor dei - nem Fen - ster soll klin - gen das Lied der Nach - ti - gall.

ritard.

pp

ritard.

pp

Red. *

- B. For each of these problems, first analyze and resolve the given chord, being especially careful with the chord 7th and the leading tone. Then find a smooth way to lead into the given chord. Analyze all chords.

C: _____ D: _____ A: _____ Eb: _____ Bb: _____

E: _____ c: _____ f: _____ g: _____ F: _____

- C. Analyze the harmonies specified by each figured bass and make an arrangement for SATB chorus. Try to use smooth voice leading, even at the expense of an interesting soprano line.

2

4⁺₂ 6 4₂ 6 6 5_b 6 6 5 6 4 7

D. Harmonize each of these chorale phrases for SATB chorus. Include at least one secondary leading-tone chord or incorporate some other aspect discussed in this chapter in each harmonization.

1

2

F:

a:

3

F:

- E. Each item below contains two versions of the same excerpt, one of them in a simple texture and one more elaborate. Continue the simple texture first, including some aspect of harmony discussed in this chapter. Then continue the elaboration, using your simple version as a framework. Label chords and NCTs.

1a.

Musical notation for exercise 1a, showing a simple texture in G major. The notation is in 6/8 time. The right hand (treble clef) has a whole rest in the first measure, followed by a dotted half note G in the second measure. The left hand (bass clef) has a dotted half note G in the first measure, followed by a dotted half note F# in the second measure. The third measure is empty for continuation.

1b.

Andantino

Musical notation for exercise 1b, showing an elaborate texture in G major. The notation is in 6/8 time. The right hand (treble clef) has a whole rest in the first measure, followed by a dotted half note G in the second measure, and a quarter note G in the third measure. The left hand (bass clef) has a dotted half note G in the first measure, followed by a dotted half note F# in the second measure, and a quarter note G in the third measure. The third measure is empty for continuation.

Empty musical staves for continuation, consisting of a grand staff with a treble clef and a bass clef.

2a.

Musical score for section 2a, piano accompaniment. The score is written for piano (p) in 6/8 time, featuring a treble and bass staff. The key signature has one flat (B-flat). The music consists of two measures of chords in the treble and single notes in the bass.

2b.

Adagio

Musical score for section 2b, orchestral arrangement. The score is written for four staves: Violin I (VI. I), Violin II (VI. II), Viola (Vla.), and Violoncello (Vc.). The tempo is marked Adagio. The key signature has one flat (B-flat). The music consists of two measures of chords in the violas and cellos, and single notes in the violins.

Empty musical staves for section 2b, orchestral arrangement. The staves are arranged for Violin I, Violin II, Viola, and Violoncello. The key signature has one flat (B-flat).

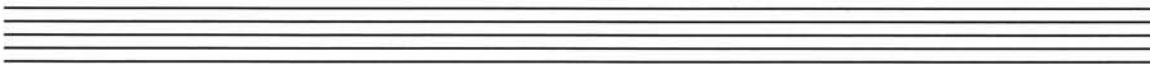
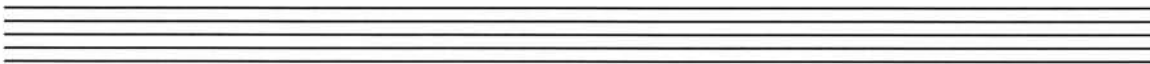
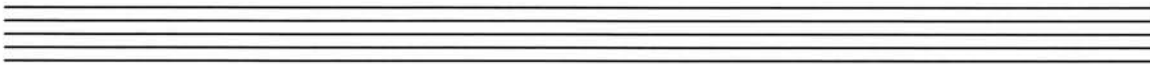
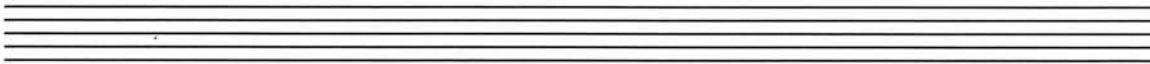
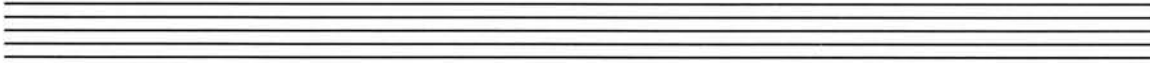
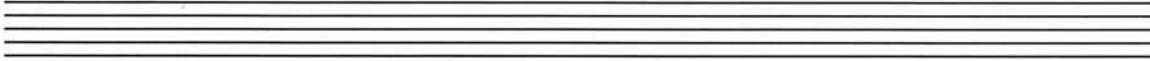
- F. Compose a setting of the following poem for chorus (three, four, or five parts) or for solo voice with piano accompaniment. Use at least one secondary leading-tone chord and one deceptive resolution of a secondary dominant. Try to put your special harmonic effects at appropriate places in the text. (Use either or both stanzas.)

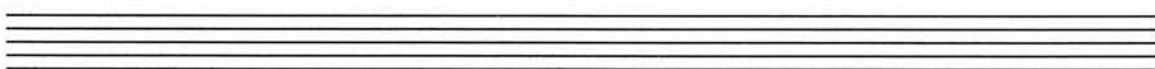
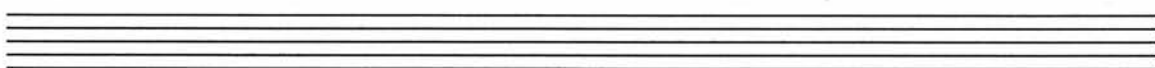
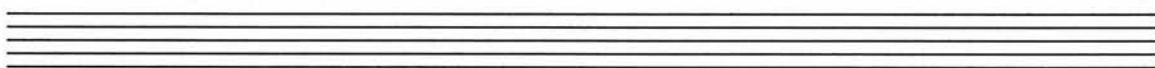
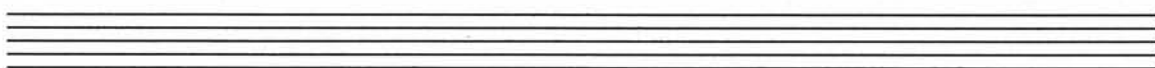
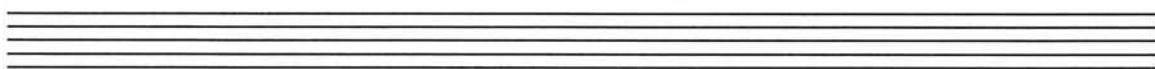
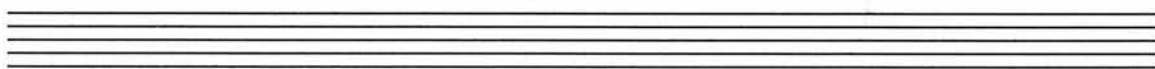
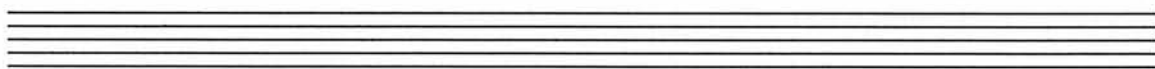
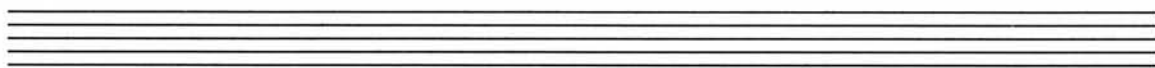
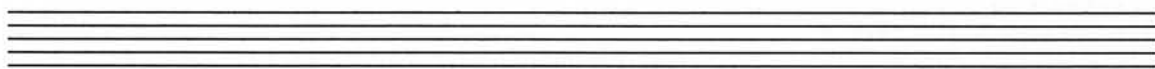
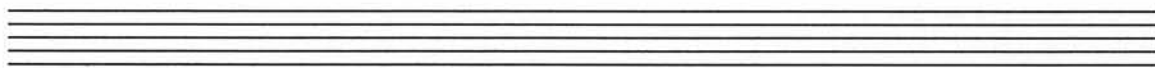
A bird came down the walk;
He did not know I saw;
He bit an angle-worm in halves
And ate the fellow raw.

And then he drank a dew
From a convenient grass,
And then hopped sidewise to the wall
To let a beetle pass.

—From “A bird came down the walk” by Emily Dickinson

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Chapter 18

MODULATIONS USING DIATONIC COMMON CHORDS

EXERCISE 18-1

A. Name the relative key in each case.

- | | |
|---------------------|---------------------|
| 1. G $\flat$ _____ | 6. d _____ |
| 2. A _____ | 7. F $\sharp$ _____ |
| 3. e _____ | 8. c $\sharp$ _____ |
| 4. g _____ | 9. A $\flat$ _____ |
| 5. C $\sharp$ _____ | 10. a $\flat$ _____ |

B. Name all the keys closely related to the given key. Be sure to use uppercase for major, lowercase for minor.

- | | | | | |
|---------------------|-------|-------|-------|-------|
| 1. b _____ | _____ | _____ | _____ | _____ |
| 2. e $\flat$ _____ | _____ | _____ | _____ | _____ |
| 3. G _____ | _____ | _____ | _____ | _____ |
| 4. B _____ | _____ | _____ | _____ | _____ |
| 5. F _____ | _____ | _____ | _____ | _____ |
| 6. f $\sharp$ _____ | _____ | _____ | _____ | _____ |

C. Name the relationship in each case (enharmonically equivalent, parallel, relative and closely related, closely related, foreign).

- | | |
|-------------------------------|---------------------------------|
| 1. D/e _____ | 6. A $\flat$ /C $\flat$ _____ |
| 2. e $\flat$ /G $\flat$ _____ | 7. C $\sharp$ /D $\flat$ _____ |
| 3. A/a _____ | 8. g $\sharp$ /c $\sharp$ _____ |
| 4. d $\sharp$ /G _____ | 9. a $\flat$ /b $\flat$ _____ |
| 5. B $\flat$ /F _____ | 10. c/E $\flat$ _____ |

EXERCISE 18-2

A. Analysis.

1. This excerpt modulates from B $\flat$ to F, its dominant. Label the chords, being sure to show two roman numerals for the common chord. The blanks beneath the music show where the bass changes, but not where the common chord occurs. NCTs in mm. 1 and 8 (only) have been identified for you.



Szymanowska, Nocturne

Moderato

B $\flat$: — — — —

2. Label chords and NCTs in this chorale, which is presented in its entirety. Which two phrases are very similar melodically? What portion of these phrases is harmonized similarly? What chord is emphasized in the first half of the second of these two phrases?



Bach, "Uns ist ein Kindlein heut' geboren"

3. This example, also a complete chorale, is in g minor, although it ends with a major triad (the “Picardy third”). Label chords, but not the NCTs. Notice how often the melody follows an arch contour (inverted in the second phrase). Bracket those arch contours in the melody. If you find any similar contours in the bass, bracket them also.



Bach, “Jesu, der du meine Seele”

4. Label the chords with roman numerals. How do the pickup notes at the beginning of the excerpt help smooth the return to the first key when the repeat is taken?



Mozart, Sonata K. 330, II

21

pp

pp

25

cresc.

f

p

p

5. Label the chords with roman numerals.



Fanny Mendelssohn Hensel, "Das Meer erglänzte weit hinaus."

14

15

wir — sas — sen am ein — sa-men Fi — scher — haus, wir —

20

sas — sen — stumm und al — lei — ne.

6. Listen to this song all the way through. Then list every tonality that is touched on in the song, either by simple tonicization or by modulation. Which (other than tonic) is referred to again at the end of the song? Decide on one or two tonalities (other than tonic) that represent modulations rather than tonicizations. Then label all chords with roman numerals.



Schumann, "Wenn ich in deine Augen seh'," Op. 48, No. 4

Langsam
p

Wenn ich in dei - ne Au - gen seh', so schwin-det all' mein Leid und Weh; doch

p

wenn ich küs - se dei - nen Mund, so werd' ich ganz und gar ge - sund. Wenn

f

Detailed description: The image shows a musical score for a song by Schumann. It consists of two systems of music. Each system has a vocal line (treble clef) and a piano accompaniment (grand staff). The key signature is one sharp (F#), and the time signature is 3/4. The tempo is marked 'Langsam' (Slow) and the dynamics are 'p' (piano) and 'f' (forte). The lyrics are in German. The first system ends with the word 'doch' and the second system ends with 'Wenn'. The piano accompaniment features various chordal textures and melodic lines.

10

ich mich lehn' an dei - ne Brust, kommt's ü - ber mich wie Him - mels - lust; doch wenn du

Ped. *

15

sprichst: Ich lie - be dich, so muss ich wei - nen bit - ter - lich.

ritard. *p*

20

rit. *pp* *ritard.*

7. This excerpt begins in A $\flat$ and ends in g minor, modulating through yet another key in the process. Label all chords, and label the NCTs in the vocal part. The German augmented sixth chord in m. 49 will be discussed in a later chapter.



Mozart, Marriage of Figaro, K. 492, "Voi che sapete"

41

E in — un mo - men - to — tor - no a ge - lar.

This system contains measures 41 through 44. The vocal line (treble clef) begins with a half note E4, followed by quarter notes G4, A4, and B4, then a half note C5, and finally a quarter note B4. The piano accompaniment (grand staff) features a steady eighth-note bass line in the left hand and chords in the right hand.

45

Ri - cer - co un be - ne fuo - ri di me,

This system contains measures 45 through 48. The vocal line continues with a half note D5, followed by quarter notes C5, B4, and A4, then a half note G4, and finally a quarter note F#4. The piano accompaniment continues with similar rhythmic patterns.

50

Non so chi il tie - ne, non so cos' è.

Ger+6

This system contains measures 50 through 53. The vocal line begins with a half note G4, followed by quarter notes A4, B4, and C5, then a half note B4, and finally a quarter note A4. The piano accompaniment features a more complex harmonic texture, including a German augmented sixth chord in measure 52, which is labeled 'Ger+6'.

8. Label the chords with roman numerals. In an Alberti bass accompaniment, such as the left hand in this example, the bass note for each chord is usually considered to be the lowest note struck. So in m. 9 the only *bass* notes are D and C#.



Beethoven, Sonata Op. 10, No. 3, II

The musical score consists of three systems of two staves each. The first system contains measures 9, 10, and 11. Measure 9 has a treble staff with a half note G4 and a bass staff with a half note D3. Measure 10 has a treble staff with a half note A4 and a bass staff with a half note E3. Measure 11 has a treble staff with a half note B4 and a bass staff with a half note F#3. The second system contains measures 12, 13, and 14. Measure 12 has a treble staff with a half note C5 and a bass staff with a half note G3. Measure 13 has a treble staff with a half note D5 and a bass staff with a half note A3. Measure 14 has a treble staff with a half note E5 and a bass staff with a half note B3. The third system contains measures 15, 16, and 17. Measure 15 has a treble staff with a half note F#5 and a bass staff with a half note C4. Measure 16 has a treble staff with a half note G5 and a bass staff with a half note D4. Measure 17 has a treble staff with a half note A5 and a bass staff with a half note E4. Dynamics include *rf* in measures 9, 10, and 11; *cresc.* in measure 15; *f* in measure 16; and *p* in measure 17.

B. Fill in the name of the new key on the second line of each exercise.

1. e: i ii^{o6} v₂⁴ i⁶ iv⁶
 ____: i⁶ v₂⁴ i⁶ ii^{o6} v⁷ i

2. D: I V I⁶ vii^{o6}
 ____: ii^{o6} i₄⁶ V i
 V

3. F: I vii^{o6} I⁶ vi
 ____: ii vii^{o6} I v₅⁶ I

4. g: i v₅⁶ v_{2/iv}⁴ iv⁶ V i⁶
 ____: iv⁶ ii^{o6} v⁷ i

5. b: i ii₂^{o4} v₅⁶ i VI iv⁶
 ____: ii⁶ i₄⁶ v⁷ I
 V

6. E^b: I ii⁶ V vi
 ____: iv ii₅^{o6} V VI iv V i

7. A: I v₃⁴ I⁶ v⁶
 ____: IV⁶ v₅⁶ i ii₅^{o6} i₄⁶ v⁷ i
 V

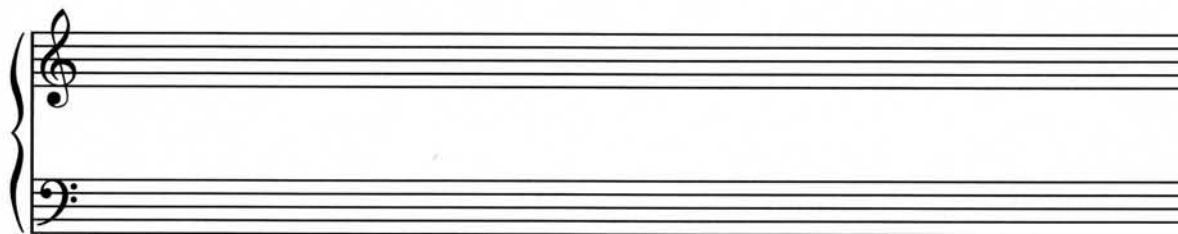
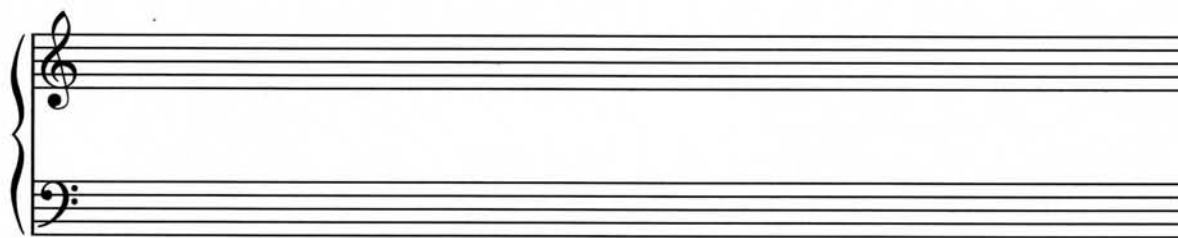
8. c: i v⁷ VI iv
 ____: vi IV⁶ (I₄⁶) ii₅⁶ V I

- C. List the diatonic triads that could serve as common chords between each pair of keys. In minor keys, assume the usual chord qualities: i, ii°, III, iv, V, VI, vii°.

ex. First key, C: I iii V vi
 Triads: C e G a
 Second key, G: IV vi I ii

1. First key, E:
 Triads:
 Second key, f#:
2. First key, D♭:
 Triads:
 Second key, G♭:
3. First key, c:
 Triads:
 Second key, B♭:
4. First key, f:
 Triads:
 Second key, A♭:
5. First key, B:
 Triads:
 Second key, F#:
6. First key, A♭:
 Triads:
 Second key, B♭:

- D. Choose two of the progressions from Part B. Arrange one for SATB chorus and the other for SAB chorus. Activate the texture with NCTs and/or arpeggiations. Arrange the metric and rhythmic structure so that the last chord comes on a strong beat. Label chords and NCTs.



E. Harmonize the following chorale tunes for SATB chorus.

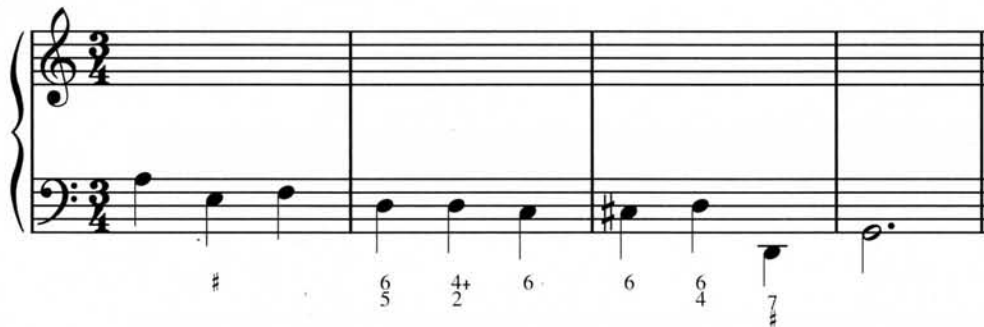
1. In the first phrase, modulate from i to III. The second phrase should return to i.



2. Modulate from I to vi in phrase 1. Return to I in phrase 2.



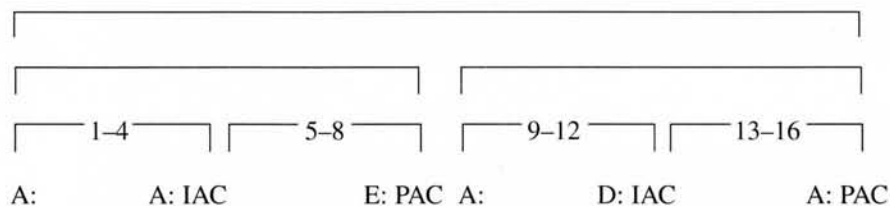
F. Analyze the chords specified by this figured bass and then make an arrangement for SATB chorus.



