

e-Workbook
for
**TECHNIQUES AND MATERIALS OF
MUSIC**

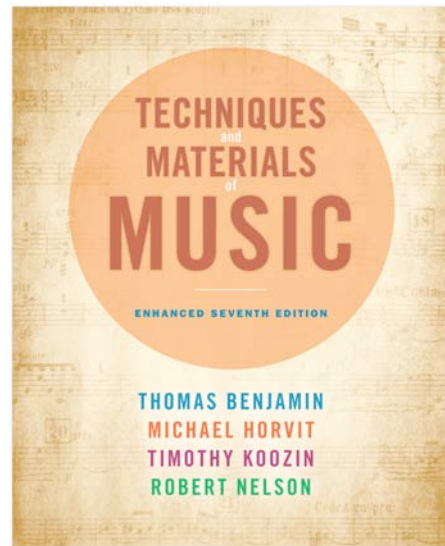
*From the Common Practice Period Through the
Twentieth Century*

ENHANCED SEVENTH EDITION

Part I: Rudiments

Assignments in worksheet format by

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Part I: Rudiments

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Preface

This e-Workbook is intended to supplement the exercises found in *Techniques and Materials of Music*, enhanced 7th edition. Instructors will find these exercises useful in several ways:

- Intensive study of particular topics
- Extra work for students having difficulty with selected topics
- Remediation, particularly for transfer students
- As a source of exercises for quizzes and tests

There are four types of exercises:

- Preliminary exercises. These exercises introduce new material in simple contexts, to help students get started with the basics of part writing.
- Melodies for harmonization.
- Figured and unfigured basses.
- Compositional exercises. These exercises establish a particular texture for the completion of the harmonization, or, in some instances, the composition of one to two phrases in the style of the given measures.

Exercises are graded and cumulative and are intended to incorporate all the harmonic vocabulary introduced to that point.

All exercises are presented with the necessary blank staves. In the early units, choral voicing or keyboard voicing is specified; in later units the student or instructor is given the choice of voicing. For the sake of simplicity, all the basic part-writing exercises have been notated with stems up in the soprano and stems down in the bass. If an exercise is realized in keyboard voicing the student will need to adjust the stem directions to reflect common notational practice.

The textural exercises are thoroughly edited. When doing these exercises it is important that the student approach them as if writing *real music*. Attention must be paid to continuing the articulations as in the given measures. The student may wish to add additional dynamic markings such as *crescendos* and *diminuendos* to support the shape of the music.

Suggestions for the Student

Before doing these exercises, it will be important to study with care the matching explanatory pages in *Techniques and Materials of Music*, and the corresponding examples found in *Music for Analysis* (7th edition, Oxford University Press).

In each exercise, carefully analyze the given material in terms of its harmonic and melodic content as well as all aspects of patterning, so that your work is logical and consistent in terms of the given. If the exercise involves harmonizing a melody, analyze (or perhaps discuss in class) the implied harmonic rhythm and the harmonic and cadential implications of the given line; if an unfigured bass, analyze and discuss the harmonic implications of each note in the bass, paying close attention to typical bass-line scale-degree idioms; if a texture/stylistic exercise, pay close attention to all aspects of patterning and style in the given. Hearing and analyzing similar examples from *Music for Analysis* will be especially helpful with these more compositional/stylistic exercises.

It is important in all your writing both to analyze and understand the choices you are making, and to produce a result that is pleasing and musical to the ear.

Part I on musical rudiments is new to this edition. These written exercises provide for a review of musical fundamentals that many students need in order to be successful with the more advanced material to follow.

For the exercises in Part III: Where there is chromaticism, be sure you understand the harmonic implications of each altered scale-degree before starting to work out the exercise. Which notes might be non-harmonic tones? Which imply secondary dominants or other chromatic vocabulary? What is the implied harmonic rhythm? What patterns of chromaticism can you find?

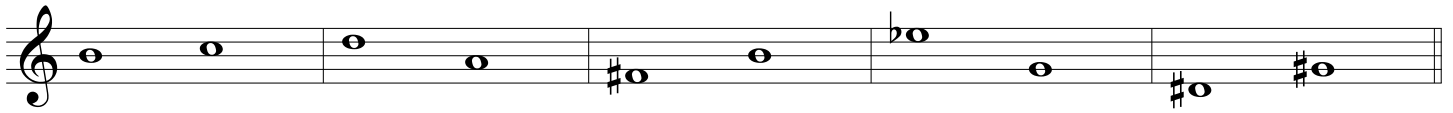
For the exercises in Part IV, it is especially important that you study the relevant chapters from *Techniques and Materials of Music*, and analyze examples from *Music for Analysis* before you undertake the writing of the exercises, as they cannot be well done without a good deal of knowledge of both technique and style. Analyze with care the given materials in each exercise in terms of all the musical aspects: scale or pitch collection, harmonic vocabulary, rhythmic organization and all aspects of patterning. Your result should as closely as possible match the sound of the given material.