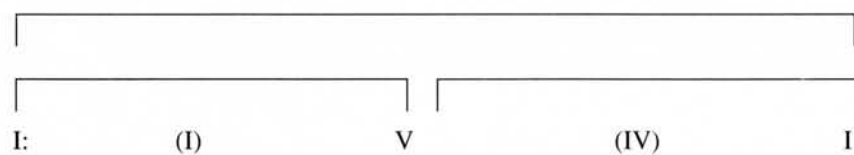
- G. Continue this soprano/bass framework, analyzing the implied harmonies. Phrase 1 (mm. 1–4) should end with a HC in *f*. Phrase 2 (mm. 5–8) should end with a PAC in *A $\flat$* . The resulting form is a modulating period. Then arrange for some combination of instruments in your class, filling in as many inner parts as needed. Elaborate your final version with NCTs and arpeggiations.

f: i vii°6 i6

- H. Compose a double period for some solo instrument with piano accompaniment. As the diagram indicates, the first phrase stays in A, whereas the second tonicizes (or modulates to) E. Phrase 3 returns briefly to A but turns quickly to D. The fourth phrase returns to A for the final cadence.



Or, in the larger view:

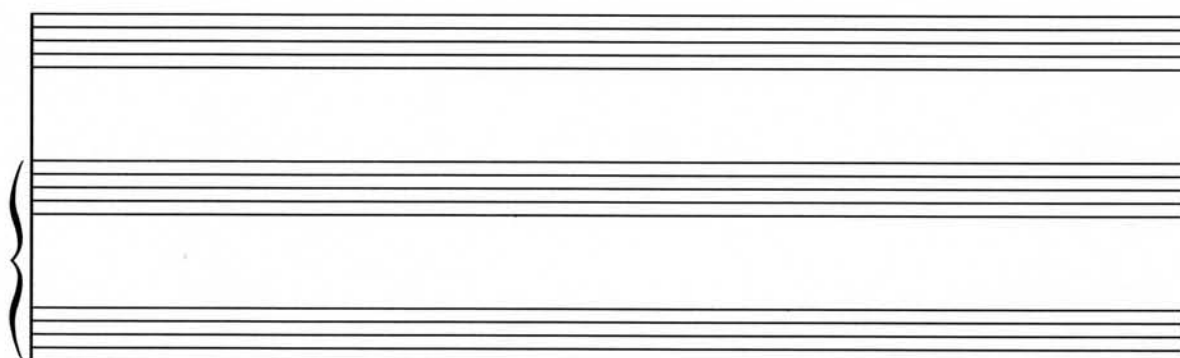
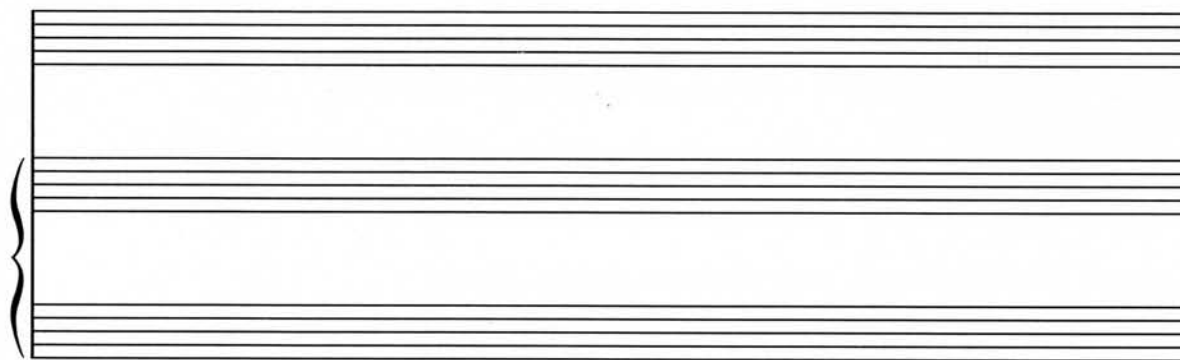


The beginning of phrase 1 is given below. Compose the soprano/bass framework first.

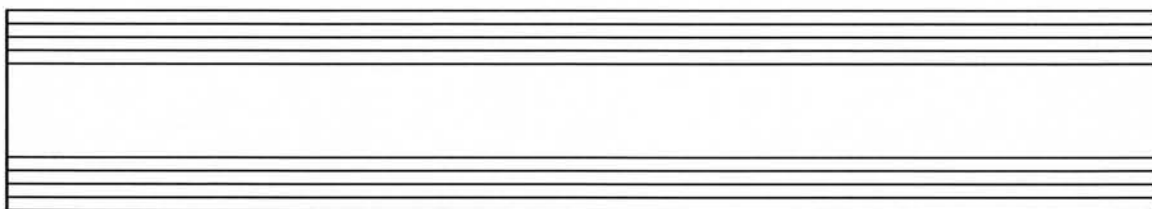
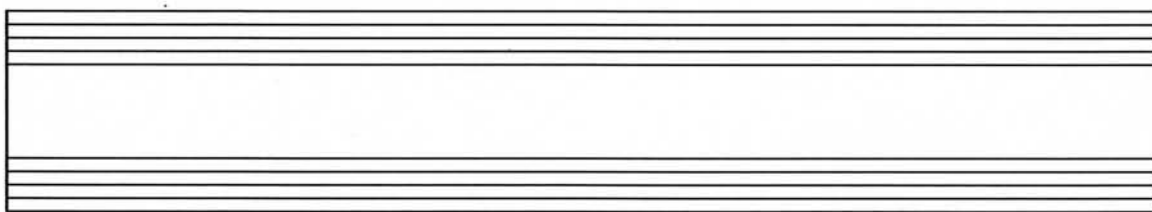
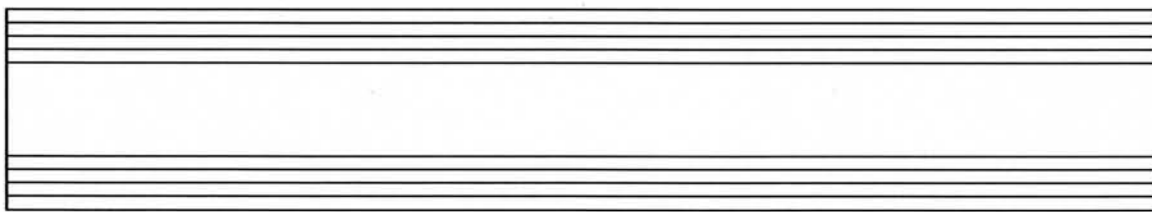
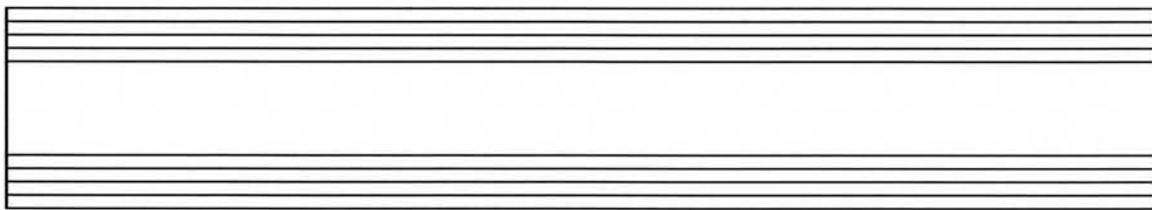
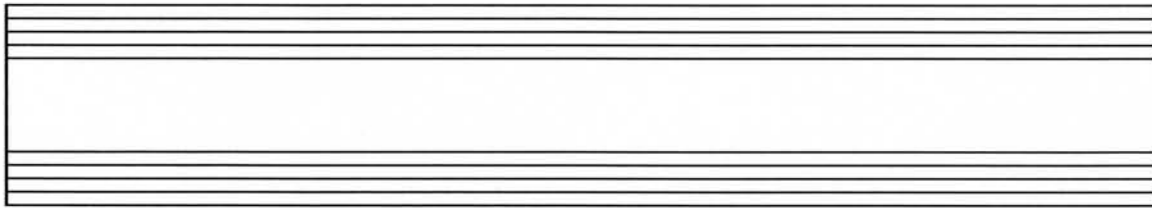
Andante con moto

The musical notation shows the beginning of phrase 1 in A major, 2/4 time. The tempo is *Andante con moto*. The piano part begins with a *p* (piano) dynamic. The melody begins with a *sf* (sforzando) dynamic. The piano accompaniment consists of a steady eighth-note pattern in the right hand and a dotted half-note pattern in the left hand.

Empty musical staves for composing the soprano/bass framework. The staves are arranged in two systems, each with a treble clef and a bass clef, and a grand staff bracket on the left.



- I. Using a text of your own choosing, compose a passage for chorus (three or four parts). If in major, it should have a tonal scheme of I–vi–I–ii–I. If in minor, use i–VI–i–iv–i.



Chapter 19

SOME OTHER MODULATORY TECHNIQUES

EXERCISE 19-1

A. Analysis. (Note: Some of the modulations below might be of the diatonic common-chord type.)

1. a. What three keys are implied in this excerpt?
- b. How would you explain the modulations?
- c. Continue the two-voice reduction below the score but avoid the change of register in m. 36.



Beethoven, Sonata Op. 10, No. 1, I

Textural reduction

2. There are two modulations in this excerpt. Label chords and NCTs. At what point does Bach not follow the conventions of spacing discussed on pages 60–61? What is achieved by the spacing he uses? Where is there a sonority used in an unusual bass position? How is the reason for this bass position related to the question about the spacing?



Bach, "Warum betrübst du dich"

Two systems of musical notation for a piece by Bach. The first system consists of two staves (treble and bass clef) with a common time signature. The second system also consists of two staves, with a measure number '5' above the first staff. The notation includes various musical symbols such as notes, rests, and accidentals.

3. What two keys are found in this excerpt? How are they related? What is the best way to describe the modulation? Label the chords with roman numerals.



Hüllmandel, "Un Poco Adagio"

Three systems of musical notation for a piece by Hüllmandel. The first system has two staves with a measure number '21' above the first staff and a dynamic marking 'fp'. The second system has two staves with a measure number '25' above the first staff and dynamic markings 'f', 'fp', and 'mp'. The third system has two staves with a dynamic marking 'p' and the instruction 'sempre legato cresc.'. The notation includes various musical symbols such as notes, rests, and accidentals.

4. Two distantly related keys are found in this passage. Label chords and NCTs.



Schubert, "Auf dem Flusse," Op. 89, No. 7

The musical score is for Schubert's "Auf dem Flusse," Op. 89, No. 7. It is in G major and 3/4 time. The score is divided into two systems. The first system starts at measure 14 and ends at measure 19. The second system starts at measure 20 and ends at measure 24. The vocal line is in the upper staff, and the piano accompaniment is in the lower staff. The lyrics are in German. The piano part features a steady eighth-note accompaniment in the right hand and a more active bass line in the left hand. The key signature has one sharp (F#). The tempo is marked "Allegretto".

14 15 *sehr*

Mit har - ter, star - rer Rin - de hast du dich ü - ber - deckt, liegst

pp

leise 20

kalt und un - be - weg - lich im San - de aus - ge - streckt.

ppp

5. This excerpt modulates from F major to what other key? Of excerpts 1 through 4, which modulation most closely resembles this one? In what ways? (The chords in mm. 35–36 are labeled for you because some of them involve concepts discussed in later chapters.)



Mozart, Marriage of Figaro, K. 492, “Voi che sapete”

29 30

Sen - to un af - fet - to pien de de - sir,

35

Ch'o - ra è di - let - to, ch'o - ra è mar - tir.

i Ger⁺6 V

40

Ge - lo, e poi sen - to l'al - ma av - vam - par,

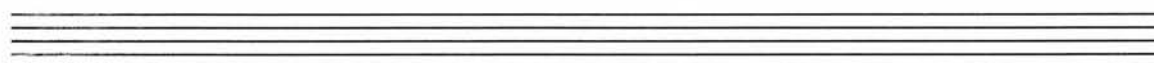
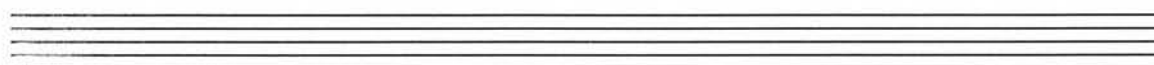
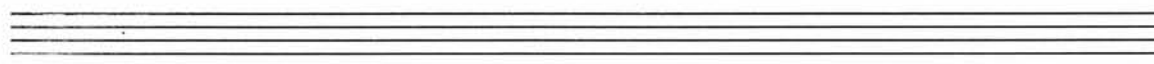
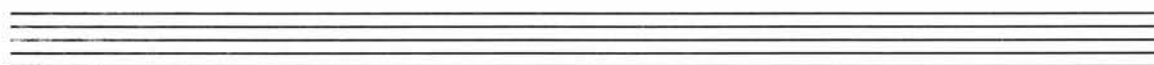
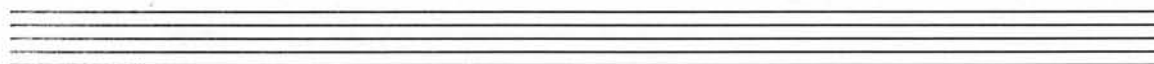
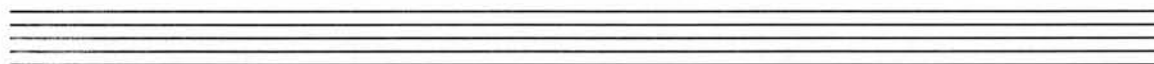
- B. Analyze the harmonies implied by this soprano/bass framework. Add an alto part to create a three-part texture. Embellish the texture with a few NCTs, including a 4-3 suspension. Identify the modulatory technique used.

Exercise B shows a musical framework in 4/4 time. The soprano line (treble clef) begins with a half note G4, followed by quarter notes A4, B4, and C5. It then has a half note D5, followed by a half note E5 with a sharp sign, and ends with a half note F#5. The bass line (bass clef) begins with a half note G3, followed by quarter notes F#3, E3, and D3. It then has a half note C3, followed by a half note B2 with a sharp sign, and ends with a half note A2. The key signature has one flat (Bb), and the time signature is 4/4.

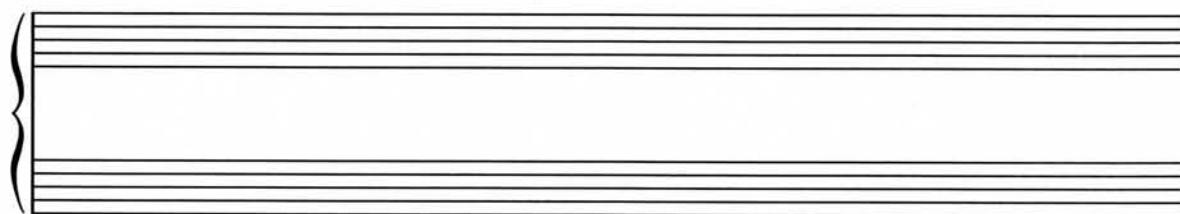
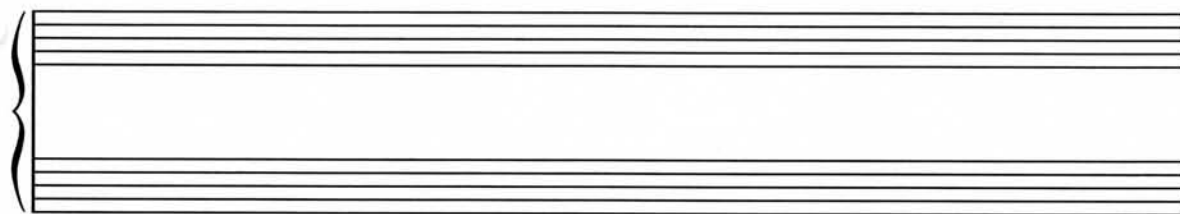
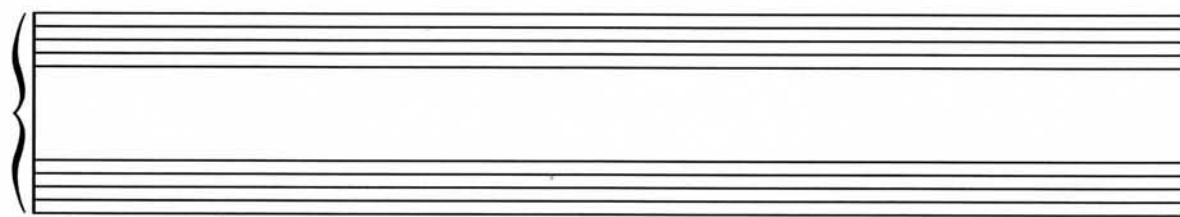
- C. Analyze the implied harmonies and then add alto and tenor parts. Enliven the texture with NCTs and/or arpeggiations. Identify the modulatory technique used.

Exercise C shows a musical framework in 3/4 time. The soprano line (treble clef) begins with a half note G4, followed by quarter notes A4 and B4. It then has a half note C5, followed by a half note D5, and ends with a half note E5. The bass line (bass clef) begins with a half note G3, followed by quarter notes F#3 and E3. It then has a half note D3, followed by a half note C3, and ends with a half note B2. The key signature has one flat (Bb), and the time signature is 3/4.

- D. Use the framework below as the basis for a repeated period. The second phrase should begin and end in D major (phrase modulation). Compose a first ending that modulates back to F using some modulatory technique discussed in this chapter. Include NCTs and arpeggiations in your final version. Score for piano or some combination of instruments found in your class.



- E. The framework below is also to be used as the basis for a repeated period for piano (or other instruments). The first phrase is in $E\flat$, and the second should be a sequential repetition of the first, in $A\flat$. Write out the repeat of phrases 1 to 2. Use more embellishments in the repeat than you used in the first eight measures.



Chapter 20

BINARY AND TERNARY FORMS

EXERCISE 20-1

- A. Diagram this excerpt down to the phrase level and name the form. Assume all phrases are four measures long. Also, answer the following questions:
1. What is the form of mm. 1–8?
 2. Find and label a $\text{vii}^{\text{o}4}_3/\text{V}$ and a $\text{vii}^{\text{o}4}_3/\text{vi}$.
 3. Why do you think Mozart chose to use a double stop in the violas in m. 14? (A double stop is a technique that allows a stringed instrument to play two notes at once.)



Mozart, *Eine kleine Nachtmusik*, III

Allegretto

The musical score is for the third movement of Mozart's *Eine kleine Nachtmusik*, marked *Allegretto*. It is in 3/4 time and G major. The score is divided into three systems. The first system (measures 1-8) is marked *f* (forte). The second system (measures 9-14) is marked *p* (piano) and includes a *cresc.* (crescendo) marking. The third system (measures 15-18) is marked *f* (forte). The score includes various musical notations such as trills (tr), slurs, and dynamic markings.

B. Name the form of this piece (do not diagram phrases and cadences). Watch out for written-out repeats. Also, do or answer the following:

1. Label the chords in mm. 5 to 8.
2. What chord forms the basis of mm. 33 to 39?
3. Analyze the last chord in m. 34.
4. In what measures does the “boom-chick-chick” accompaniment drop out?



Chopin, Mazurka Op. 67, No. 3

Allegretto ♩ = 144

p rubato

tr

Red. * *Red.* * *Red.* * *Red.* *

5 *tr* 10 *f*

Red. * *Red.* * *Red.* * *Red.* * *Red.* * *Red.* *

tr *tr* *cresc.* *< sf*

Red. * *Red.* * *Red.* *

15 *poco rit.* *tr* *ff* *a tempo* *p*

Red. * Red. * Red. * Red. *

20 *tr* *Red.* * *Red.* * *Red.* * *Red.* *

25 *tr* *Red.* * *Red.* * *Red.* * *Red.* *

30 *poco rit.* *tr* *< sf* *ff* *a tempo* *ten.* *sf* *pp*

Red. * Red. * Red. *

35 *ten.* *sf* *pp* *ten.* *sf* *ten.*

Red. * Red. * Red. *

40 *riten.* *a tempo* *p* *tr* 45

Red. * Red. * Red. * Red. * Red. *

50 *tr*

Red. * Red. * Red. * Red. * Red. * Red. *

55 *poco rit.* *tr* *tr* *cresc.* *< sf* *ff*

Red. * Red. * Red. * Red. * Red. *

C. This excerpt is the first part of a scherzo and trio (a scherzo is much like a minuet, only faster). The trio is not shown.

1. Diagram this scherzo at the phrase level. The key implied by mm. 17 to 20 is d minor, not A major.
2. Identify the form. Do not be misled by the written-out repeat in mm. 9 to 16—this is a two-reprise form.
3. Find two examples of chromatic mediant relationships.



Beethoven, Violin Sonata Op. 24, III

Scherzo

La prima parte senza repetizione
Allegro molto

5

10

15

20

25

p

p

p

p

cresc.

cresc.

Fine

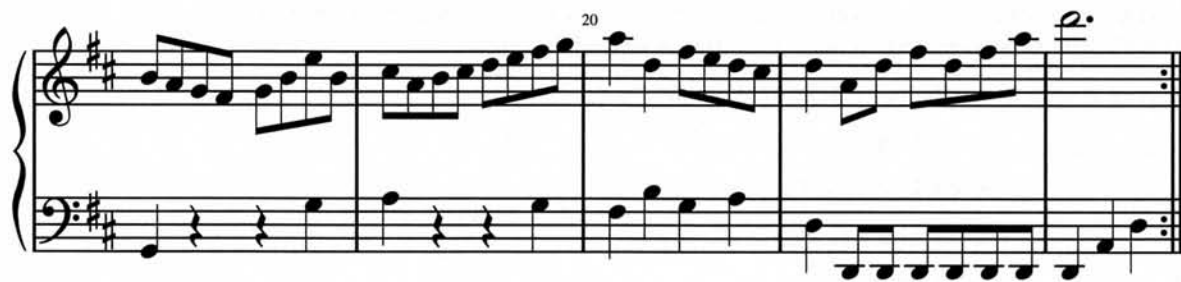
D. Diagram this piece down to the phrase level and name the form. Also, answer the following questions:

1. Where is a sequence involving both hands? Bracket it.
2. What does the G#4 in m. 6 accomplish?
3. What material in mm. 10 to 22 is obviously derived from mm. 1 to 9.



March from the *Notebook for Anna Magdalena Bach*

The image displays the musical score for the March from the Notebook for Anna Magdalena Bach, measures 1 through 22. The score is written for piano in G major (one sharp) and common time (C). It consists of three systems of grand staves (treble and bass clef joined by a brace).
- The first system contains measures 1 through 4.
- The second system contains measures 5 through 9. Measure 5 is marked with a '5' above the treble staff. Measure 7 features a trill (tr) on the treble staff.
- The third system contains measures 10 through 14. Measure 10 is marked with a '10' above the treble staff. Measures 10-14 show a sequence of eighth-note patterns in both hands, which is a key structural element of the piece.
The notation includes various musical symbols such as notes, rests, accidentals, and dynamic markings.



E. This excerpt, the final movement of a piano sonata, is a minuet and trio, although Haydn did not label it as such.

1. Diagram phrases and cadences, treating the minuet and trio as separate pieces. Be sure to play or listen to the music because some of the returns are disguised. (A melodically varied return of phrase *a* is still labeled phrase *a*, not phrase *a'*.)
2. Name the forms of the minuet and the trio.
3. In performance, the trio is followed by a return to the minuet (although the repeats are omitted), ending at the fermata. What is the form of the movement as a whole?
4. Find the one phrase in this movement that is not four measures long and compare it to its earlier four-measure version. How does Haydn extend this phrase?
5. Provide roman numerals for the following chords:
 - a. _____ m. 17, beats 1 to 2 (in E $\flat$)
 - b. _____ m. 19, beat 3 (in E $\flat$)
 - c. _____ m. 35, beat 3 (in A $\flat$)
 - d. _____ m. 44 (in A $\flat$)
 - e. _____ m. 46, beat 3 (in A $\flat$)



Haydn, Piano Sonata No. 38, III

Finale
Allegro

f

p

f

p

tr tr w 20

p

25

f

(Trio)

dolce

30

(w) tr

35

40

45

(w) tr 50

Da Capo
sin al segno

Detailed description: This is a piano score for a piece in B-flat major, spanning measures 1 to 50. The score is written for a grand piano with a treble and bass staff. The key signature has two flats (B-flat and E-flat). The time signature is not explicitly shown but appears to be 4/4. The score includes various musical notations: trills (tr), slurs, accents, and dynamic markings. Measure numbers 20, 25, 30, 35, 40, 45, and 50 are indicated. A 'Trio' section begins at measure 30, marked 'dolce'. A 'Da Capo sin al segno' instruction is placed at the end of the score, with a repeat sign and a fermata over the final measure (measure 50). The notation includes eighth and sixteenth notes, chords, and rests.

Part V

Chromaticism 2

Chapter 21

MODE MIXTURE

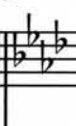
EXERCISE 21-1

A. Notate these chords in the specified inversions. Include key signatures.

1	2	3	4	5
				
A: ii° ₂ ⁴	F: vii° ⁷	Db: i° ₄ ⁶	C: bVI	E: ii° ₆ ⁶

6	7	8	9	10
				
Ab: vii° ₅ ⁶	Eb: iv	f#: I	D: bIII	G: iv° ₆ ⁶

B. Label these chords. Include inversion symbols.

1	2	3	4	5
				
F: _____	D: _____	Bb: _____	A: _____	Ab: _____

6 7 8 9 10

G: C: E: d: Eb:

C. Analysis.

1. Label the chords with roman numerals. NCTs have been put in parentheses (other interpretations are possible). Which chord could be considered an example of secondary mode mixture?



Bach, "Herr Jesu Christ, wahr'r Mensch und Gott"

C:

2. Label the chords and NCTs. Circle the roman numerals of any borrowed chords.



Schumann, "Ich grolle nicht," Op. 48, No. 7

Nicht zu schnell *mf*

Ich grol-le nicht, und wenn das Herz auch bricht,

3. Label the chords, circling the roman numerals of any borrowed chords. Label the cadence type.



Brahms, Symphony No. 3, Op. 90, II

4. Schumann uses mode mixture in this passage to modulate from E to its minor dominant. Label all the chords and the common-chord modulation.



Schumann, "Liebeslied," Op. 51, No. 5

7

wie blickt so trau - rig die

E:

Welt mich an.

10

fp

p

fp

p

fp

In mei - nem Sin - ne woh - net mien Freund nur,

5. In the passage below, Mozart uses mode mixture twice to move from E major to the very distant key of c minor and then uses mode mixture twice more to return to E major. Label all chords, including the common-chord modulations from E to c and back. (Remember that the bass voice is always the lowest-sounding voice, so that the bass note in m. 221, for example, is the cello G, not the piano Eb.)



Mozart, Piano Trio K. 542, I



220

Measures 220-224 of a musical score in A major (three sharps). The score is written for voice and piano. The piano part features a complex texture with multiple voices in both hands, including arpeggiated chords and moving lines. The voice part has a melodic line with some rests. Dynamics include piano (*p*) and a crescendo (*cresc.*) starting in measure 223.

225

Measures 225-229 of the musical score. The piano part continues with arpeggiated figures and moving lines. The voice part has a melodic line with some rests. Dynamics include piano (*p*), crescendo (*cresc.*), and forte (*f*). A trill (*tr.*) is marked in measure 228.

Measures 230-234 of the musical score. The piano part features a complex texture with multiple voices in both hands, including arpeggiated chords and moving lines. The voice part has a melodic line with some rests. Dynamics include piano (*p*) and a trill (*tr.*) in measure 233.

6. This excerpt modulates from $A\flat$ to some other key and then back to $A\flat$. Label all chords and NCTs.



Schubert, Impromptu Op. 90, No. 1

42

p

n n

45

p

mf

decresc.

50

pp

53

54

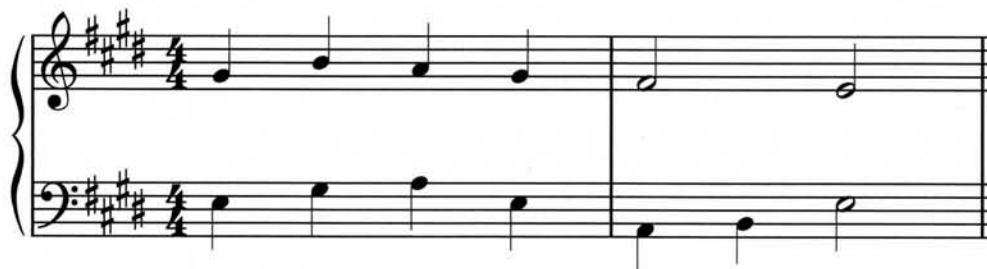
55

p

This musical score is for a piano piece, spanning measures 53 to 55. The key signature is B-flat major (two flats) and the time signature is 4/4. The score is written for piano, with a grand staff consisting of a treble and a bass clef. In measure 53, the treble staff features a half-note chord (F4, Bb4) tied to the next measure, and the bass staff has a half-note chord (Bb3, F4). In measure 54, the treble staff has a half-note chord (F4, Bb4) tied to the next measure, and the bass staff has a half-note chord (Bb3, F4). In measure 55, the treble staff has a half-note chord (F4, Bb4) tied to the next measure, and the bass staff has a half-note chord (Bb3, F4). The piece concludes with a final chord in measure 55, consisting of a half-note chord (F4, Bb4) in the treble and a half-note chord (Bb3, F4) in the bass. The dynamic marking *p* (piano) is present in measure 54.

D. Part writing. Analyze the chords implied by the soprano/bass framework. Then fill in alto and tenor parts. Be sure to use the specified mode mixture.

1. Include a $ii^{\circ 6}_5$.



2. Include a iv^6 and a $ii^{\circ 4}_3$.



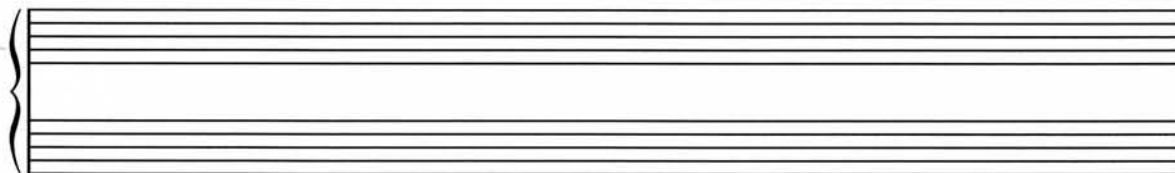
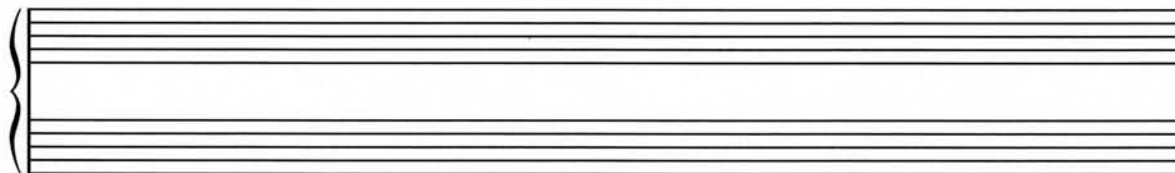
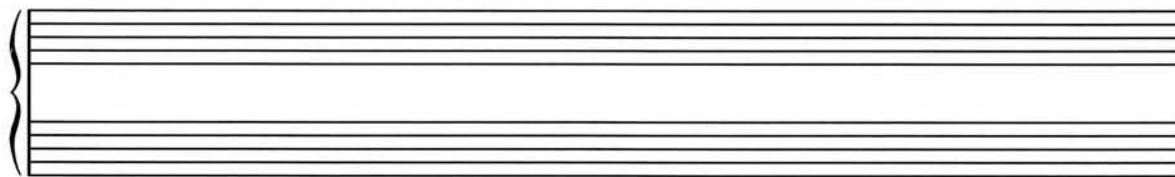
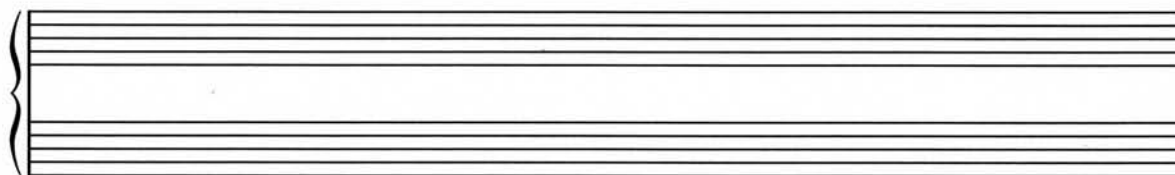
- E. The first two phrases of a chorale melody are given below. A bass line is included for the first phrase. Complete the four-part texture, including in the second phrase a modulation to $B\flat$ and a borrowed iv^6 chord. Label all chords and circle the roman numeral of the borrowed chord. Activate the texture with NCTs and/or arpeggiations.

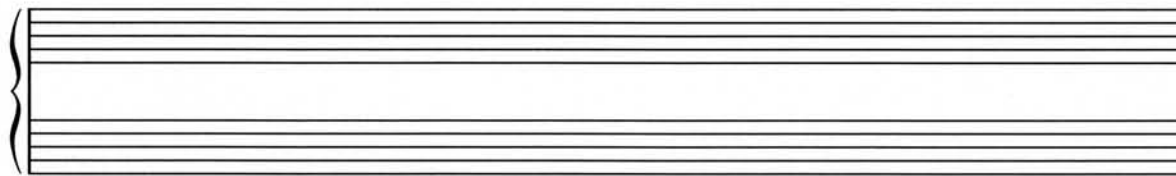
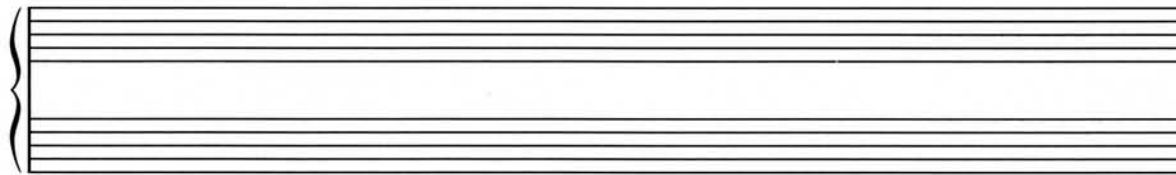
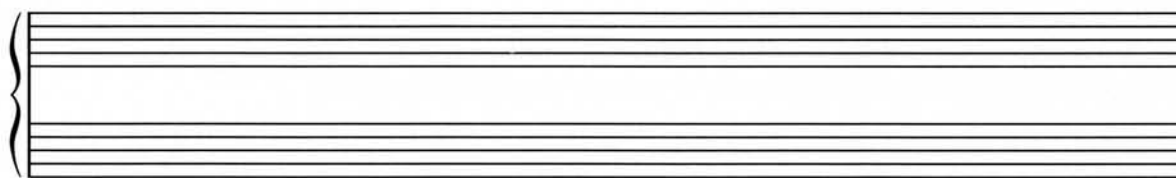
- F. Analyze the harmonies specified by the following figured bass and then make an arrangement for SATB chorus. This passage modulates.

- G. Arrange the first modulation below for SAB chorus and the second one for SATB chorus. Activate the textures with NCTs and/or arpeggiations. Arrange the metric and rhythmic structure so that the last chord comes on a strong beat. Label chords and NCTs.

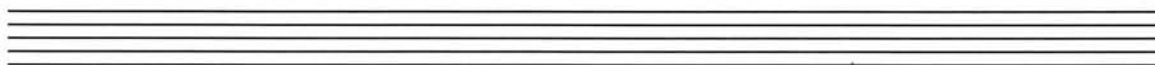
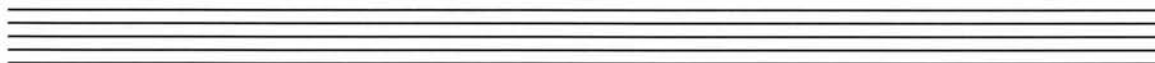
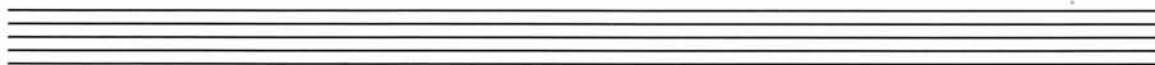
1. D: I V I⁶ vi $\overbrace{\text{iv}^6}^{\text{F: ii}^6}$ V_2^4 I⁶ V_3^6/V $\underbrace{\text{I}_4^6 \text{ V}}_{\text{V}}$ I

2. F: I $\text{vii}^{\circ 6}_5$ I⁶ V_3^6 I $\text{vii}^{\circ 4}_3/\text{IV}$ $\overbrace{\text{iv}^6}^{\text{bb: i}^6}$ iv $\underbrace{\text{i}_4^6 \text{ V}}_{\text{V}}$ i





H. Use the framework below as the basis for the beginning of a passage that starts in F major and modulates to D $\flat$ major by means of mode mixture. Score for piano or for some combination of instruments in your class.



Chapter 22

THE NEAPOLITAN CHORD

EXERCISE 22-1

A. Label each chord. Include inversions, if appropriate.

Measures 1-5 of Exercise 22-1. Measure 1: Treble clef, key signature of one flat (Bb), chord of F major (F4, A4, C5). Measure 2: Treble clef, key signature of two flats (Bb, Eb), chord of C minor (C4, Eb4, Gb4). Measure 3: Treble clef, key signature of two sharps (F#, C#), chord of D major (D4, F#4, A#4). Measure 4: Treble clef, key signature of three flats (Bb, Eb, Ab), chord of Bb major (Bb4, D5, F5). Measure 5: Treble clef, key signature of one sharp (F#), chord of E major (E4, G#4, B4).

F: _____ c: _____ D: _____ bb: _____ e: _____

Measures 6-10 of Exercise 22-1. Measure 6: Treble clef, key signature of two sharps (F#, C#), chord of D major (D4, F#4, A#4). Measure 7: Treble clef, key signature of three sharps (F#, C#, G#), chord of E major (E4, G#4, B4). Measure 8: Treble clef, key signature of one flat (Bb), chord of D minor (D4, Fb4, Ab4). Measure 9: Treble clef, key signature of two sharps (F#, C#), chord of F# major (F#4, A#4, C#5). Measure 10: Treble clef, key signature of three flats (Bb, Eb, Ab), chord of Ab major (Ab4, Bb4, D5) with a trill (tr) over the Ab4.

D: _____ E: _____ d: _____ f#: _____ Ab: _____

B. Notate each chord. Include key signatures.

1 2 3 4 5



a: N⁶ f: N B^b: ii^ø₂⁴ A: vii^ø₇/IV c#: N⁶

6 7 8 9 10



B^b: V⁴₃/ii g: vii^ø₆/V G: N⁶ E^b: bIII b: N⁶

C. Analysis.

1. Label chords and NCTs.



Chopin, Prelude Op. 28, No. 20

2. Label the chords in this excerpt.



Beethoven, Sonata Op. 27, No. 2, I

c#:

3. Label the chords in this excerpt. Where does the most unusual progression occur? (Don't let Beethoven's interesting use of $\hat{6}$ and $\hat{7}$ in mm. 1–3 confuse you—there is really just one chord in these three measures.)



Beethoven, Violin Sonata, Op. 47, II, Variation 3

Minore

p

cresc. *sf* *p* *fp espress.*

cresc. *sf* *p* *espress.*

cresc. *p*

Red. *

4. This beautiful and moving theme illustrates the expressive power of the Neapolitan chord. Label all the chords and NCTs. The B $\sharp$ in m. 6 is not a chord tone but instead delays the arrival of C $\sharp$. By the time the C $\sharp$ arrives, however, the harmony has moved on. Does something similar happen in m. 8, or is the A $\sharp$ a chord tone? Be sure to listen to or play this example.



Mozart, Piano Concerto, K. 488, II

Andante

5

10

15

5. At this point in Schubert's famous "Erlkönig," the evil personality of the title character is finally expressed, with the help of the Neapolitan triad. Label the chords.



Schubert, "Erlkönig," Op. 1

113 115

"Ich

d:

lie - be dich, mich reizt dei - ne schö - ne Ge - stalt; und

pp

120

bist du nicht wil - lig, so brauch ich Ge - walt."

fff

6. At the end of the song, the father's frantic ride comes to an end, and we hear the Neapolitan again. Label the chords.



Schubert, "Erlkönig," Op. 1

accelerando

134 135

grau - set's, er rei - tet ge - schwind, er hält in

cresc.

Ar - men das äch - zen - de Kind,

ff

er - reicht den Hof mit Müh und

fz *fz*

145 *Recit.*

Noth; in sei-nen Ar - men das Kind war todt.