3. Correct the ambiguities, using cautionary (courtesy) accidentals where needed or otherwise appropriate.

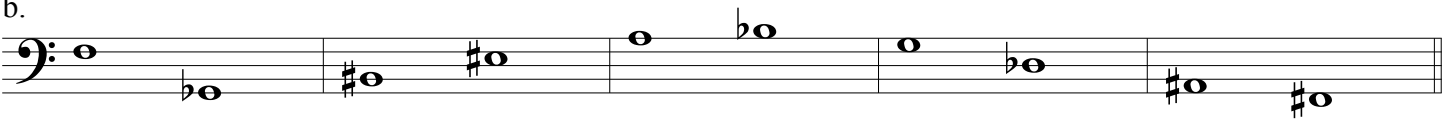


1. Identify the intervals between the following pairs of pitches.

a.



b.



c.

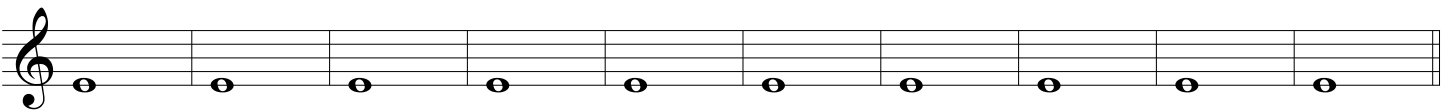


d.

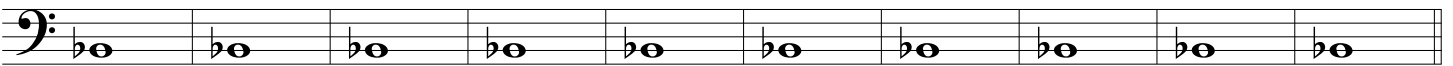


2. Write the notes that form the indicated intervals *above* the given pitch.

a. P5 m2 d5 M7 m3 M6 A4 m7 P5 M3



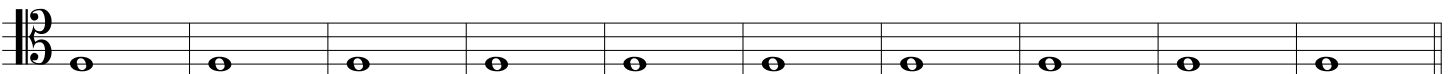
b. A2 m6 P5 M3 m2 M7 M6 d5 m3 A6



c. M3 P4 m2 m6 d5 M7 M2 M6 A4 m7



d. M7 m6 M2 A4 M3 d5 A6 m2 A3 P5



3. Identify the intervals between the following pairs of pitches.

a.

A musical staff in treble clef with a key signature of one sharp (F#). It contains five pairs of notes: (1) G4 and A4, (2) Bb3 and Bb3, (3) C4 and E4, (4) D4 and F#4, (5) G4 and Bb4.

b.

A musical staff in bass clef with a key signature of one sharp (F#). It contains five pairs of notes: (1) G2 and A2, (2) Bb2 and Bb2, (3) C3 and E3, (4) D3 and F#3, (5) G3 and Bb3.

c.

A musical staff in bass clef with a key signature of one sharp (F#). It contains five pairs of notes: (1) G2 and A2, (2) Bb2 and Bb2, (3) C3 and E3, (4) D3 and F#3, (5) G3 and Bb3.

d.

A musical staff in bass clef with a key signature of one sharp (F#). It contains five pairs of notes: (1) G2 and A2, (2) Bb2 and Bb2, (3) C3 and E3, (4) D3 and F#3, (5) G3 and Bb3.

4. Write the notes that form the indicated intervals *above* the given pitch.

a. M3 P5 m2 d7 M2 d5 P4 M7 m6 M6

A musical staff in treble clef with a key signature of one sharp (F#). It contains ten starting notes: F#4, G4, A4, Bb4, C5, D5, E5, F#5, G5, A5. The space above each note is blank for writing the interval.

b. d5 m3 P5 M3 m7 m6 m2 M6 A3 P4

A musical staff in bass clef with a key signature of one sharp (F#). It contains ten starting notes: G2, A2, Bb2, C3, D3, E3, F#3, G3, A3, Bb3. The space above each note is blank for writing the interval.

c. M7 A6 m2 P4 M3 P5 A4 M7 M6 m3

A musical staff in bass clef with a key signature of one sharp (F#). It contains ten starting notes: G2, A2, Bb2, C3, D3, E3, F#3, G3, A3, Bb3. The space above each note is blank for writing the interval.

d. M3 m6 m2 P4 P5 M6 M7 A4 m3 M3

A musical staff in bass clef with a key signature of one sharp (F#). It contains ten starting notes: G2, A2, Bb2, C3, D3, E3, F#3, G3, A3, Bb3. The space above each note is blank for writing the interval.