Andante

fp *pp* *p* *f*

7. Mode mixture is involved in this excerpt in modulations to the key of the Neapolitan and back again. Label all chords, including common chords for both modulations.



Beethoven, Rondo, Op. 51, No. 1

103

ri - tar - dan -

105

do *pp*

110

legato

cresc.

115

f

120

sfp

f

fp

3

v⁷

I

D. For each exercise, provide the correct key signature and notate the specified chords preceding and following the N^6 . Use the given three- or four-part texture in each case.

1 2 3 4

b: iv N^6 V e: VI N^6 V^4_2 c: iv N^6 i^6_4 V f#: i^6 N^6 V^4_2

5 6 7 8

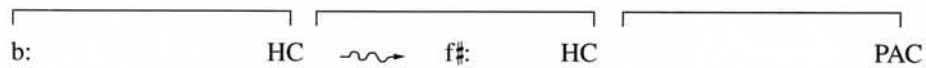
d: i N^6 V c#: VI N^6 $vii^\circ 7/V$ g: iv N^6 $vii^\circ 7/V$ f: V^7/N N V^7

E. Analyze the harmonies implied by the soprano/bass framework. Then fill in inner voices to make a four-part texture. Each exercise should contain a Neapolitan chord.

1 2

d: b:

H. Use the framework below as the first phrase of a three-phrase excerpt having the following structure:



Phrase 2 modulates to f# minor. Phrase 3 remains in f# minor and contains a Neapolitan triad. After completing the framework, make a more elaborate version for piano or for some combination of instruments in your class.

A musical score for the song "The Rose Tree". The score is written for a piano, with a treble and bass staff. The key signature is one sharp (F#), and the time signature is 3/4. The melody is in the treble staff, and the bass staff provides a simple accompaniment. The score consists of four measures. The first measure has a treble staff with a half note G4 and a bass staff with a half note G2. The second measure has a treble staff with a half note A4 and a bass staff with a half note G2. The third measure has a treble staff with a half note B4 and a bass staff with a half note G2. The fourth measure has a treble staff with a half note C5 and a bass staff with a half note G2. The score is written in a simple, clear style, suitable for a children's songbook.

- I. Make a setting of the following text or another text of your choice for three-part chorus. Include in your setting examples of the following:

Neapolitan triad

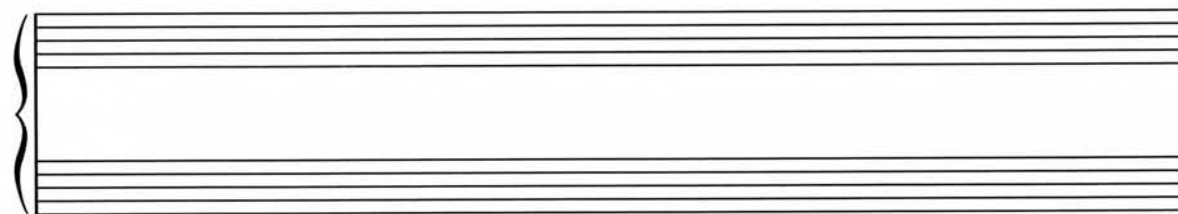
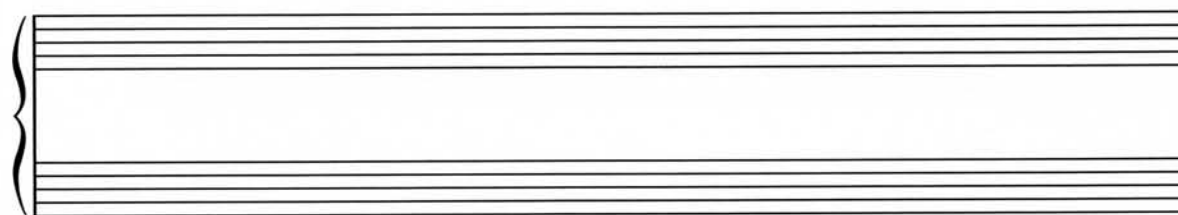
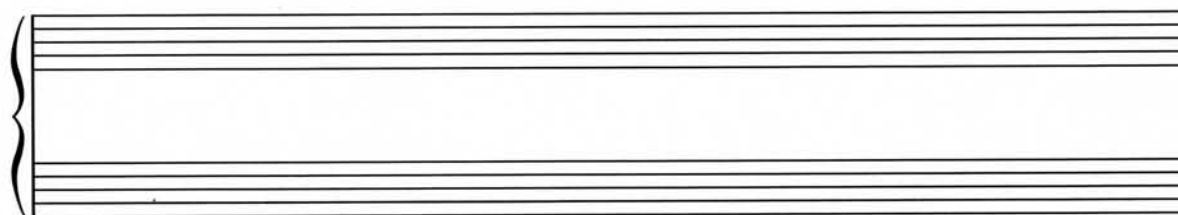
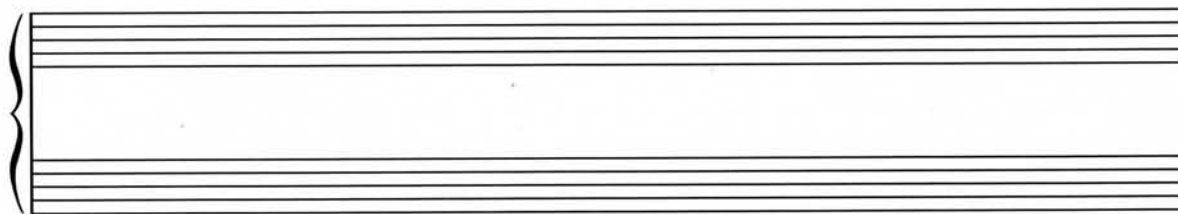
Mode mixture

Common-chord modulation

Your composition should begin and end in the same key. Be sure to include a harmonic analysis.

A storm of white petals,
Buds throwing open baby fists
Into hands of broad flowers.

—From “The Year,” in *Cornhuskers* by Carl Sandburg, copyright 1918 by Holt, Rinehart and Winston, Inc.; renewed 1946 by Carl Sandburg. Reprinted by permission of Harcourt Brace & Company.

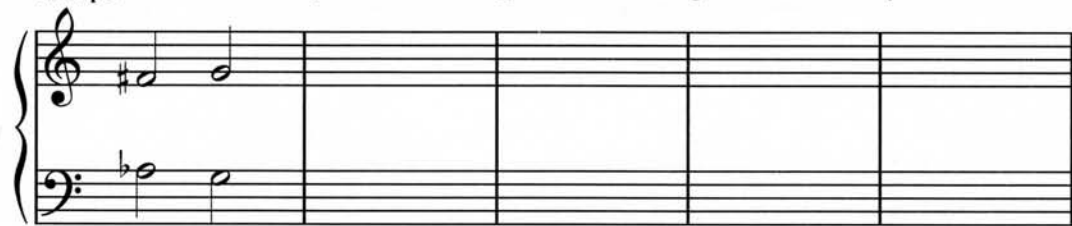


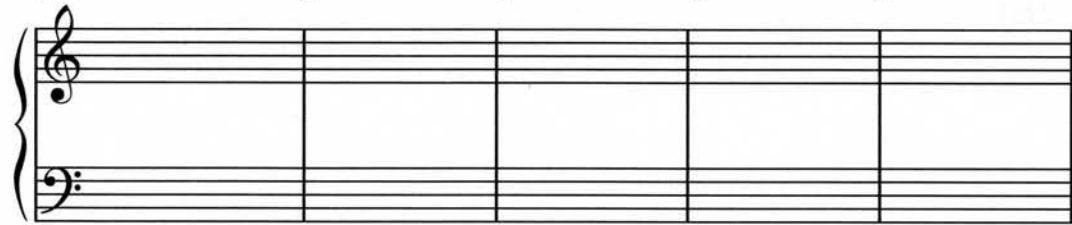
Chapter 23

AUGMENTED SIXTH CHORDS 1

EXERCISE 23-1

- A. For each exercise below, provide the key signature, and then notate $\sharp 4$ to $\hat{5}$ on the top staff and $\hat{6}$ to $\hat{5}$ (or, in major, $\flat \hat{6}$ to $\hat{5}$) on the bottom staff. Finally, show an analysis of the implied chords as in the example.

Example	1	2	3	4
				
C: +6 V	e:	B $\flat$:	a:	G:

5	6	7	8	9
				
d:	f $\sharp$:	E $\flat$:	g:	A:

B. Label each chord, using inversion symbols where appropriate.

1 2 3 4 5

c#: b: f: Eb: D: _____

6 7 8 9 10

E: Db: a: g: F: _____

C. Notate each chord in close position. Augmented sixth chords should be in their customary bass position ($\hat{6}$ in the bass in minor, $\flat\hat{6}$ in major). Include key signatures.

1 2 3 4 5

Bb: Fr+6 d: N6 bb: Ger+6 Ab: It+6 B: ii $\hat{6}$ ₅

6 7 8 9 10

f#: It+6 A: Ger+6 c: Fr+6 G: vii $\hat{7}$ /vi e: Ger+6

D. Label the chords in each example below. Also, discuss the details of the resolution of each augmented sixth chord. Do $\sharp 4$ and $\flat 6$ follow their expected resolutions to $\hat{5}$? How are parallel 5ths avoided in the Ger $^{+6}$ resolution(s)?

- Measures 2 to 5 of this excerpt are in d minor, although the key of VI ($B\flat$) is strongly tonicized in mm. 2 to 3 (the second chord in m. 2 should be analyzed as a secondary function of VI). Common-chord modulations to two other keys occur in mm. 5 to 11.



Schumann, "Sehnsucht," Op. 51, No. 1

p 2

Ich blick' _____ in mein Herz _____ und ich blick' _____ in die Welt, bis vom

p

f 5 *p*

schwim - mem - den Au - ge die Thrä - ne mir fällt; wohl

leuch - tet die Fer - ne mit gol - de - nem Licht, doch

p

This system contains the first two measures of the piece. The vocal line is in G major, with a key signature of one sharp (F#). It features eighth-note patterns and a melodic line with two slurs, each marked with a '2' indicating a second ending or a specific fingering. The piano accompaniment consists of a steady eighth-note chordal texture in the right hand and a simple bass line in the left hand.

hält mich der Nord, ——— ich er - rei - che sie nicht. O die

This system contains measures 3 and 4. The vocal line continues with eighth-note patterns and a melodic line with a slur. The piano accompaniment maintains the eighth-note chordal texture in the right hand and the simple bass line in the left hand.

Schran - ken so eng, ——— und die Welt ——— so weit,

10

This system contains measures 5 and 6. The vocal line begins with a measure rest, indicated by the number '10' above the staff. The piano accompaniment continues with the eighth-note chordal texture in the right hand and the simple bass line in the left hand.

2. This excerpt begins and ends in g minor, but it contains modulations to two other keys (or tonicizations of two other chords). How do those keys relate to the “parent” tonality of g minor?



Schumann, “Die beiden Grenadiere,” Op. 49, No. 1

23 *p* 25

wohl ob der kläg - li - chen Kun - de. Der Ei - ne sprach: “Wie weh wird

mir, wie brennt mei - ne al - te Wun - de!” Der An - dre sprach: “Das Lied ist

30 aus, auch ich möcht’ mit dir ster - ben, doch hab’ ich Weib und

35 *mf*

Kind zu Haus, die oh - ne mich ver - der - ben." "Was schert mich Weib,

3. This very chromatic excerpt from an early Mozart string quartet contains an augmented sixth chord that resolves quite irregularly. Before you begin to label the chords, review the use of the subdominant chord in minor on pp. 64–65 and 243.



Mozart, String Quartet, K. 168, II (piano arrangement)

C:

4. This excerpt begins in C major and modulates. Where is there a 9-8 suspension?



Haydn, Quartet Op. 74, No. 3, II

30

p

p

p

35

f

5. This excerpt modulates to the dominant, passing through another key on the way. The first chord in m. 8 is spelled enharmonically (imagine a $G\sharp$ instead of the $F\sharp$). Be sure to analyze a chord on beat 2 of m. 8.



Schumann, Tragödie, Op. 136, No. 3

Rasch und mit Feuer *f sf*

Ent - flich' mit mir und sei mein Weib und ruh' an

sf f

Red. * *Red.* *Red.* *Red.*

mei - nem Her - zen aus! In wei - ter Fer - ne sei mein

Red. *Red.* *Red.* *Red.* *

Herz dir Va - ter - land und Va - ter - haus!

sf *sf*

Red. *

6. The slow tempo of this theme allows some measures to contain several chords. In the first measure, for example, each bass note is harmonized by a new chord, with the exception of the B2. Discuss the various uses of the pitch class G $\sharp$ /A $\flat$ in this excerpt.



Beethoven, String Trio Op. 9, No. 3, II

Adagio con espressione

First system of a musical score, measures 1-3. The top staff is in treble clef, the middle in alto clef, and the bottom in bass clef. The key signature has one sharp (F#). Measure 1 contains eighth-note chords and a triplet of eighth notes in the top staff, and a triplet of eighth notes in the middle staff. Measure 2 features a half note in the top staff, a half note in the middle staff, and a half note in the bottom staff. Measure 3 shows a half note in the top staff, a half note in the middle staff, and a half note in the bottom staff. The system concludes with a double bar line.

Second system of a musical score, measures 4-6. The top staff is in treble clef, the middle in alto clef, and the bottom in bass clef. The key signature has one sharp (F#). Measure 4 begins with a forte (*sf*) dynamic marking. The top staff contains a half note, a half note, and a half note. The middle staff contains a half note, a half note, and a half note. The bottom staff contains a half note, a half note, and a half note. Measure 5 features a half note in the top staff, a half note in the middle staff, and a half note in the bottom staff. Measure 6 shows a half note in the top staff, a half note in the middle staff, and a half note in the bottom staff. The system concludes with a double bar line.

- G. Analyze the harmonies specified by this figured bass and then make an arrangement for SATB chorus.

6 4/2 6 6/4/3 6/5 4/2 6 6/5^b 7

- H. Analyze the harmonies implied by this soprano/bass framework, being sure to include an It^{+6} . Then fill in the inner voices, following good voice-leading procedures. There are no NCTs in the bass and soprano lines.

- I. Given below are mm. 1 to 2 of a four-measure phrase. Continue the passage to make a period (parallel or contrasting) that ends with a PAC in the key of the dominant. Include an augmented sixth chord.

- J. Make a setting of the following text or another text of your choice for three-part chorus. Include in your setting examples of the following:

Neapolitan triad

Mode mixture

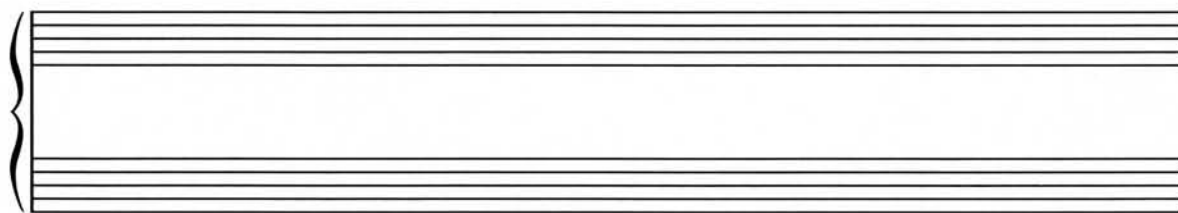
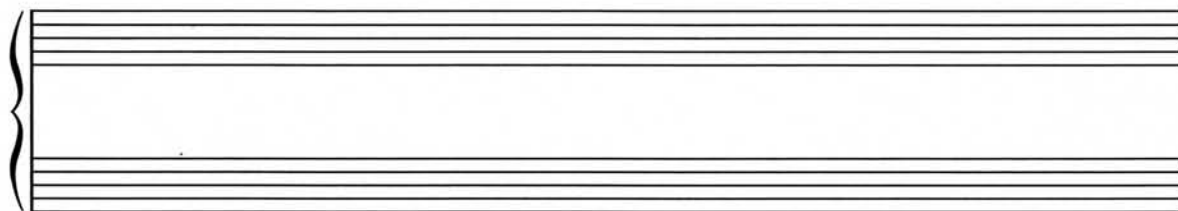
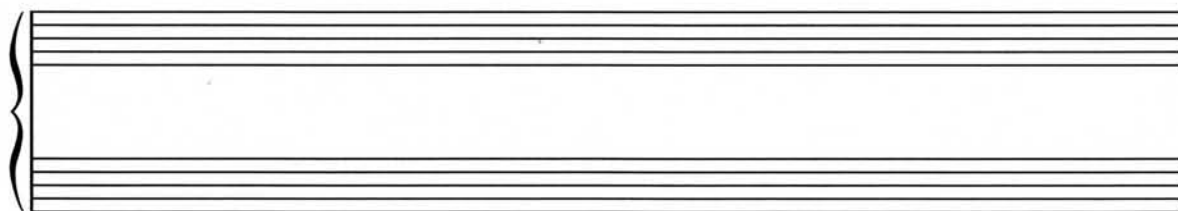
Secondary function

Augmented sixth chord

Remember to include tempo indication and dynamic markings.

Two roads diverged in a wood, and I—
I took the one less traveled by,
And that has made all the difference.

—From “The Road Not Taken,” by Robert Frost. From *The Poetry of Robert Frost*, edited by Edward Connery Lathem. Copyright 1916, © 1969 by Henry Holt and Company, Inc. Copyright 1944 by Robert Frost. Reprinted by permission of Henry Holt and Company, Inc.



Chapter 24

AUGMENTED SIXTH CHORDS 2

EXERCISE 24-1

A. Label the chords in the keys indicated.

1 2 3 4 5

g: _____ b: _____ Ab: _____ G: _____ f#: _____

6 7 8 9 10

f: _____ d: _____ Eb: _____ E: _____ Bb: _____

B. Analysis.

1. Label the chords in this example. Measures 10 to 12 could be analyzed in terms of secondary functions or as a modulation.



Tchaikovsky, "The Nurse's Tale," Op. 39, No. 19

2. In a number of his works Scriabin used the chord found at the end of the first measure. Label the chords.



Scriabin, *Tragic Poem*, Op. 34

3. This excerpt will give you practice with both alto and tenor clefs. Label all chords and NCTs.



Schubert, String Trio D. 471

4. This example begins in A and modulates. Label the chords.



Schumann, "Novellette," Op. 21, No. 7 (simplified texture)

105 110

f#:

5. Label the chords.



Beethoven, Violin Sonata Op. 23, III

130 135

cresc. p

cresc. p

ENHARMONIC SPELLINGS AND ENHARMONIC MODULATIONS

A. Analyze the given chord. Then show any possible enharmonic reinterpretation(s) of that chord, keeping the same key signature. The enharmonic reinterpretation should involve a new key, not just an enharmonically equivalent key (like $g\sharp$ and $a\flat$). Number 1 is supplied as an example.

Bb: _____ = _____ = _____ = _____ F#: _____ = _____

- B. Each of the following short passages contains an enharmonic modulation. Analyze each passage after playing it slowly at the piano and listening for the point of modulation. Do not try to analyze these passages without hearing them.

2

3

- C. Analyze the progressions implied by these soprano and bass lines and fill in the inner voices. Analyze enharmonic common chords where indicated.

Use two different chords on the last beat of m. 2 and the first beat of m. 3 in Exercise 1.

1

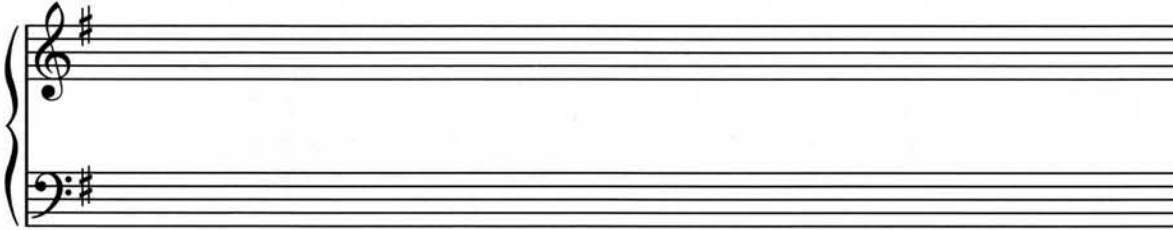
b: i V

2

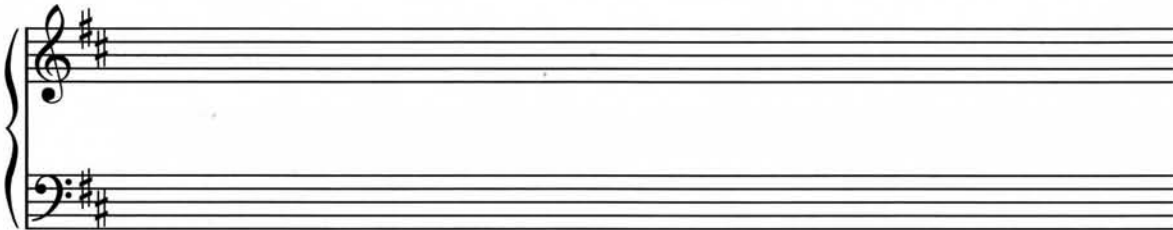
C: I

D. Compose short passages similar to those in Part B. The given chord is to serve as the common chord in an enharmonic modulation. (Hint: As you sketch out your progression, notate the given chord first. Then find satisfactory ways to lead into and away from that chord.)

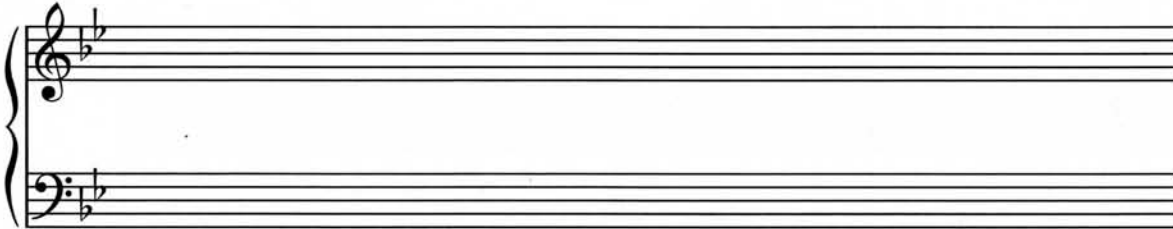
1. G to B. Common chord: V^7/IV in G.



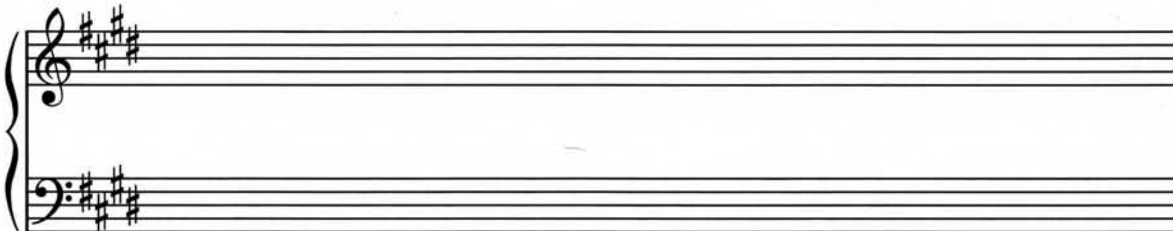
2. b to B $\flat$. Common chord: $vii^{\circ 7}/iv$ in b.



3. B $\flat$ to E. Common chord: $vii^{\circ 6}_5$ in B $\flat$.



4. E to F. Common chord: Ger^{+6} in E.



E. Analysis. Be sure to play as much as you can of each excerpt.

1. This passage modulates from f# minor to A♭ major by way of E major. The bass notes are found above the "Ped." markings—the other notes in the bass clef are arpeggiations into inner voices. Label all the chords, including common chords for both modulations.



Chopin, Nocturne Op. 27, No. 1

41 *sempre più stretto cresc.* *sf* *Ped.* * *Ped.* * *Ped.* *

45 *sf* *ff* *appassionato* *Ped.* * *Ped.* * *Ped.* *

50 *sostenuto* *fff* *Ped.* * *Ped.* * *Ped.* * *Ped.* *

50 *ritenuto* *dim.* * *Ped.* * *Ped.* *

2. This excerpt begins in g minor. Label all the chords.



Beethoven, Sonata Op. 13, I

133 *fp* *fp* *fp* *p*

Allegro molto e con brio

decresc. *pp* *p* *cresc.* *f*

3. This excerpt is from the end of the exposition and the beginning of the development of a movement in sonata form (review pp. 332–334). The final cadence of the last B theme is shown in the first few measures of the excerpt (in E $\flat$ major). The music then leads to a modulation to C minor in the first ending and to A minor in the second ending. Notice that the sonority first heard in m. 76 is used again twice, each time in a different way. (Bonus question: what *other* sonority in these measures is treated enharmonically?)



Brahms, Quartet, Op. 51, No. 1, I

73 *p* *p* *p* *pizz.* *p*

79

1. 2.

p

p

p

arco pizz.

84

p

p

p

p

cresc.

cresc.

cresc.

cresc.

90

f

f

f

f

The musical score is written for a piano and features three systems of staves. The first system (measures 79-83) includes first and second endings, with dynamics of piano (*p*) and markings for arco and pizzicato. The second system (measures 84-89) shows a crescendo in all parts, starting from piano (*p*). The third system (measures 90-91) concludes with a forte (*f*) dynamic. The key signature has two flats, and the time signature is 4/4.

4. The next excerpt is quite challenging. Label both chords and NCTs. You might find it helpful to label the chords with pop symbols before assigning roman numerals.



Haydn, Quartet Op. 76, No. 6, II

Excerpt 1 (Measures 31-34) of Haydn, Quartet Op. 76, No. 6, II. The score is in 3/4 time, key of B-flat major. It features four staves (Violin I, Violin II, Viola, and Cello/Double Bass). The dynamics are marked *p* (piano) for all parts. The music consists of eighth and quarter notes, with some slurs and ties.

Excerpt 2 (Measures 35-38) of Haydn, Quartet Op. 76, No. 6, II. The score continues in 3/4 time, key of B-flat major. The dynamics are marked *pp* (pianissimo) for measures 35-37 and *poco, f* (poco fortissimo) for measure 38. The music includes a triplet in measure 38, indicated by a '3' over the notes. The notation includes slurs, ties, and dynamic markings.

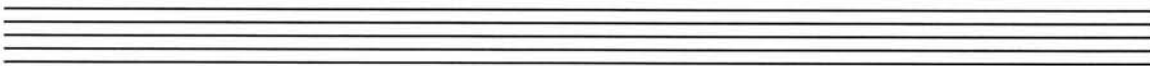
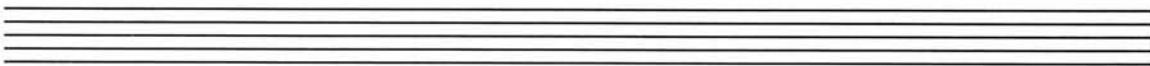
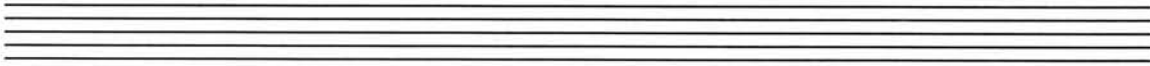
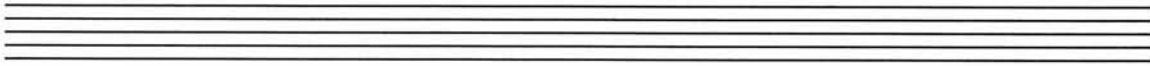
5. This dance modulates from D $\flat$ to A and back again. Although both modulations involve enharmonicism, only one of them is a true enharmonic modulation—the other uses enharmonic spellings for convenience.
- Label all the chords, including two common-chord modulations.
 - Label the enharmonic modulation.
 - Name the form of this piece.



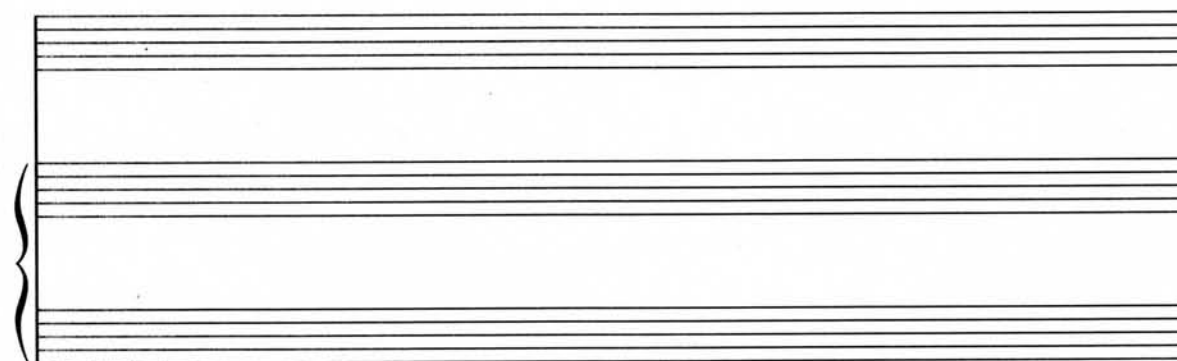
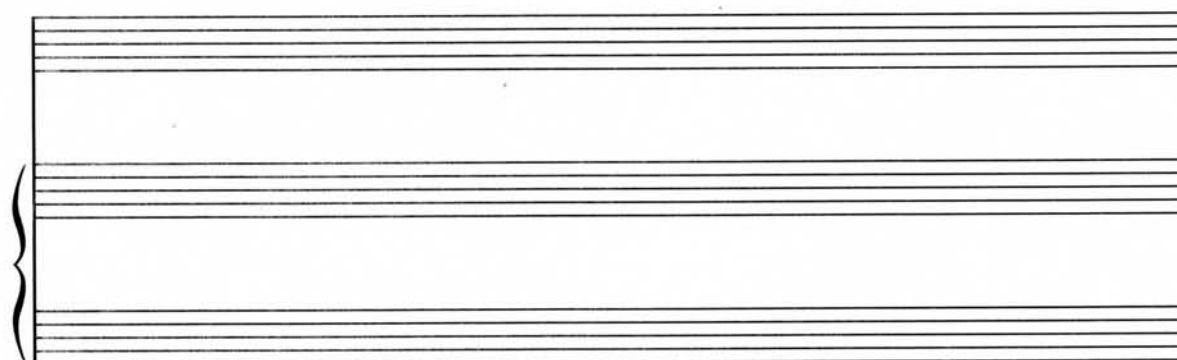
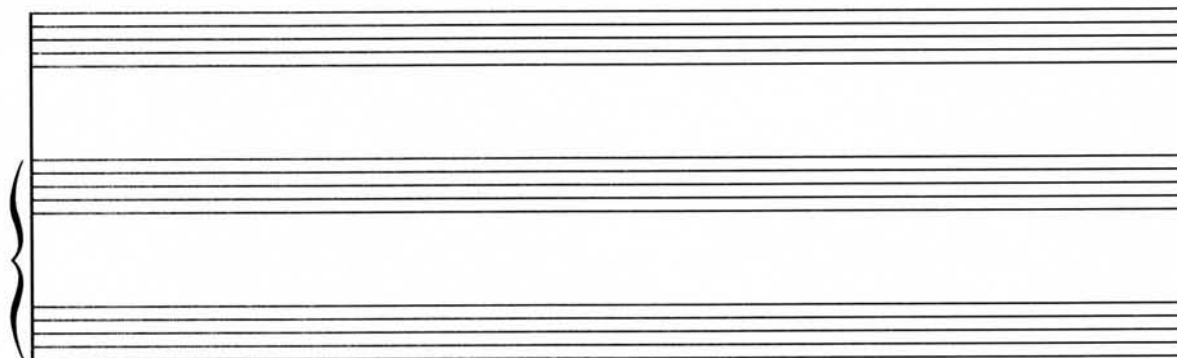
Schubert, Originaltänze, Op. 9 (D. 365), No. 14

The musical score is for Schubert's Originaltänze, Op. 9, No. 14, in 3/4 time. The key signature is D $\flat$ major (three flats). The score is written for piano and consists of five systems of grand staff notation. The first system begins with a piano (*p*) dynamic. The second system features a measure rest in the bass staff. The third system also has a measure rest in the bass staff. The fourth system starts with a mezzo-forte (*mf*) dynamic and includes a key signature change to A major (three sharps) at measure 12. The fifth system includes first and second endings. Measure numbers 5, 10, 15, and 20 are indicated above the staves.

- F. Use mm. 31 to 34 of Part E, number 4, as the first phrase of an eight-measure parallel period. The second phrase should include an enharmonic modulation to a foreign key.



- G. Compose the beginning of a song with piano accompaniment, using a text of your choice. Include two enharmonic modulations, one of them using a Ger^{+6} chord, the other a diminished seventh chord.



Chapter 26

FURTHER ELEMENTS OF THE HARMONIC VOCABULARY

EXERCISE 26-1

- A. In each fragment below, analyze the given chord. Then notate the specified chord in such a way that it leads smoothly into the given chord with acceptable voice leading. Some of the problems use a five-part texture for simpler voice leading.

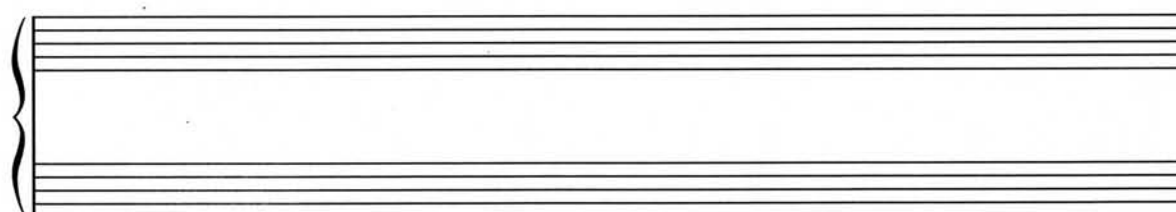
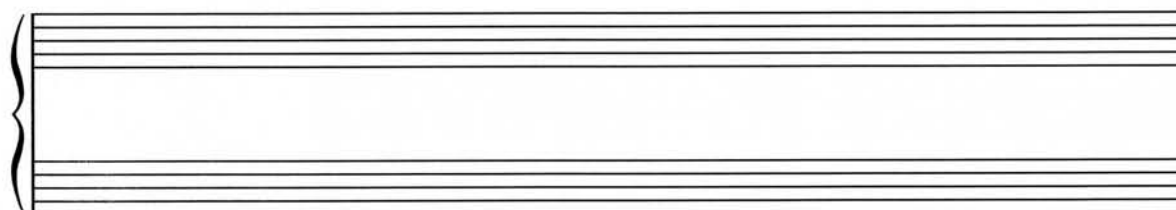
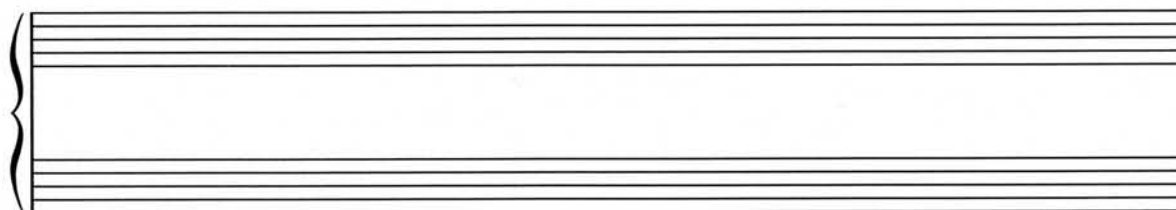
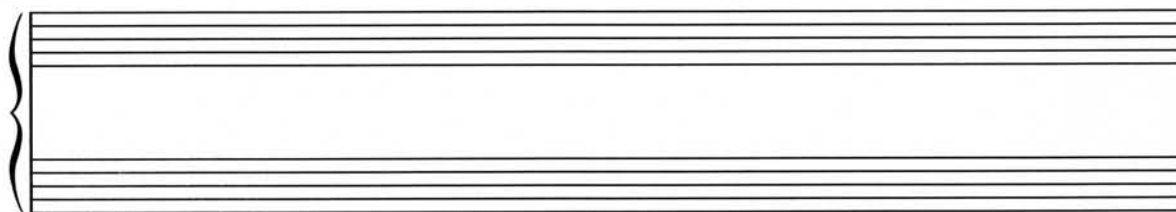
1 2 3 4

D: IV^{M9} Eb: (ct^{°7}) b: V^{7subs.}_{6th} A: V⁺⁷

5 6 7 8

F#: (ct^{°7}) Bb: V⁺⁶/IV E: ii^{°4}₃ g: V^{b9}

- B. Compose four short passages for piano, each one making use of a different progression from Part A. The half-note durations do not need to be retained, but use the same voice leading.



C. Analysis. Throughout this section highlight (using arrows or whatever is convenient) any occurrences of the chords discussed in this chapter.

1. Label chords and NCTs.



Schumann, *Humoresque*, Op. 20

Einfach ♩ = 80

2. This excerpt features one of the chords discussed in the chapter. The last chord in m. 8 should be analyzed as a secondary function. What is the form of the excerpt?



Chopin, Nocturne, Op. 32, No. 2

3. a. Analyze this excerpt in f minor throughout. One of the chords is best analyzed as a chord with an added 6th.
- b. Put parentheses around NCTs and be prepared to discuss them.
- c. Diagram the phrase structure and label the form. Assume four-measure phrases.



Chopin, Mazurka, Op. 63, No. 2

Lento

p

Red. * Red. * Red. * Red. * Red. * Red. *

Red. * Red. * Red. * Red. * Red. *

Red. * Red. * Red. * Red. *

4. The excerpt below is written for barbershop quartet. The treble clef part sounds an octave lower, and the melody is given to the second tenor (the bottom voice in the treble clef). Music for barbershop quartet frequently uses $\text{ct}^{\text{o}7}$ chords, and you will find some in this excerpt, including one that embellishes a secondary dominant. Label all chords and NCTs, analyzing in $\text{A}\flat$ throughout.

Ayer (arr. by Campbell), "Oh! You Beautiful Doll"

Oh, oh, oh!

Oh! ——— you beau - ti - ful doll, — you great big beau - ti - ful doll! —

Oh, oh, oh!

Let ——— me put my arms a - bout you,

Oh, oh, oh!

I ——— could nev - er live with - out you. Oh! ——— you

I could nev - er

I ——— could nev - er

5. Harmonic sequences occupy most of this excerpt. Find the two sequences and bracket each occurrence of the sequential patterns. If it is possible to do so, label the chords in the sequences with roman numerals, perhaps in terms of shifting tonalities. Discuss briefly the large-scale harmonic/melodic function of each sequence. In other words, just what does each sequence accomplish harmonically and melodically?



Schumann, "Die Löwenbraut," Op. 31, No. 1

73

Die un - se - li - ge wagt's sich der Thü - re zu nah'n, da fällt er ver wan - delt die Her - rin an, die

mf

75

schö - ne Ge - stalt, ein gräss - li - cher Raub, liegt blu - tig zer - ris - sen ent - stellt in dem Staub.

p

Und wie er ver - gos - sen das theu - re Blut,

sf *sf* *sf* *pp*

6. This familiar excerpt is easier to listen to than to analyze. The transpositions do not make the analysis any easier—clarinets in A and horns in F—nor do the four clefs in use. Do your best with the score (after all, conductors face this sort of problem every day), then check your work with the piano reduction that follows the excerpt.



Tchaikovsky, Symphony No. 6, Op. 74, I

[illegible]

Piano reduction

90

95

This piano reduction consists of two systems of music. The first system starts at measure 90 and the second at measure 95. Both systems are in the key of D major (two sharps) and 2/4 time. The right hand features a melodic line with eighth and sixteenth notes, often beamed together, and some chords. The left hand provides harmonic support with chords and single notes. Measure numbers 90 and 95 are indicated above the first measures of their respective systems.

7. The chord in m. 4 should be analyzed in two ways: the way in which we expect it to resolve when we first hear it and the way it actually functions.



Schubert, *Schwanengesang*, “Kriegers Ahnung”

This musical score is for Schubert's “Kriegers Ahnung” from the collection *Schwanengesang*. It is in 3/4 time and the key of D minor (three flats). The score is presented in two systems. The first system begins with a piano (*pp*) dynamic marking. The second system includes a fortissimo (*fp*) dynamic marking with a crescendo hairpin. The notation includes various chords, some with triplets, and melodic lines in both hands. Measure numbers 5 and 9 are indicated above the first measures of the two systems.

8. This excerpt ends with an enharmonic modulation leading to a cadence that implies the key of e, although it is not confirmed by the following phrase.



Schubert, String Quintet, I (piano reduction)

Allegro ma non troppo

The excerpt consists of four systems of piano reduction for Schubert's String Quintet, I. The tempo is *Allegro ma non troppo*. The key signature is one sharp (F#), and the time signature is 2/4. The notation includes various dynamics such as *p* (piano), *f* (forte), *pp* (pianissimo), and *ff* (fortissimo), as well as articulations like accents and slurs. Measure numbers 5, 10, 15, and 20 are marked. The piece concludes with a cadence in E major, indicated by the final chord in the last system.