5. Write the notes that form the indicated intervals *below* the given pitch.

a. P4 m6 d5 M2 M7 m2 P5 m3 d7 A4

b. M3 M7 m6 M7 m2 A4 M6 P5 A6 m7

c. M3 m2 P5 M7 P4 A2 d5 m6 A6 m3

d. A4 m7 M3 P5 m2 m6 M7 d5 P4 M6

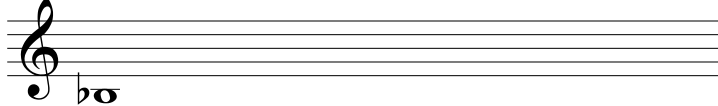
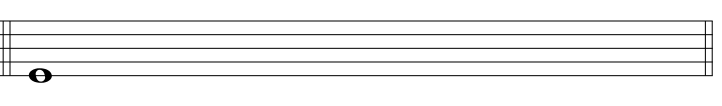
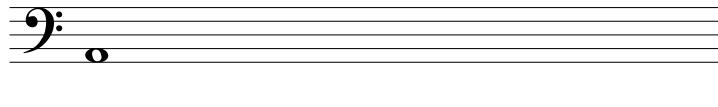
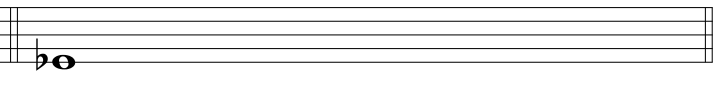
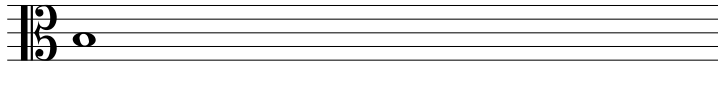
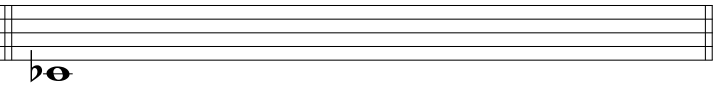
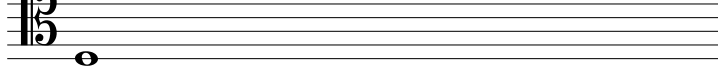
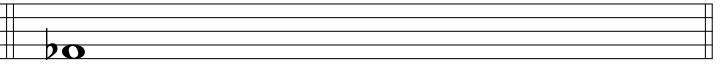
6. Invert the given intervals. Identify both the given and inverted intervals.

a.

b.

c.

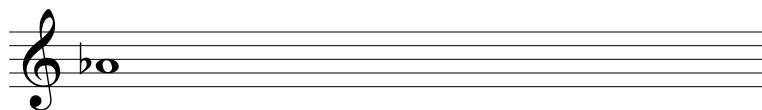
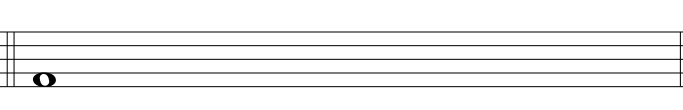
1. Write major scales ascending one octave with the given pitch as tonic. Use accidentals as they are required to form the proper interval series. Do not use key signatures.

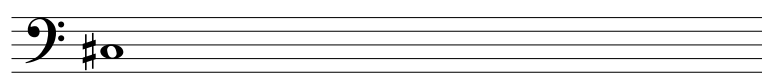
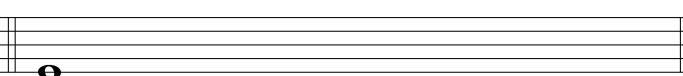
a.	b.
	
c.	d.
	
e.	f.
	
g.	h.
	

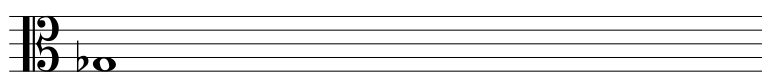
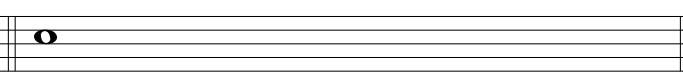
2. Write the three forms of the minor scale ascending from the given pitch. Write the melodic minor descending as well. Use accidentals as they are required to form the proper interval series. Do not use key signatures.

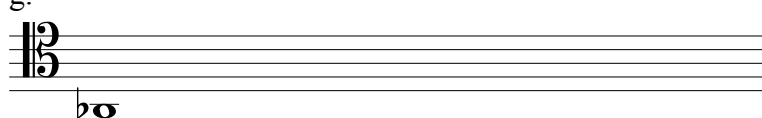
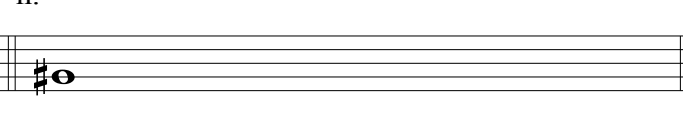
	Natural Minor	Harmonic Minor	Melodic Minor
a.			
b.			
c.			
d.			

3. Write major scales ascending one octave with the given pitch as tonic. Use accidentals as they are required to form the proper interval series. Do not use key signatures.

a.  b. 

c.  d. 

e.  f. 

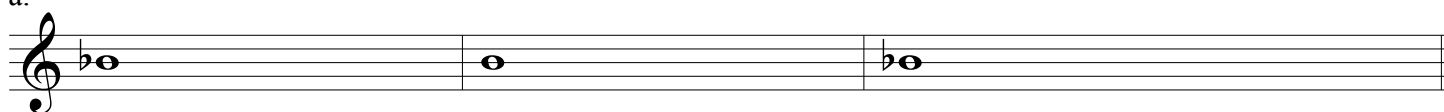
g.  h. 

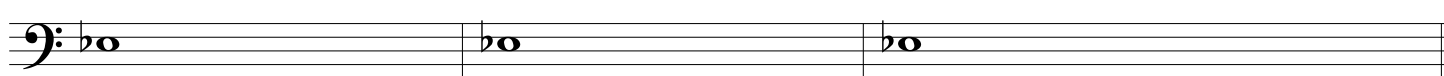
4. Write the three forms of the minor scale ascending from the given pitch. Write the melodic minor descending as well. Use accidentals as they are required to form the proper interval series. Do not use key signatures.