9. Label with roman numerals the two chords in this excerpt that are the most important structurally. The other chords are simultaneities connecting the structural chords. Label their roots. If any of these chords imply fleeting tonicizations, indicate this with roman numerals. The chord in m. 2 could be heard as a g triad with raised *and* lowered 5th (G-B $\flat$ -D $\flat$ -D $\sharp$) because the E $\flat$ ascends chromatically to E, as we would expect D $\sharp$ to do. Find another chord in this passage that could be interpreted similarly.



Wagner, *Siegfried*, Act I (piano-vocal score)

Heftig beschleunigend

Was frommt sei-ne hel - le Schnei - de,
freu'n.

f *fp* *cresc.*

⁵
ist der Stahl nicht hart und fest?

10. In some ways this excerpt pushes traditional harmony toward its limits, especially through its disregard for conventional resolutions of dissonance. Nevertheless, the entire passage can be analyzed reasonably well in traditional terms. Label all the chords. Which portion of the excerpt is the most unconventional in terms of dissonance treatment?



Grieg, "The Mountain Maid," Op. 67, No. 2

Allegretto tranquillo *p*

She is slen-der and fair and young, With fea-tures so pure and pale; The

p

poco rit.

droop-ing lids of her eyes Their dream-y splen-dor veil.

poco rit.

Red.

Part VI

Late Romanticism and the
Twentieth Century

Chapter 27

TONAL HARMONY IN THE LATE NINETEENTH CENTURY

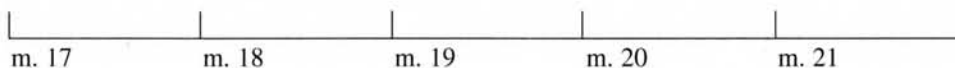
EXERCISE 27-1

A. Examine the first twenty-five measures of the opening of *Tannhäuser*, given below, and do the following:

1. The opening eight measures show rather traditional harmonic function. Analyze these measures, using roman numerals (do all work on the music).
2. The following eight measures, which may also be analyzed with roman numerals, show less traditional harmonic movement. Cite at least three instances in which this is true (show measure number).

- a. _____
- b. _____
- c. _____

3. Analyze the sequence that begins at m. 17 and continues through m. 21.



Use pop symbols, roman numerals, or a mixture of both, whichever seems appropriate. Circle those chords that are most strongly tonicized. How is such tonicization accomplished?



Wagner, *Tannhäuser*, Prelude to Act I (piano reduction)

Andante maestoso

This musical score is written for piano in A major, spanning measures 3 to 25. The notation is arranged in four systems, each with a grand staff (treble and bass clefs). Measure numbers 3, 10, 15, 20, and 25 are indicated at the top of their respective systems. The music features a variety of harmonic textures, including triads, dyads, and moving lines. Notable features include a triplet of eighth notes in measure 3, a chromatic descending line in the bass of measure 10, and a complex chromatic passage in measures 20-21. The piece concludes with a final chord in measure 25.

B. Analyze the following chromatic sequences, then continue each as indicated.



Select one of the above sequence patterns to serve as the basis for a piano composition. You might want to create a melody over the background of block chords or perhaps modify the texture of the harmonies themselves. Nonessential or embellishing chords may be inserted within the sequence for the purpose of color.

C. Continue the following sequences as indicated. Then select one to serve as the harmonic basis for a piano or vocal composition in the style of one of the post-Romantic composers studied. Strive for contrapuntal interest and smooth voice leading.



D. Examine the following excerpt.

1. The opening key is designated as E major. What is interesting about the structure of the scale that forms the basis for mm. 2 and 3? _____

2. Provide roman numeral analysis for m. 2. _____
In what way does the music in mm. 10 to 11 suggest more traditional treatment of tonality? _____

3. Describe the modulatory procedure that takes place in mm. 12 to 13. _____

4. Name the key introduced in m. 14. _____
What is its relationship to the opening key? _____
5. Name two other keys hinted at between mm. 1 and 14. _____
and _____. These keys represent what relationship to each other and to the opening key? _____



Wolf, "Die ihr schwebet um diese Palmen"

Ziemlich bewegt *leise*

Die ihr schwe - bet

pp *p*

um die - se Pal - men in Nacht und

⁵ Wind, ihr heil' - gen

En - gel, stil - let die Wip - fel!

10

es schlum - mert mein Kind.

15

von Beth - le - hem im

Ihr Pal - men

f *mf* *f* *f* *p*

Detailed description: This musical score is for a vocal and piano piece, spanning measures 10 to 15. The vocal line is in treble clef, and the piano accompaniment is in grand staff (treble and bass clefs). The key signature changes from one flat (B-flat major or D-flat minor) to two sharps (D major or F# minor) at measure 11. The tempo and dynamics are indicated by various markings: *f* (forte), *mf* (mezzo-forte), and *p* (piano). The piano part features complex chordal textures with many beamed sixteenth notes, suggesting a rapid harmonic progression. The vocal line is more melodic, with lyrics in German. Measure 10 ends with a fermata over the word 'Kind.' Measure 11 begins with a new key signature and the lyrics 'Ihr Pal - men'. Measure 12 continues with 'von Beth - le - hem im'. Measure 13 has a dynamic change to *f*. Measure 14 has a dynamic change to *p*. Measure 15 ends with a fermata over the word 'im'.

E.

1. Is there a clear tonal center in the opening five bars of the following excerpt? If so, what is it and how is it defined? _____

2. Using pop symbols, name the two sonorities found in mm. 6 and 7. _____

and _____. In what way could these chords be said to suggest functional harmony in the key of D major, which ultimately concludes the excerpt, as well as

the piece? _____

3. What roman numerals are used in mm. 9 to 12 to prepare the cadence in D major?

m. 9	m. 10	m. 11	m. 12



Wolf, "Verschwiegene Liebe"

Sanfte Bewegung und immer sehr zart

5

in den Glanz — hin-ein, — wer mag sie er-ra-ten, wer

p

rit.

hol-te sie ein? — Ge-

pp rit.

a tempo *p* 10 *pp*

dan-ken sich wie-gen, die Nacht ist ver-schwie-gen, Ge-

a tempo *p* *pp*

dan - ken sind frei. Er -

p *mf* *f* *p*

The musical score is written for voice and piano. The voice part is on a single staff in G major (one sharp). The piano accompaniment consists of two staves. The first system covers measures 1 through 4. The piano part features a rhythmic pattern of eighth and sixteenth notes in the right hand, with a simpler bass line in the left hand. Dynamics are indicated by *p* (piano), *mf* (mezzo-forte), *f* (forte), and *p* (piano) across the measures. The lyrics are in German: 'dan - ken sind frei. Er -'.

- F. The first ten measures of *Reverie* may be analyzed with traditional roman numerals (if you watch out for enharmonic respellings). Do so, then comment on reasons for the rather contemporary sound of the piece.



Payne, *Reverie*

Languidly

p

con Pedale

5

10

mp

© Dorothy Payne

G.

1. The following excerpt begins and ends in E major. What is unusual about the manner in which the key is established in mm. 10 to 13? _____

2. Label on the music the harmonies found in mm. 14 to 22. Use pop symbols for your analysis.
3. What five-chord succession within mm. 14 to 22 represents an “omnibus” fragment? _____

4. In what way is the approach to the closing E major harmony unusual? _____

5. By what means does Fauré make it convincing, nonetheless? _____



Fauré, “Chanson d’Amour,” Op. 27, No. 1 (mm. 10–22)

10

- ront.

a tempo

marcato

15

p

J'ai - me ta voix, j'ai - me l'é - tran - ge grâ - ce de tout ce que tu

p

poco a poco (,) cresc.

dis, O ma re-belle, ô - mon cher an - ge,

²⁰ *f* (,) *p*

Mon en - fer et mon pa - ra - dis! J'ai - me tes yeux

H.

1. In the *Siegfried* excerpt, analyze one essential harmony for each of the first eleven measures of the excerpt.

m. 1	m. 2	m. 3	m. 4	m. 5	m. 6	m. 7	m. 8	m. 9	m. 10	m. 11

2. Name at least three keys (including the first one) that are established throughout the course of this excerpt. Show the measure numbers.

3. Show two instances in which modulation is effected by deceptive resolution, either of chords or of single pitches. Describe the process that takes place.



Wagner, *Siegfried* (Act III, Scene 3)

BRÜNNHILDE

E - wig - war ich, e - wig - bin ich,

a tempo

pp

e - wig - in süß - seh - nen-der Won-ne doch e -

*Red. **

*Red. **

*Red. **

(*feurig, doch zart*)

10 wig zu dei - nem Heil! O Sieg - fried, Herr - li - cher!

15 Hort der Welt! Le - ben der

20 Er - de, la - chen - der Held! Lass', ach,

lass'! Las - se von mir! Na he mir nicht mit der

p *poco f* *p* *sf* *sf* *sf* *p* *cresc.*

I.

1. What is unusual about the treatment of tonality in the opening four measures of the Franck prelude? _____

2. Describe the nontraditional treatment of the dominant seventh sonority in mm. 5 to 9 of the excerpt. _____

3. In what way is the musical style significantly influenced by the treatment of nonharmonic material? Consider both single tones and vertical sonorities. _____



Franck, *Prelude, Aria, and Finale for Piano* (Prelude)

Allegro moderato e maestoso

10

dim.

This musical system contains measures 10, 11, and 12 of a piece in A major. Measure 10 begins with a treble clef, a key signature of three sharps (F#, C#, G#), and a common time signature. A melodic line in the treble clef starts on A4, moves to B4, and then has a half-note rest. The bass clef accompaniment consists of a steady eighth-note pattern: A3, G#3, F#3, E3, D3, C#3, B2, A2. A dynamic marking of *dim.* is placed below the first bass staff. Measures 11 and 12 continue the melodic and harmonic patterns, with the treble clef featuring more melodic movement and the bass clef maintaining the eighth-note accompaniment.

This musical system contains measures 13 and 14 of the piece. Measure 13 shows the continuation of the melodic and harmonic patterns from the previous system. Measure 14 concludes the system with a double bar line. The treble clef features a final melodic phrase, and the bass clef accompaniment ends with a whole note chord.

J. The following excerpt is taken from the *Barcarolle*, Op. 17, No. 6, by Richard Strauss (mm. 21–30).

1. What key is implied by the melody in the opening four bars? _____

2. What means does Strauss employ to negate that tonal implication and, indeed, any clear tonal implication? _____

3. Show the underlying harmonic structure of mm. 25 to 29, using pop symbols.

m. 25	m. 26	m. 27	m. 28	m. 29

4. Within the passage shown above, locate and describe at least three examples of deceptive resolution that serve to make the chord succession convincing.

a. _____

b. _____

c. _____



Strauss, *Barcarolle*, Op. 17, No. 6

21 *p a tempo*

Schon auf dem Fel - sen durch's Grün der Pla - ta - ne

p a tempo

seh' ich das säu - len - ge - tra - ge - ne Dach,

und das flim - mern - de Licht am Al - ta - ne

dim.

Red. *poco calando* *Red.*

kün - det mir, dass die Ge - lieb te noch

Red. *a tempo* *a tempo* *p*

wach. Flie - ge, mein

Chapter 28

AN INTRODUCTION TO TWENTIETH-CENTURY MUSIC

EXERCISE 28-1

A. Add the appropriate accidentals to create the modal scale indicated:

C-Mixolydian



C-Dorian



C-Phrygian



C-Lydian



C-Aeolian



C-Locrian



B. Add the appropriate accidentals to create the modal scale indicated:

D-Mixolydian



B-Dorian



F-Phrygian



G-Aeolian



E-Lydian



G-Locrian



C. Answer the following questions about the diatonic modes:

1. The three modes that are essentially *major* in quality are the _____, _____, and _____ modes.
2. The three modes that are essentially *minor* in quality are the _____, _____, and _____ modes.
3. All the modes contain a perfect 5th from $\hat{1}$ up to $\hat{5}$ except the _____ mode.
4. The two modes that contain a leading tone are the _____ and _____ modes.
5. The two modes that contain a minor second from $\hat{1}$ up to $\hat{2}$ are the _____ and _____ modes.
6. The $\hat{1}$ - $\hat{4}$ tetrachord in the Mixolydian mode matches that of the _____ mode.
7. Likewise, the opening tetrachords of the Aeolian and _____ modes are the same.
8. The four modes that contain a major 6th from $\hat{1}$ up to $\hat{6}$ are the _____, _____, _____, and _____ modes.
9. The three modes that contain a minor 6th from $\hat{1}$ up to $\hat{6}$ are the _____, _____, and _____ modes.
10. Name the interval from $\hat{1}$ up to $\hat{4}$ in the Ionian mode. _____
11. Name the interval from $\hat{1}$ up to $\hat{4}$ in the Lydian mode. _____
12. Name the interval from $\hat{4}$ up to $\hat{7}$ in the Ionian mode. _____
13. Name the interval from $\hat{4}$ up to $\hat{7}$ in the Mixolydian mode. _____

D. Using a key signature (rather than appropriate accidentals), notate the following modal scales in the clef indicated.

Ab-Ionian



D-Locrian



D-Phrygian



A-Phrygian



F#-Dorian



F#-Aeolian



E. Notate the following pentatonic scales and hybrid modes starting on the pitch indicated. Be sure to include the octave-related pitch.

Major pentatonic



Major pentatonic



Hirajoshi pentatonic



Lydian/Mixolydian



Lydian/Mixolydian



Phrygian/Dorian



F. Notate the following synthetic scales starting on the pitch indicated. Be sure to include the octave-related pitch.

Whole-tone



Octatonic (half-whole)



Whole-tone



Octatonic (half-whole)



Half-step/minor third



Octatonic (half-whole)



G. Add the appropriate accidentals (or delete the appropriate notes) to create the scale indicated. You may choose a starting pitch of B or B $\flat$.

Mixolydian



Major pentatonic



Lydian/Mixolydian



Phrygian



Whole-tone



Locrian





4



5



6

Moderately



- I. Analysis. The following examples represent three versions of the principal tune from Debussy's "Fêtes." For each, identify the scale being used.

Debussy's "Fêtes," from *Nocturnes* (piano reduction)

Animato e deciso

mm. 1-4

f marcato

Red.



scale: _____

mm. 15-18

p

ff

scale: _____

mm. 29–32

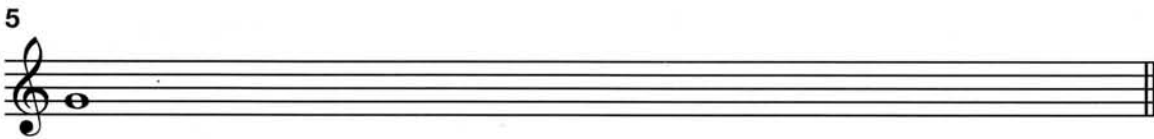
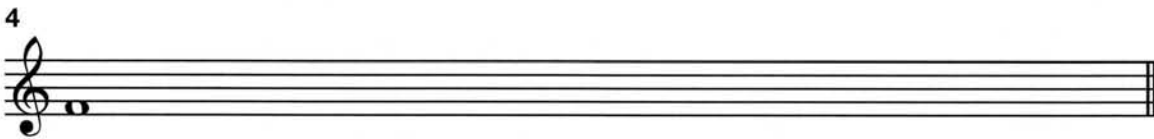
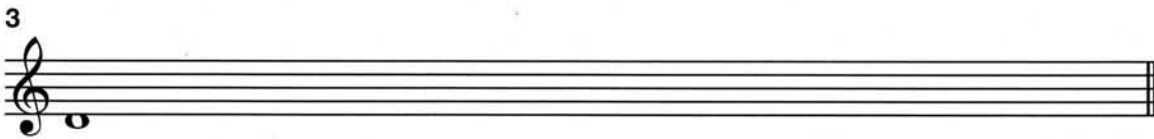
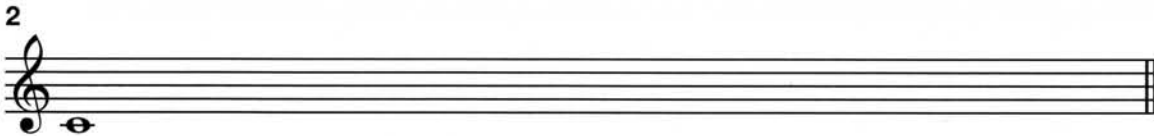
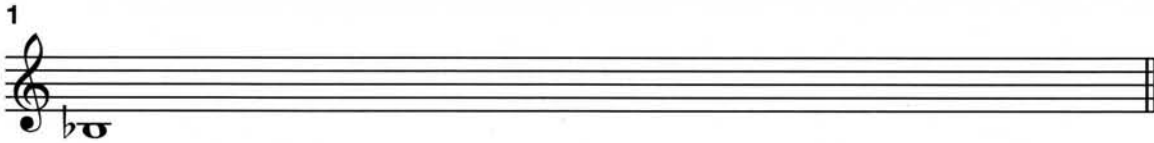
f legato

p il basso staccato

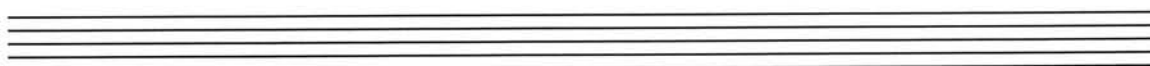
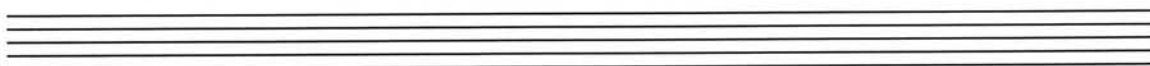
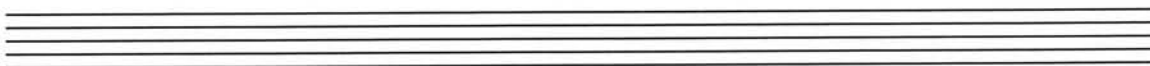
scale: _____

J. Composition. Compose pieces according to the following specifications:

Using the major pentatonic scale B $\flat$ -C-D-F-G-B $\flat$ as a basis, compose five brief melodies, each of which in turn establishes the indicated tone as a tone center. (Hint: D is tough. Why?)

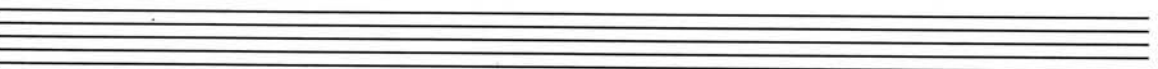
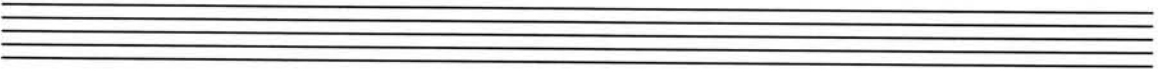
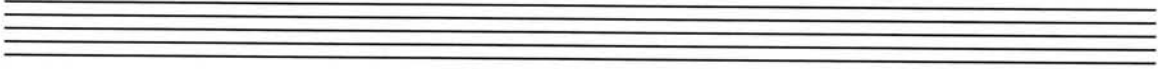


Create a melody based on the octatonic scale that emphasizes major and minor 3rds.
Carefully use rhythmic interest to create an exciting melody.

6

Create a two-voice composition based on a whole-tone scale. You might want to create a symmetrical relationship between the two voices or perhaps treat them imitatively. If your composition is for piano, experiment with the wide range of the keyboard.

7



EXERCISE 28-2

- A. Describe the structure of the chords shown below by providing the correct symbol: use the symbol "Q" for quartal/quintal chords, "S" for secundal chords, and lead sheet symbols for tertian sonorities and polychords.

1 2 3 4 5 6 7 8

- B. Identify the following sonorities as a quartal/quintal chord (Q), split-third chord, whole-tone chord, or tone cluster.

1 2 3 4 5 6 7 8

C. Describe the types of vertical sonorities found in the following examples as tertian, polychord, quartal, quintal, or added-note.