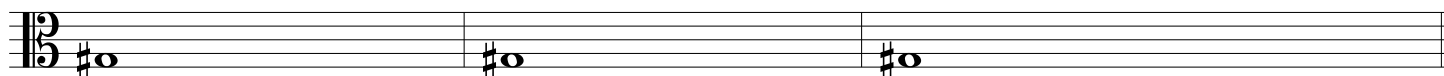
Natural Minor

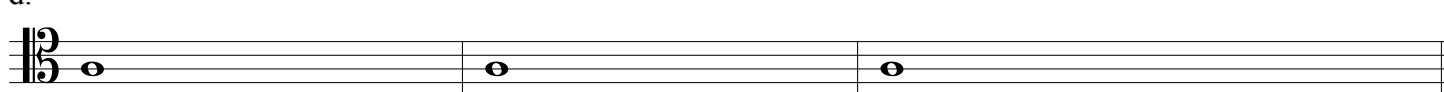
Harmonic Minor

Melodic Minor

a. 

b. 

c. 

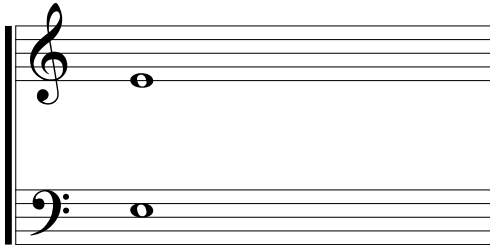
d. 

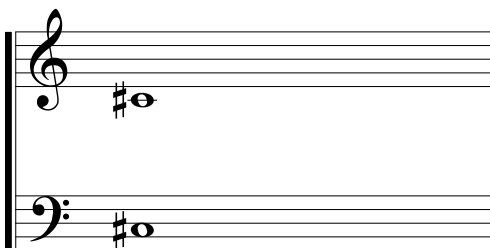
1. Using key signatures and accidentals as needed, write the three forms of the minor scale ascending from the indicated pitches in both clefs. Write the melodic minor descending as well.

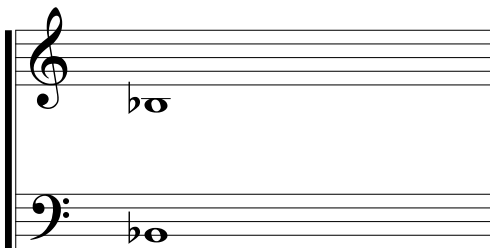
Natural

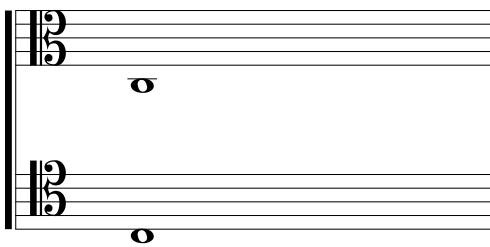
Harmonic


Melodic

		
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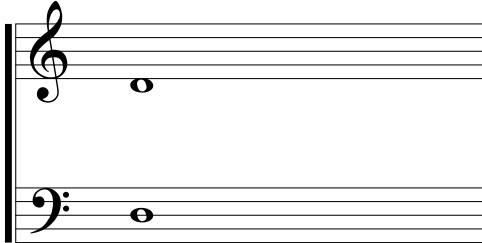
		
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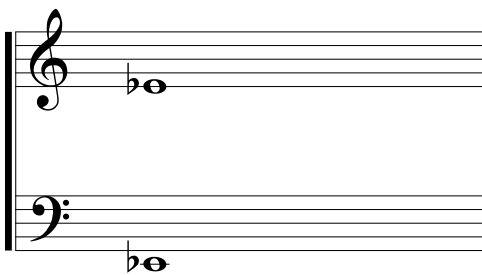
2. Using key signatures and accidentals as needed, write the three forms of the minor scale ascending from the indicated pitches in both clefs. Write the melodic minor descending as well.

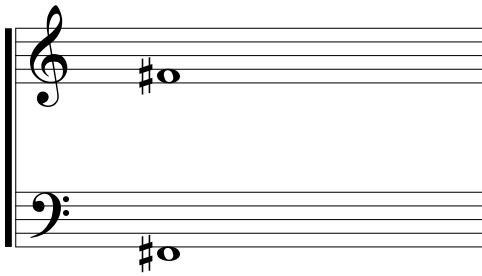
Natural

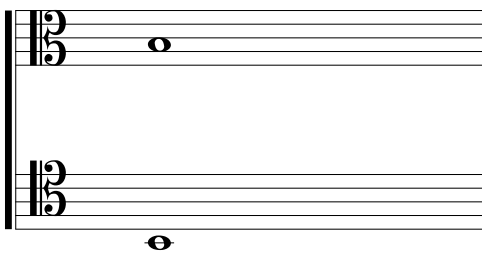
Harmonic


Melodic

		
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1. Construct triads of the indicated quality in each staff.

a. Root given.

Major

Diminished

Minor

Augmented

A musical staff with two staves (treble and bass clefs) divided into four measures. The notes are: Measure 1: Treble clef, middle C (C4); Bass clef, middle C (C4). Measure 2: Treble clef, C#4; Bass clef, C#4. Measure 3: Treble clef, Bb3; Bass clef, Bb3. Measure 4: Treble clef, Bb3; Bass clef, Bb3.

b. Third given.

Minor

Diminished

Major

Augmented

A musical staff with two staves (treble and bass clefs) divided into four measures. The notes are: Measure 1: Treble clef, D#4; Bass clef, D#4. Measure 2: Treble clef, E4; Bass clef, E4. Measure 3: Treble clef, Fb4; Bass clef, Fb4. Measure 4: Treble clef, F#4; Bass clef, F#4.

c. Fifth given.

Minor

Major

Diminished

Augmented

A musical staff with two staves (treble and bass clefs) divided into four measures. The notes are: Measure 1: Treble clef, D#4; Bass clef, D#4. Measure 2: Treble clef, Eb4; Bass clef, Eb4. Measure 3: Treble clef, E4; Bass clef, E4. Measure 4: Treble clef, F#4; Bass clef, F#4.

d. Root given.

Major

Minor

Augmented

Diminished

A musical staff with two staves (both in bass clef) divided into four measures. The notes are: Measure 1: Treble clef, Bb3; Bass clef, Bb3. Measure 2: Treble clef, E4; Bass clef, E4. Measure 3: Treble clef, Bb3; Bass clef, Bb3. Measure 4: Treble clef, C#4; Bass clef, C#4.

2. Construct triads of the indicated quality in each staff.

a. Root given.

Augmented

Diminished

Major

Minor

Exercise a: Root given. Four musical staves showing triads in treble and bass clefs. The first staff shows an augmented triad (C-E-G#), the second a diminished triad (C-Eb-Gb), the third a major triad (C-E-G), and the fourth a minor triad (C-Eb-G).

b. Third given.

Minor

Diminished

Major

Augmented

Exercise b: Third given. Four musical staves showing triads in treble and bass clefs. The first staff shows a minor triad (Eb-G-Bb), the second a diminished triad (Eb-Gb-Bb), the third a major triad (Eb-G#-Bb), and the fourth an augmented triad (Eb-G-B).

c. Fifth given.

Major

Minor

Diminished

Augmented

Exercise c: Fifth given. Four musical staves showing triads in treble and bass clefs. The first staff shows a major triad (Eb-G-B), the second a minor triad (Eb-G-Bb), the third a diminished triad (Eb-Gb-Bb), and the fourth an augmented triad (Eb-G-B).

d. Third given.

Augmented

Minor

Major

Diminished

Exercise d: Third given. Four musical staves showing triads in bass clefs. The first staff shows an augmented triad (Eb-G-B), the second a minor triad (Eb-G-Bb), the third a major triad (Eb-G#-Bb), and the fourth a diminished triad (Eb-Gb-Bb).

e. Fifth given.

Diminished

Minor

Augmented

Major

Exercise e: Fifth given. Four musical staves showing triads in bass clefs. The first staff shows a diminished triad (Eb-Gb-Bb), the second a minor triad (Eb-G-Bb), the third an augmented triad (Eb-G-B), and the fourth a major triad (Eb-G#-Bb).

3. Using key signatures, write the major scale ascending on both staves from the given pitch. Construct triads using each note of the scale as root and label the quality of each.

A musical staff with two staves. The left staff is a bass clef with a whole note C4. The right staff is a treble clef with a whole note Bb3. A vertical bar line separates the two staves.

4. Using key signatures and accidentals as needed, write the three forms of the minor scale on both staves ascending from the indicated pitch. Write the melodic minor descending as well. Construct triads using each note of the scale as root and label the quality of each.

Natural

Harmonic

A musical staff with two staves. The left staff is a bass clef with a whole note C4. The right staff is empty. A vertical bar line separates the two staves.

Melodic

An empty musical staff with two staves.

Natural

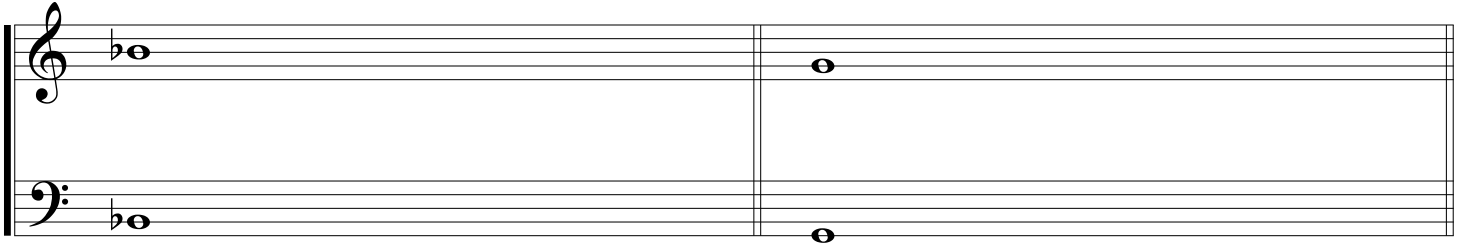
Harmonic

A musical staff with two staves. The left staff is a treble clef with a whole note D#4. The right staff is empty. A vertical bar line separates the two staves.

Melodic

An empty musical staff with two staves.

5. Using key signatures, write the major scale ascending on both staves from the given pitch. Construct triads using each note of the scale as root and label the quality of each.