1

Lento

p tranquillo

5

f

p subito



2

p

mf

5

p



3

Allegro



4

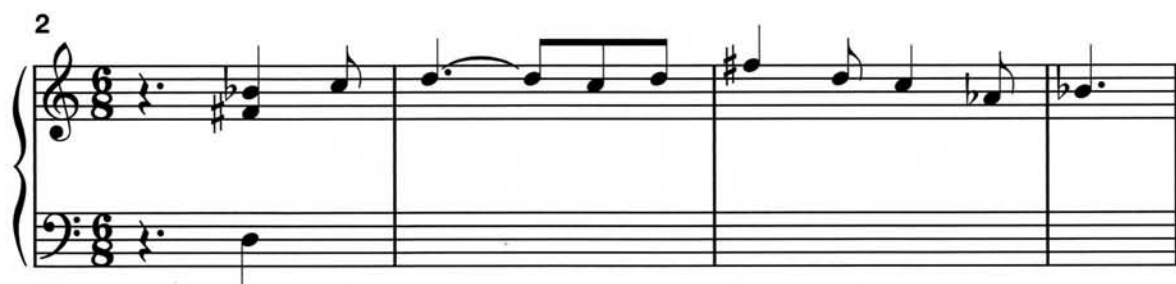
Grave

- D. Complete the following passages using chromatic planing, or strict parallelism. That is, use the given initial sonority to create a passage where all voices move in the same direction by the same interval.

1



2



3



4



5



- E. Complete the following passages using diatonic planing. That is, use the given initial sonority to create a passage where all voices move in the same direction by the same diatonic interval within the key signature indicated.

1

Exercise 1: Treble and bass staves in G major, 3/4 time. The treble staff begins with a D4 quarter note, an E4 quarter note, and a D4 half note. The bass staff begins with a G3 quarter note, an A3 quarter note, and a G3 half note. The exercise is to complete the passage by moving all voices in the same direction by the same diatonic interval.

2

Exercise 2: Treble and bass staves in D major, 4/4 time. The treble staff begins with a D4 quarter note, an E4 quarter note, a F#4 quarter note, and a D4 half note. The bass staff begins with a D3 quarter note, an E3 quarter note, a F#3 quarter note, and a D3 half note. The exercise is to complete the passage by moving all voices in the same direction by the same diatonic interval.

3

Exercise 3: Treble and bass staves in C major, 3/4 time. The treble staff begins with a C4 quarter note, a D4 quarter note, and a C4 half note. The bass staff begins with a C3 quarter note, a D3 quarter note, and a C3 half note. The exercise is to complete the passage by moving all voices in the same direction by the same diatonic interval.

4

Exercise 4: Treble and bass staves in G major, 6/8 time. The treble staff begins with a D4 quarter note, an E4 quarter note, and a D4 half note. The bass staff begins with a G3 quarter note, an A3 quarter note, and a G3 half note. The exercise is to complete the passage by moving all voices in the same direction by the same diatonic interval.

5

Exercise 5: Treble and bass staves in E minor, 3/4 time. The treble staff begins with an E4 quarter note, a F4 quarter note, and an E4 half note. The bass staff begins with a B2 quarter note, a C3 quarter note, and a B2 half note. The exercise is to complete the passage by moving all voices in the same direction by the same diatonic interval.

- F. Complete the following passages, using the triad type indicated for each hand. Continue the scoring suggested by the first polychord, using the given outer parts consistently as either roots, 3rds, or 5ths of the sonority.

1 R.H. major, L.H. major

Exercise 1: R.H. major, L.H. major. The exercise is in C major, 2/4 time. The right hand starts with a C major triad (C4, E4, G4) and continues with a melody: C4 (quarter), E4 (quarter), G4 (quarter), F#4 (quarter), E4 (quarter), D4 (half). The left hand starts with a C major triad (C3, E3, G3) and continues with a melody: C3 (quarter), E3 (quarter), G3 (quarter), F#3 (quarter), E3 (quarter), D3 (half). The exercise ends with a final C major triad in both hands.

2 R.H. minor, L.H. minor

Exercise 2: R.H. minor, L.H. minor. The exercise is in C minor, 3/4 time. The right hand starts with a C minor triad (C4, E4, G4) and continues with a melody: C4 (quarter), E4 (quarter), G4 (quarter), F#4 (quarter), E4 (quarter), D4 (half). The left hand starts with a C minor triad (C3, E3, G3) and continues with a melody: C3 (quarter), E3 (quarter), G3 (quarter), F#3 (quarter), E3 (quarter), D3 (half). The exercise ends with a final C minor triad in both hands.

3 R.H. major, L.H. minor

Exercise 3: R.H. major, L.H. minor. The exercise is in C major, 3/4 time. The right hand starts with a C major triad (C4, E4, G4) and continues with a melody: C4 (quarter), E4 (quarter), G4 (quarter), F#4 (quarter), E4 (quarter), D4 (half). The left hand starts with a C minor triad (C3, E3, G3) and continues with a melody: C3 (quarter), E3 (quarter), G3 (quarter), F#3 (quarter), E3 (quarter), D3 (half). The exercise ends with a final C major triad in both hands.

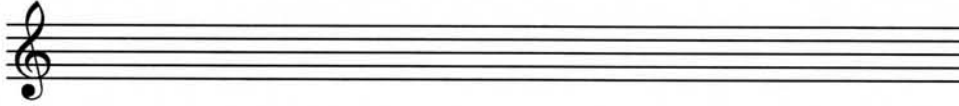
4 R.H. major, L.H. minor

Exercise 4: R.H. major, L.H. minor. The exercise is in C major, 4/4 time. The right hand starts with a C major triad (C4, E4, G4) and continues with a melody: C4 (quarter), E4 (quarter), G4 (quarter), F#4 (quarter), E4 (quarter), D4 (half). The left hand starts with a C minor triad (C3, E3, G3) and continues with a melody: C3 (quarter), E3 (quarter), G3 (quarter), F#3 (quarter), E3 (quarter), D3 (half). The exercise ends with a final C major triad in both hands.

G. Analysis. Try to play or listen to the following example and answer the following questions:

1. What technique is used to create form in this piano composition?

2. Notate the scale that forms the basis of the opening *four* measures:



Does the piece have a tone center? _____ If so, what is it? _____

If you do not perceive one, why? _____

3. What are the distinguishing characteristics of the opening two measures? _____

4. In what ways is the character of the opening maintained throughout the piece?

5. What is the derivation of the thematic gesture found in m. 3 of the right-hand part?

_____ Locate three other instances in which that intervallic pattern appears (other than in the bass line).

a. _____

b. _____

c. _____



Payne, Arch

Andante ♩ = 80

pp molto legato

pp

espressivo

mp

mf

ff

espressivo

marcato melody

mf

p

calando

ritard.

p

H. Composition. Devise completions for the following passages. Include both black and white keys in your solution. Try to maintain stylistic consistency.

1

Exercise 1, measures 1-3. The key signature is C major, and the time signature is common time (C). The melody in the right hand consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. The bass line in the left hand consists of whole notes: C3, F2, C3, F2, C3, F2, C3, F2. The first measure is a half note, and the second and third measures are quarter notes. The fourth measure is empty for completion.

Empty musical staves for exercise 1 completion, measures 4-6.

2

Exercise 2, measures 1-2. The key signature is B-flat major (two flats), and the time signature is 4/4. The melody in the right hand consists of half notes: Bb3, D4, Eb4, F4, G4, Ab4, Bb4, C5. The bass line in the left hand consists of half notes: Bb2, D3, Eb3, F3, G3, Ab3, Bb3, C4. The first measure is a half note, and the second measure is a half note. The third measure is empty for completion.

Empty musical staves for exercise 2 completion, measures 3-5.

3

First system of a musical score for piano. The key signature is one flat (B-flat) and the time signature is 6/8. The score consists of four measures. In the first measure, the right hand has a whole rest and the left hand has a half note G2. In the second measure, the right hand has a half note A2 and the left hand has a half note G2. In the third measure, the right hand has a half note B-flat2 and the left hand has a half note G2. In the fourth measure, the right hand has a half note C3 and the left hand has a half note G2. The notes in the left hand are beamed together in pairs.

Second system of musical staves for piano, consisting of four empty measures for both the right and left hands.

EXERCISE 28-3

- A. Which of the following rhythmic procedures—added value, asymmetric meter, displaced accent, metric modulation, mixed meter, or non-retrogradable rhythm—are illustrated by the following examples:

1 ♩ = 60

2

3

4

5

6

B. Analysis. Comment on the rhythmic and metric devices employed in the following excerpts.



1 *Maestoso*



The musical excerpt consists of four staves of music in G major (one sharp). The tempo is marked *Maestoso*. The first staff begins with a forte (*f*) dynamic and features a series of chords with eighth-note patterns. The second staff includes a piano (*p*) dynamic and a *subito* marking. The third staff features a fortissimo (*ff*) dynamic. The fourth staff continues the complex rhythmic patterns with various time signatures including 7/8, 2/4, 3/8, 5/8, 7/8, 3/4, and 5/4. The notation includes many beamed eighth notes, slurs, and dynamic markings.

Stravinsky, "Danse de la foire," from *Petrouchka* (piano reduction)

2 Stringendo $\text{♩} = \text{♩} = 46$

74

75

l.h.

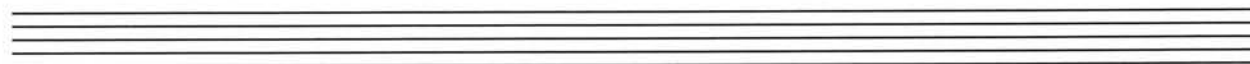
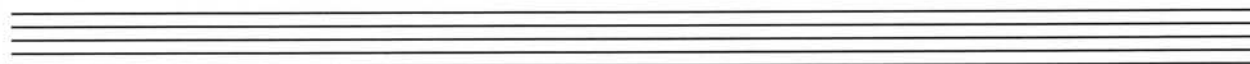
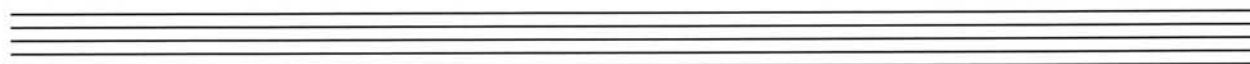
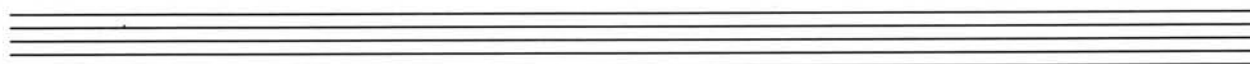
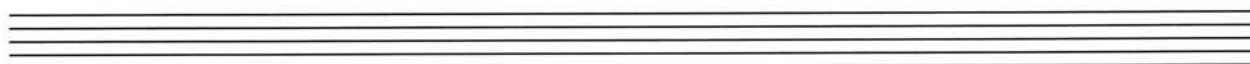
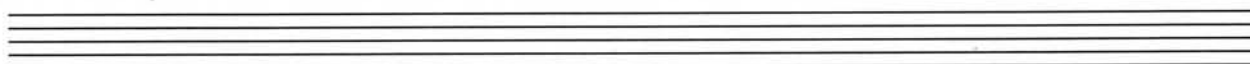
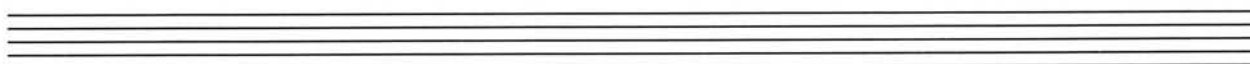
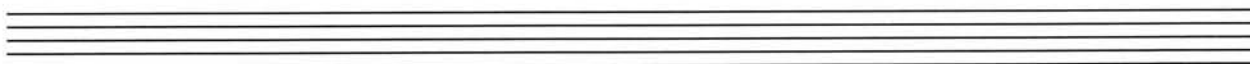
ff

Red.

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C. Composition. Compose a piece according to one of the following specifications:

1. Create a polyrhythmic composition for two percussionists. Use any two like non-pitched percussion instruments (claves, cowbells, hand-claps, etc.).
2. Create a composition for any two instruments that features a passage based on polymeter.
3. Create a melody that utilizes two or more of the following rhythmic devices: added value, asymmetric meter, displaced accent, metric modulation, mixed meter, or non-retrogradable rhythm.



EXERCISE 28-4

- A. First notate each pitch-class (pc) set on the staff provided (i.e., using *staff notation*). Then determine each pc set's normal order and prime form. (Use the space indicated on the staff as a workspace for your calculations.)

1 PC Set: (A,E,Eb)

STAFF NOTATION WORKSPACE



Normal order: [__, __, __]

Prime form: (__ __ __)

2 PC Set: (D,A,F#)



Normal order: [__, __, __]

Prime form: (__ __ __)

3 PC Set: (C#,G#,D#)



Normal order: [__, __, __]

Prime form: (__ __ __)

4 PC Set: (D,E,A,G)



Normal order: [__, __, __, __]

Prime form: (__ __ __)

5 PC Set: (Bb,A,C,B)



Normal order: [__, __, __, __]

Prime form: (__ __ __)

6 PC Set: (G,F,Eb,D)



Normal order: [__, __, __, __]

Prime form: (__ __ __)

C. Analysis. *from ritual to romance* for solo piano by Reginald Bain, 1st movement, mm. 1–8, which follows, opens with an atonal passage. Try to play the example and then answer the following questions:

1. Determine the normal order of the initial four-note melodic gesture (C, C $\sharp$, G, F $\sharp$). To what set class does this pc set belong?

Normal order: [__, __, __, __] Belongs to set class: 4-__ (____)

2. Find two other melodic instances of this set class in the passage. Circle these occurrences on the score and mark them with the appropriate Forte name.
3. The three-note melodic cell (G, F $\sharp$, B $\flat$) plays an important role in this introductory passage. Determine this pitch-class set's normal order. To what set class does it belong?

Normal order: [__, __, __] Belongs to set class: 3-__ (____)

4. Find four instances of this set class in m. 6. Circle them on the score and mark them with the appropriate Forte name.
5. Determine the normal order of the chord (B, E, B $\flat$) in the right hand, m. 2. To what set class does this pc set belong?

Normal order: [__, __, __] Belongs to set class: 3-__ (____)

6. Find another instance of this set class in the right hand. Circle it on the score and mark it with the appropriate Forte name.
7. To what interval class does the left hand gesture in m. 2 belong?

ic__

Is this interval class prominently featured in the set classes you identified above?

Yes/No (circle one)

8. A new set class begins to play an important role in m. 5. Two occurrences may be found in the right hand melody, mm. 5–6. What set class is it?

Set class: 3-__ (____)

In the melody mm. 5–6, circle both occurrences and mark them with the appropriate Forte name.

Bain, *from ritual to romance*, 1st movement, mm. 1–8

With great intensity (♩ = ca. 66–72)

freely, molto espr. *a tempo*

p *mf* *poco rit.* *p*

mp

4 *poco accel.* *rit.*

mf *mp*

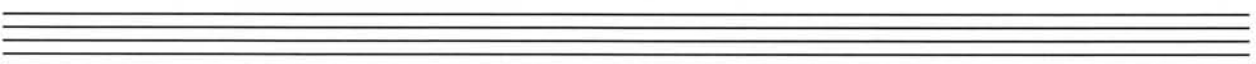
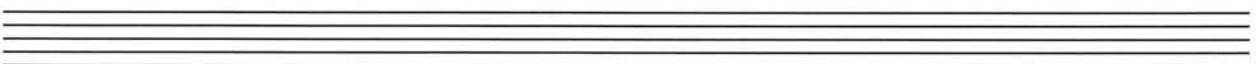
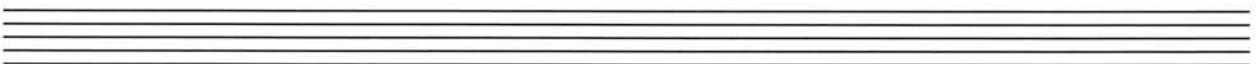
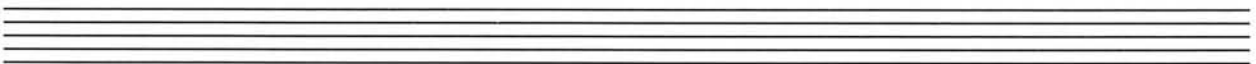
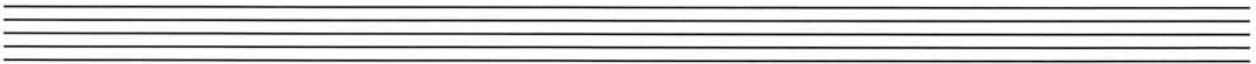
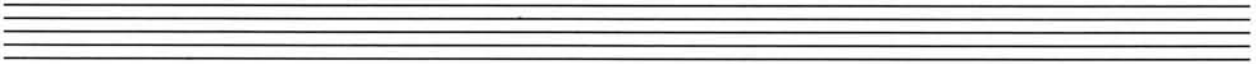
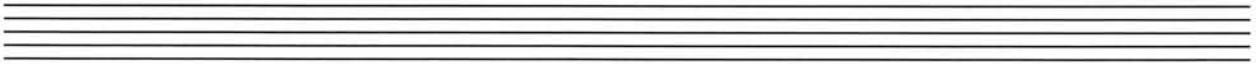
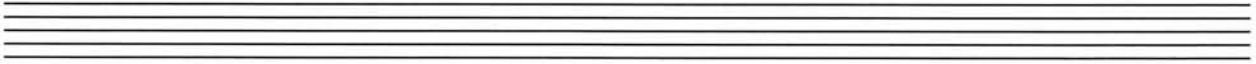
7 *Homage to AS* *a tempo* *poco rit.* *a tempo*

pp *mp* *f sub.* *8vb*

The musical score is written for piano and consists of three systems of staves. The first system (measures 1-3) starts with a treble clef and a 3/4 time signature, then changes to 4/4 and back to 3/4. It features a melody in the right hand and a bass line in the left hand. The second system (measures 4-6) continues the melody and bass line, with a key signature change to one flat. The third system (measures 7-8) includes a 'Homage to AS' section and ends with a final chord. The score includes various dynamic markings (p, mf, mp, pp, f sub., 8vb) and tempo markings (freely, molto espr., a tempo, poco accel., poco rit., rit.).

D. Composition. Compose a piece according to one of the following specifications:

1. Create a melody that begins with a statement of set class 3-1 (012) and goes on to emphasize the following interval classes: ic2 (e.g., M2 or m7), ic1 (e.g., m2 or M7) and ic5 (e.g., P4 or P5).
2. Create a composition for piano that is based on two harmonic cells and two melodic cells. For example, you might choose set classes 3-9 (027) and 3-7 (025) for your harmonic cells and ic1 and ic2 for your melodic cells.



B. Answer the following questions about the series from Berg's *Lyric Suite*.

1. In the following trichordal segmentation of the series, identify the set class to which each discrete trichord belongs by providing its Forte name and prime form.

3-__ (____) 3-__ (____) 3-__ (____) 3-__ (____)

2. In the following tetrachordal segmentation of the series, identify the set class to which each discrete tetrachord belongs by providing its Forte name and prime form.

4-__ (____) 4-__ (____) 4-__ (____)

3. Determine the normal order of the two discrete hexachords.

1st Hexachord 2nd Hexachord
Normal order: [__, __, __, __, __, __] [__, __, __, __, __, __]

From what scale do the two hexachords appear to be derived? The _____ scale.

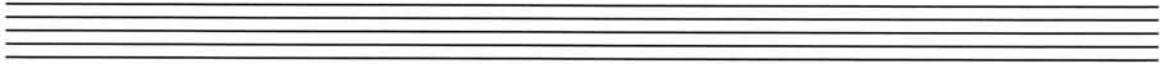
4. Examine the intervallic structure of the series by filling in the blanks to indicate the number of semitones up to the next pitch class. For example, F-E is up 11 semitones.

11 _ _ _ _ _ _ _

What is interesting about the intervallic structure of this series? _____

D. Analysis

1. "Full Moon" by Otto Joachim is based on a 12-tone series. It employs a single series form that we will call P_0 . First, identify the series and notate it (using the treble clef) on the staff provided below. (Hint: The series is presented for the first time in mm. 1-3. The order of the pitch classes in m. 3 is $E\flat-B\flat-G\flat-D\flat$.)

 P_0 

Order

numbers: 1 2 3 4 5 6 7 8 9 10 11 12

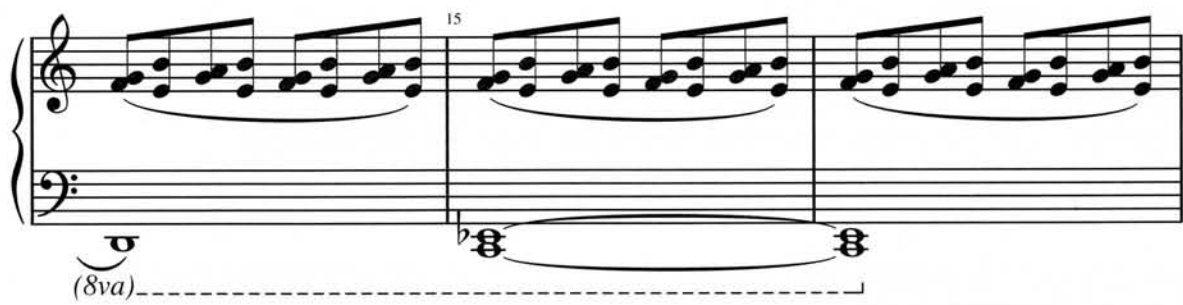
Now trace the presentation of the series in mm. 1-24 by marking series forms (remember, the piece only employs P_0) and order numbers (1-12) on the score.