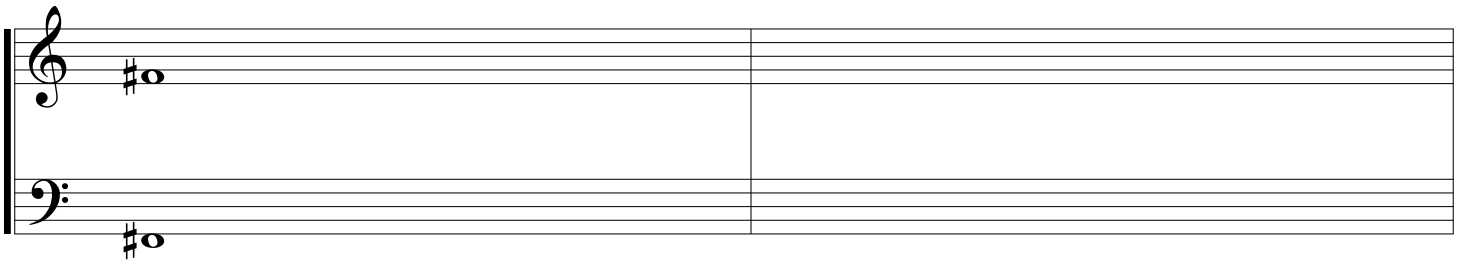


A musical staff with two staves (treble and bass clefs) and a key signature of one flat (B-flat). The first measure contains a whole note on B-flat in both staves. The second measure is empty for student input.

6. Using key signatures and accidentals as needed, write the three forms of the minor scale on both staves ascending from the indicated pitch. Write the melodic minor descending as well. Construct triads using each note of the scale as root and label the quality of each.

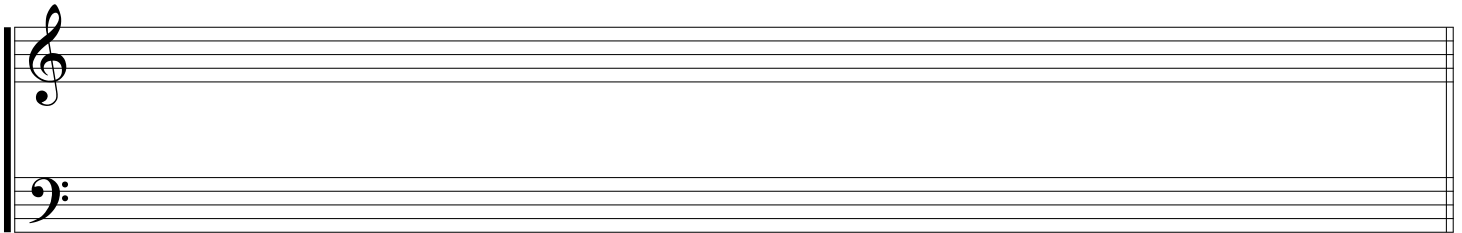
Natural

Harmonic



A musical staff with two staves (treble and bass clefs) and a key signature of one sharp (F-sharp). The first measure contains a whole note on F-sharp in both staves. The second measure is empty for student input.

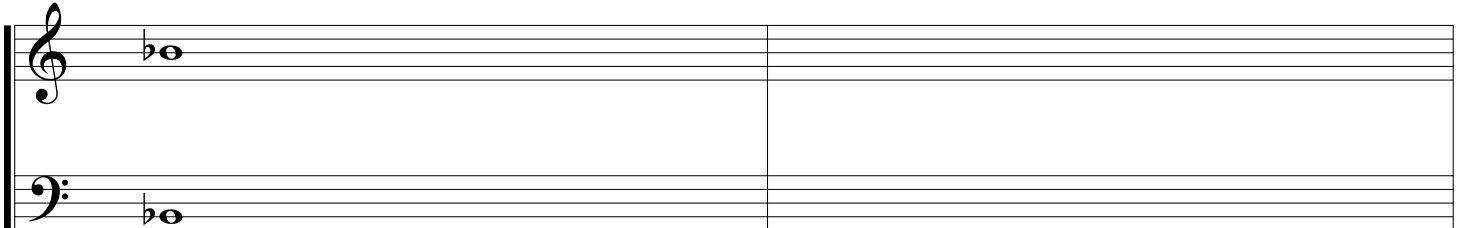
Melodic



A musical staff with two staves (treble and bass clefs) and a key signature of one sharp (F-sharp). The first measure contains a whole note on F-sharp in both staves. The second measure is empty for student input.

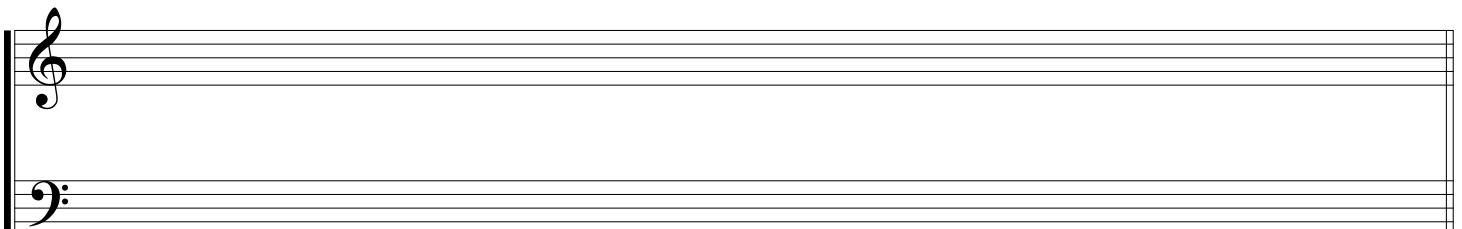
Natural

Harmonic



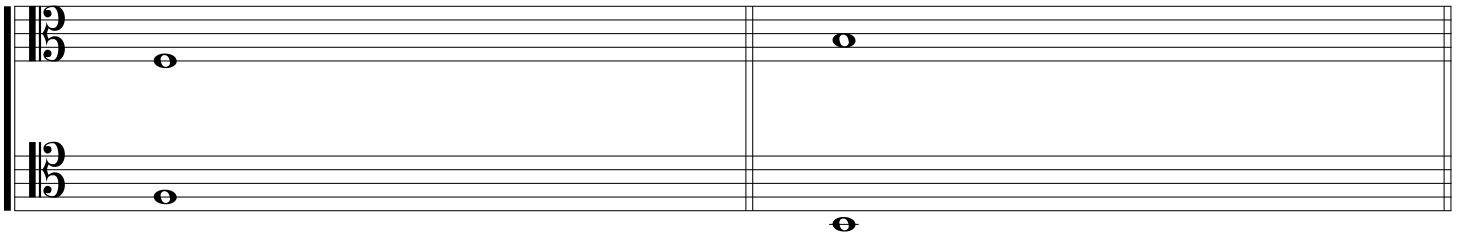
A musical staff with two staves (treble and bass clefs) and a key signature of two flats (B-flat and E-flat). The first measure contains a whole note on B-flat in both staves. The second measure is empty for student input.

Melodic



A musical staff with two staves (treble and bass clefs) and a key signature of two flats (B-flat and E-flat). The first measure contains a whole note on B-flat in both staves. The second measure is empty for student input.

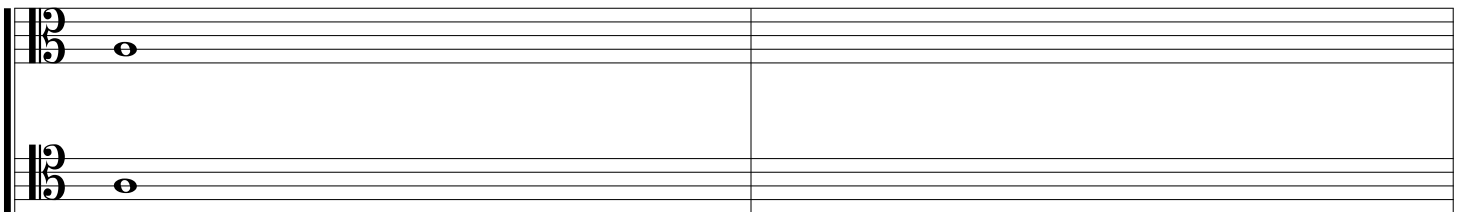
7. Using key signatures, write the major scale ascending on both staves from the given pitch. Construct triads using each note of the scale as root and label the quality of each.



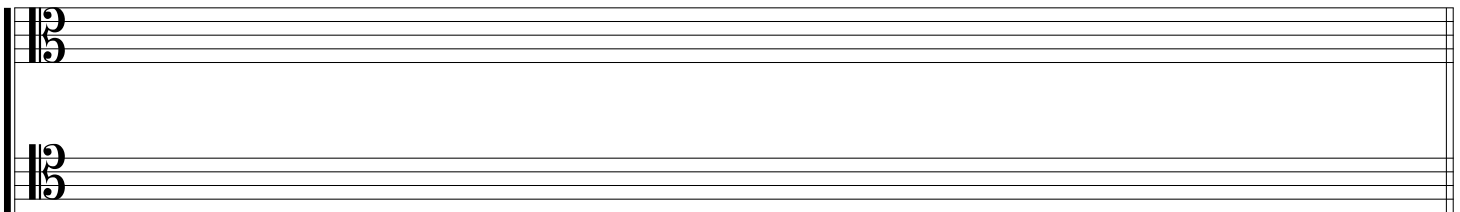
8. Using key signatures and accidentals as needed, write the three forms of the minor scale on both staves ascending from the indicated pitch. Write the melodic minor descending as well. Construct triads using each note of the scale as root and label the quality of each.