Full Moon Otto Joachim

8va ----- 8va -----

from *Twelve 12-Tone Pieces for Children*

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Scarborough.



System 1: Treble and bass staves. Treble staff has a continuous eighth-note arpeggiated pattern. Bass staff has a whole note chord of G2, B1, and D2, with a slur and a dashed line below labeled (8va). A measure number 15 is above the first measure.



System 2: Treble and bass staves. Treble staff continues the arpeggiated pattern. Bass staff has a half note G2, then a half note B1, then a half note D2, followed by a whole note chord of G#2, B#2, and D#2. Dynamics *mf* and *p* are indicated below the bass staff.



System 3: Treble and bass staves. Treble staff continues the arpeggiated pattern. Bass staff has a whole note chord of G#2, B#2, and D#2, followed by a whole note chord of G#2, B#2, and D#2, and then a whole note chord of G#2, B#2, and D#2. A measure number 20 is above the first measure.



System 4: Treble and bass staves. Treble staff continues the arpeggiated pattern. Bass staff has a whole note chord of G#2, B#2, and D#2, followed by a whole note chord of G#2, B#2, and D#2, and then a whole note chord of G#2, B#2, and D#2. A measure number 25 is above the first measure. The word *dim.* is written below the bass staff.



System 5: Treble and bass staves. Treble staff continues the arpeggiated pattern. Bass staff has a whole note chord of G#2, B#2, and D#2, followed by a whole note chord of G#2, B#2, and D#2, and then a whole note chord of G#2, B#2, and D#2. The word *rit.* is written below the bass staff, and *ppp* is written below the treble staff.

In some ways, “Full Moon” sounds almost impressionistic. What compositional devices has the composer employed to create this effect?

2. "The Moon Rises" by Ernst Krenek is based on the following 12-tone series:

P_0

Order numbers: 1 2 3 4 5 6 7 8 9 10 11 12

Like Joachim's "Full Moon," it employs a single series form (P_0). Trace the presentation of the series throughout the course of the piece by marking order numbers (1–12) on the score.

Krenek, "The Moon Rises," from *Twelve Short Piano Pieces*, Op. 83

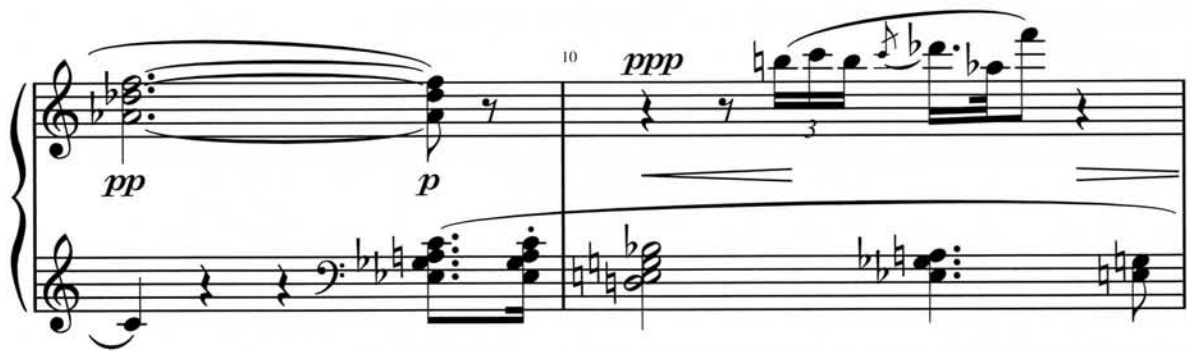
Adagio ♩ = 42

pp p

5

pp

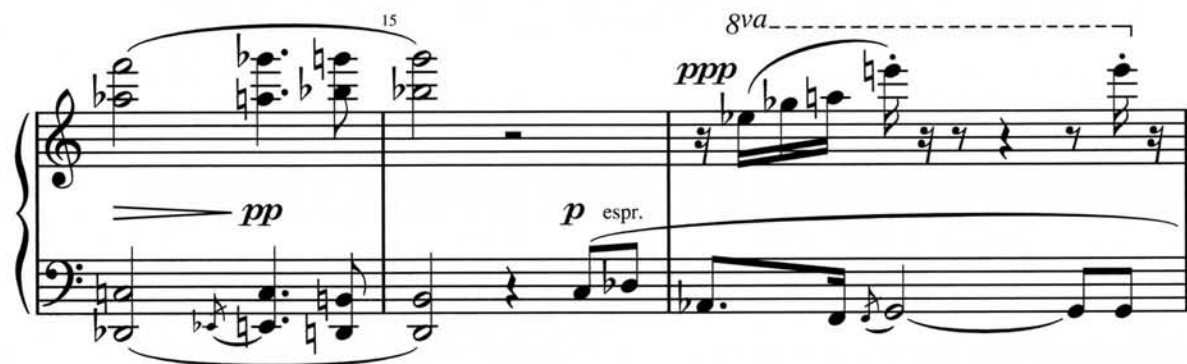
"The Moon Rises" from *Twelve Short Piano Pieces* by Ernst Krenek. Copyright © 1939 (renewed) by Associated Music Publishers, Inc. (BMI). International copyright secured. All rights reserved. Reprinted by permission.



First system of the musical score. The treble clef staff begins with a *pp* dynamic and a half note chord, followed by a *p* dynamic half note chord. A measure rest is marked with a '7'. The system concludes with a *ppp* dynamic and a triplet of eighth notes. The bass clef staff features a half note chord, a measure rest, and a half note chord.



Second system of the musical score. The treble clef staff starts with a *p* dynamic half note chord, followed by a measure rest, and then a triplet of eighth notes marked *ppp*. The bass clef staff contains a half note chord, a measure rest, and a half note chord.



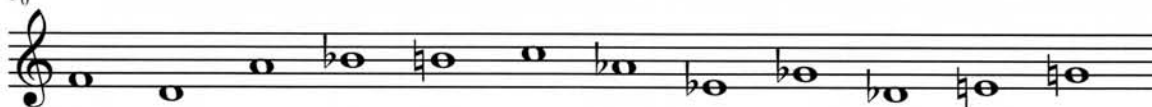
Third system of the musical score. The treble clef staff begins with a *pp* dynamic half note chord, followed by a measure rest, and then a half note chord. A measure rest is marked with a '15'. The system concludes with a *ppp* dynamic and a half note chord. The bass clef staff features a half note chord, a measure rest, and a half note chord. A *p espr.* dynamic is indicated for the final half note chord. A dashed line labeled '8va' spans the final half note chord.



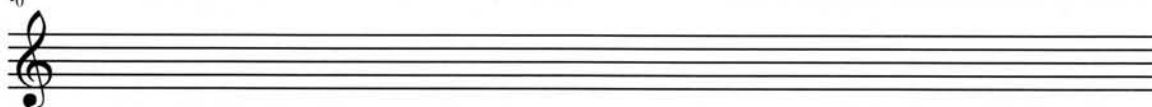
Fourth system of the musical score. The treble clef staff begins with a *pp dolce* dynamic and a triplet of eighth notes, followed by a *p* dynamic half note chord. A measure rest is marked with a '3'. The system concludes with a *ppp* dynamic and a half note chord. The bass clef staff features a half note chord, a measure rest, and a half note chord.

3. "Glass Figures" by Ernst Krenek, is based on the following 12-tone series. In preparation for the work that follows, notate the I_0 and R_0 forms of the series on the staves provided:

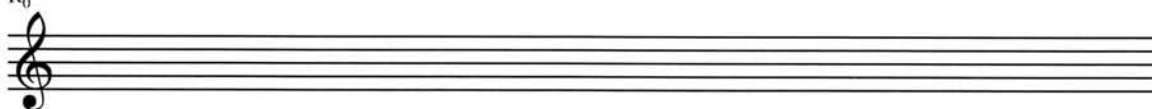
P_0



I_0



R_0



In examining the music, you will note that the first measure of the right hand opens with the first three notes of I_0 , whereas the left hand features the first two notes of R_0 . The third note of this latter series form $D\flat$, is accommodated by the right hand because the third note of I_0 is also a $D\flat$. Following this, the roles of the series forms are reversed, with the left hand picking up I_0 while the right hand continues with R_0 . Because of the frequency of this type of exchange where two or more series forms are involved, it is advisable to use different-colored pencils to indicate different series forms in operation.

Krenek, "Glass Figures," from *Twelve Short Piano Pieces*, Op. 83

Andante ben tenuto ♩ = 63



pp *molto stacc.* *p* *pp* *pp*

senza Ped.

"Glass Figures" from *Twelve Short Piano Pieces* by Ernst Krenek. Copyright © 1939 (renewed) by Associated Music Publishers, Inc. (BMI). International copyright secured. All rights reserved. Reprinted by permission.

5 *pp* *dolce legato rit.* *a tempo* *ppp* *stacc.*

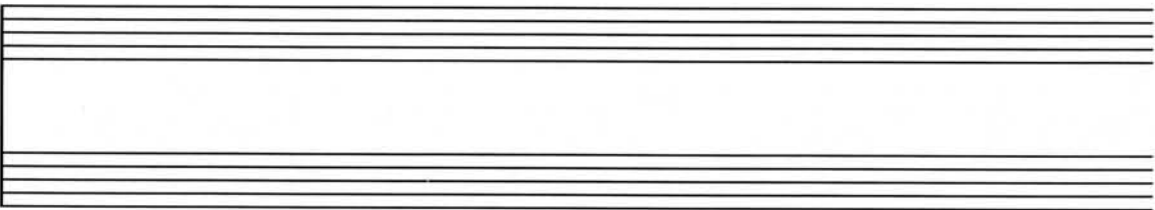
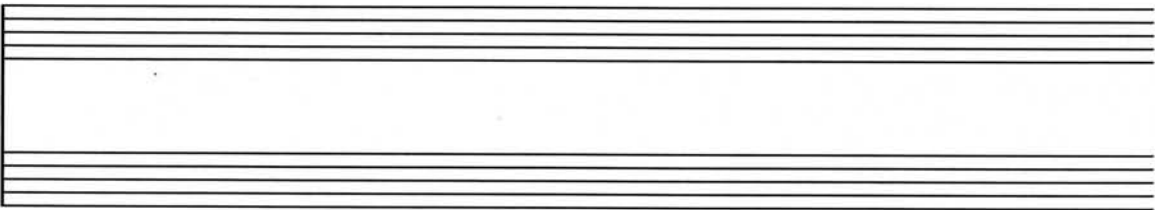
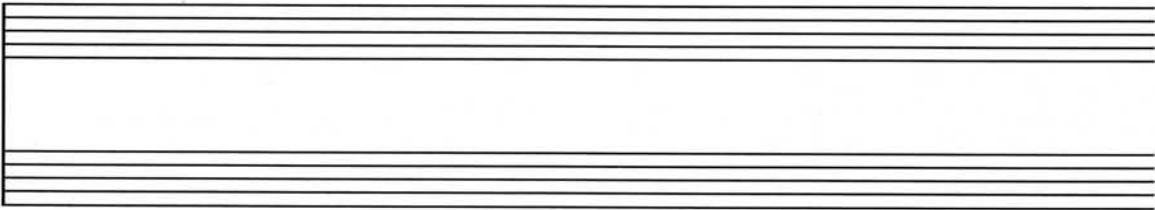
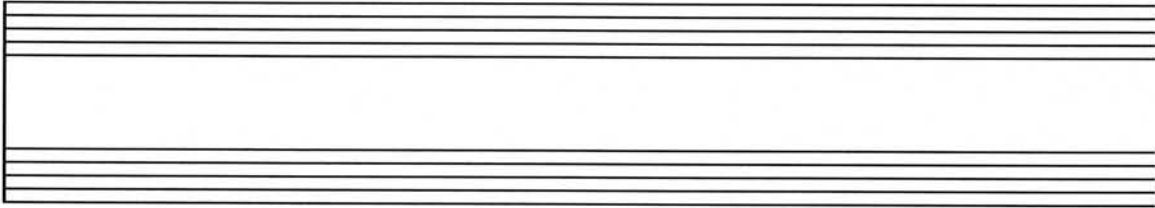
10 *pp espr. legato* *mf* *f*

15 *ff* *f* *mf* *p* *pp*

pp

20 *pp* *ppp*

- E. Composition. Using the series for “The Moon Rises” shown below, compose a two-voice composition, the upper voice of which is based on a transposed series form while the lower voice makes use of a retrograde series form. You might want to try using instruments other than piano, such as violin and cello or two flutes.



EXERCISE 28-6

- A. With the help of your instructor, find works that illustrate the principles of aleatory or chance, minimalism, the use of texture and expanded instrumental resources, and electronic music discussed in Chapter 28. Then try the following exercises.
1. Compose a short piece featuring aleatoric or indeterminate elements. Prepare a performance for class.
 2. Analyze and write a summary of a piece that combines live performer and recorded music. On the basis of your findings, compose a piece in this style.
 3. Compose a piece featuring special effects for your instrument or voice. Perform the piece in class.
 4. Compose a one measure melodic gesture (theme) that will form the basis for a minimalist piece. Your composition should be based entirely on rhythmic modifications of this theme. Have the piece performed in class. Be sure that your performance directions are perfectly clear. (Hint: Your class performance will go much better if you arrange at least a brief rehearsal first!)

Compact Discs to Accompany Workbook

THE PERFORMERS

Jana Holzmeier, *soprano*
Jennifer Murray, *soprano*
Julia Armstrong, *mezzo-soprano*
Tim Campbell, *tenor*
David L. Jones, *tenor*
David Stevens, *tenor*
Joel Quade, *baritone*
Richard Womack, *baritone*
Elizabeth Whitten, *flute*
David Pinkard, *bassoon*
Michael Misner, *horn*
James Wester, *horn*
Jennifer Bourianoff, *violin*
Marian Mentel, *violin*
Roger Graybill, *organ*
Jeff Hellmer, *piano (popular and jazz)*
Myra Spector, *jazz vocals*
David Mead, Alejandro Hernandez-Valdez, *piano and harpsichord*
Kyle Sigrest, *piano II*

The Barton Strings
Beth Blackerby, *violin*
Jennifer Bourianoff, *violin and viola*
Martha Carapetyan, Bruce Williams, *viola*
Carolyn Blubaugh-Hagler, *violoncello*

Tosca String Quartet
Leigh Mahoney, *1st violin*
Tracy Seeger, *2nd violin*
Ames Asbell, *viola*
Sara Nelson, *cello*

Chamber Choir—David Mead, *conductor*
Judith Kanana, Carol Hopkins, *soprano*
Brooke Lehr, Kellie McCurdy, *contralto*
Oliver Worthington, *tenor*
Te Oti Rakena, Steven Olivares, *bass*

Orchestra—David Mead, Alejandro Hernandez Valdez, *conductors*
Elizabeth Whitten, Michelle Clover Neal, *flute*
Pamela Whitcomb, Lana Neal, *oboe*
Marisa Bannworth Wester, Shannon Thompson, *clarinet*
David Pinkard, Rhonda Collison, *bassoon*
James Wester, Michael Misner, Richard Wheatley, Kellie Babcock, *horn*
Thomas Caswell, Stephen Miles, *trumpet*
Sean Scot Reed, David Garcia, David Hendricksen, *trombone*
Richard Short, *timpani*
Marian Mentel, *concertmaster*; Tera Shimizu, *principal violin II*
Jennifer Fedie, Wei He, Daniel McAtee, Sean Milligan, Hye-Sung Oh, Sue-Jean Park, Linda Piatt, Thomas Sender, Marvin Suson, Alicija Usarek, *violin*
Joseph Tan, Mark Sattler, Jason Elinoff, *viola*
Paul Rhodes, Kirsten Eggen, Sara Nelson, Victorial Wolff, *violoncello*
John Rosenkrans, Robert Jenkins, *contrabass*

Mark Ellis, *announcer*
David Mead, *producer*
Andrew Murphy, Frank Simon, *engineers*
J. Burke Hunn, Michael Czysz, *assistant engineers*

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Listening Example track information on next page.

LISTENING EXAMPLES

CD 1

Disc Duration:
45:13:14

Track Name

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- 2 WB 3-4 B1
- 3 WB 3-4 B2
- 4 WB 3-4 B3
- 5 WB 4-1 C1
- 6 WB 4-1 C2
- 7 WB 4-2 C1
- 8 WB 4-2 C2
- 9 WB 5-2 A
- 10 WB 5-3 A
- 11 WB 7-1 C1
- 12 WB 7-1 C2
- 13 WB 8-1 A1
- 14 WB 8-1 A2
- 15 WB 8-1 A3
- 16 WB 9-1 A1
- 17 WB 9-1 A2
- 18 WB 9-1 A3
- 19 WB 9-1 A4
- 20 WB 9-1 A5
- 21 WB 9-1 A6
- 22 WB 10-1 B1
- 23 WB 10-1 B2
- 24 WB 10-1 B3
- 25 WB 10-1 B4
- 26 WB 10-1 B5
- 27 WB 10-1 B6
- 28 WB 10-1 B7
- 29 WB 11-1 A2
- 30 WB 12-1 A4
- 31 WB 12-1 A5
- 32 WB 12-1 A6
- 33 WB 13-1 B
- 34 WB 13-2 B1
- 35 WB 13-2 B2
- 36 WB 13-2 B3
- 37 WB 13-2 B4
- 38 WB 14-1 C1
- 39 WB 14-1 C2
- 40 WB 14-1 C3
- 41 WB 14-1 C4
- 42 WB 14-1 C5
- 43 WB 15-1 C1

- 44 WB 15-1 C2
- 45 WB 15-1 C3
- 46 WB 15-1 C4
- 47 WB 15-1 F
- 48 WB 16-2 A1
- 49 WB 16-2 A2
- 50 WB 16-2 A3
- 51 WB 16-2 A4
- 52 WB 16-2 A5
- 53 WB 16-2 A6
- 54 WB 17-2 A1
- 55 WB 17-2 A2
- 56 WB 17-2 A3
- 57 WB 17-2 A4
- 58 WB 17-2 A5
- 59 WB 18-2 A1
- 60 WB 18-2 A2
- 61 WB 18-2 A3
- 62 WB 18-2 A4
- 63 WB 18-2 A5
- 64 WB 18-2 A6
- 65 WB 18-2 A7
- 66 WB 18-2 A8
- 67 WB 19-1 A1
- 68 WB 19-1 A2
- 69 WB 19-1 A3
- 70 WB 19-1 A4
- 71 WB 19-1 A5
- 72 WB 20-1 A
- 73 WB 20-1 B
- 74 WB 20-1 C
- 75 WB 20-1 D
- 76 WB 20-1 E

- 10 WB 22-1 C4
- 11 WB 22-1 C5
- 12 WB 22-1 C6
- 13 WB 22-1 C7
- 14 WB 23-1 D1
- 15 WB 23-1 D2
- 16 WB 23-1 D3
- 17 WB 23-1 D4
- 18 WB 23-1 D5
- 19 WB 23-1 D6
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- 22 WB 24-1 B3
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- 29 WB 25-1 E5
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- 31 WB 26-1 C2
- 32 WB 26-1 C3
- 33 WB 26-1 C5
- 34 WB 26-1 C6
- 35 WB 26-1 C7
- 36 WB 26-1 C8
- 37 WB 26-1 C9
- 38 WB 26-1 C10
- 39 WB 27-1 A
- 40 WB 27-1 D
- 41 WB 27-1 E
- 42 WB 27-1 F
- 43 WB 27-1 G
- 44 WB 27-1 H
- 45 WB 27-1 I
- 46 WB 27-1 J
- 47 WB 28-1 H2
- 48 WB 28-1 H3
- 49 WB 28-1 H4
- 50 WB 28-2 C1
- 51 WB 28-2 C2
- 52 WB 28-2 C3
- 53 WB 28-2 C4
- 54 WB 28-2 G
- 55 WB 28-3 B1

CD 2

Disc Duration:
40:09:08

Track Name

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- 3 WB 21-1 C3
- 4 WB 21-1 C4
- 5 WB 21-1 C5
- 6 WB 21-1 C6
- 7 WB 22-1 C1
- 8 WB 22-1 C2
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