Natural

Harmonic

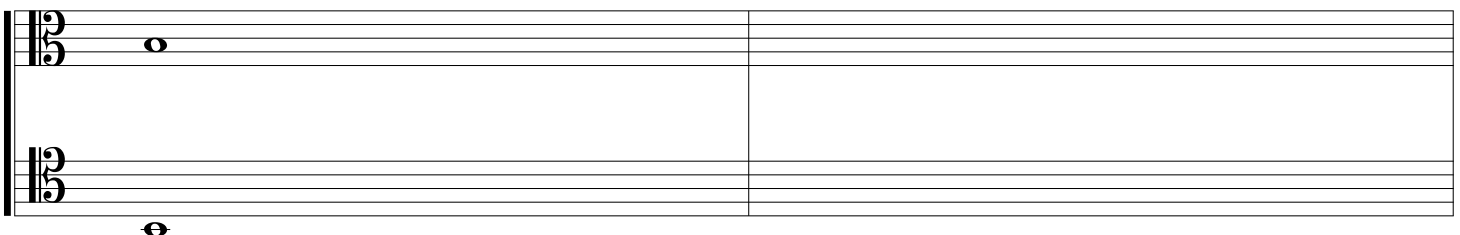


Melodic

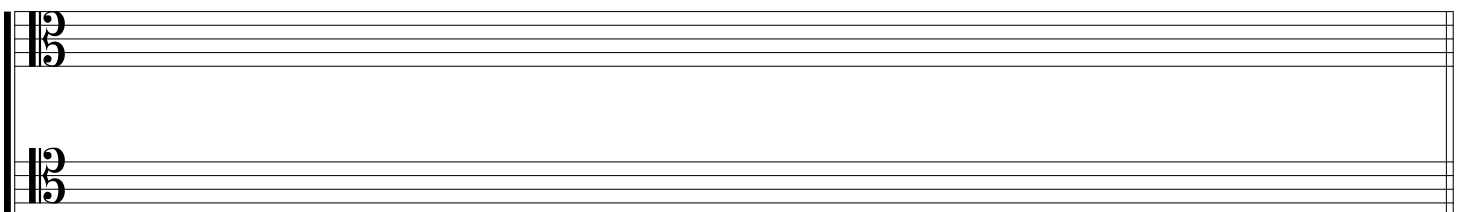


Natural

Harmonic





Melodic








1. Complete the following:

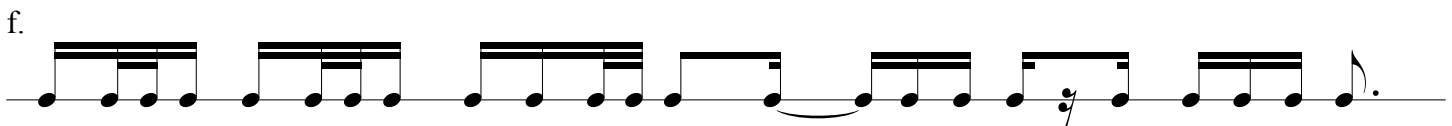
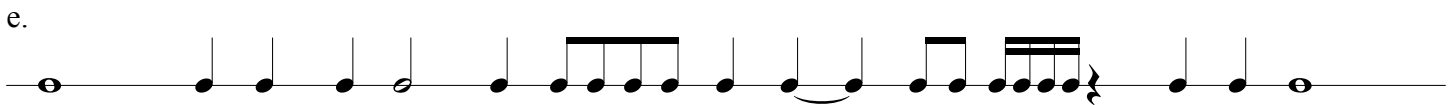
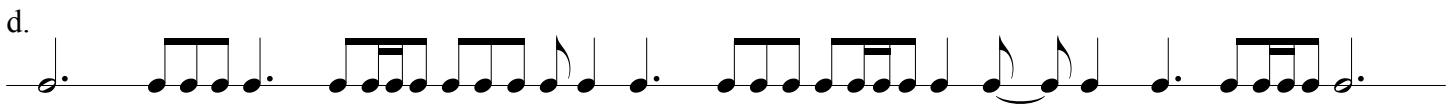
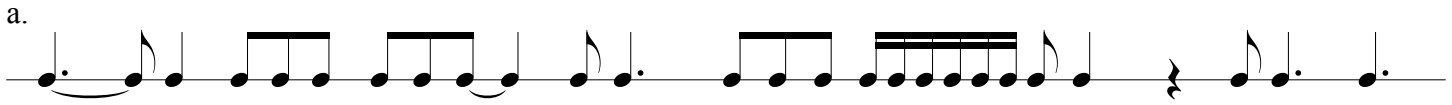
- a. Identify the following meter signatures by indicating the number of beats, the note value receiving the beat, the division of the beat, and the terminology of the meter:

Meter	Beats	Unit of Beat	Background Unit	Terminology
$\frac{2}{4}$	two			simple duple
$\frac{3}{2}$				
$\frac{9}{8}$				
$\frac{4}{2}$				
$\frac{12}{16}$				
$\frac{2}{8}$				
$\frac{3}{16}$				
$\frac{6}{4}$				
$\frac{4}{8}$				

- b. Complete the chart below:

Meter	Beats	Unit of Beat	Background Unit	Terminology
				compound triple
$\frac{3}{4}$				
	four			
	two			simple _____
$\frac{12}{8}$				
	three			
	three			simple _____
$\frac{9}{4}$				

3. What meter signature does each of the following patterns suggest? Examine the patterns, determine the meter signature of each, add this signature at the beginning of each example, and draw in measure bars. Each example will be *four* measures.



4. In the following examples, replace the ties with dotted notes wherever possible. The duration of each note should remain the same.

a.

b.

c.

d.

e.

f.

g.

h.

5. Notate the following examples in the related meters indicated. In other words, keep the same number of notes in each measure and the same rhythmic relationships, only changing the note values to fit the meter.

Example:

a. Rewrite the following example in $\frac{3}{2}$ and $\frac{3}{8}$.

b. Rewrite the following in $\frac{6}{4}$ and $\frac{6}{16}$.

6. Rewrite the following examples in the equivalent compound meter.

Example:

The example shows two staves of music. The top staff is in common time (C) and contains a sequence of notes: a quarter note, a pair of eighth notes, a dotted quarter note, an eighth note, a triplet of eighth notes, a quarter note, a quarter rest, an eighth note, a dotted quarter note, and a quarter rest. The bottom staff is in 12/8 time and shows the equivalent compound meter with a dotted quarter note, a pair of eighth notes, a dotted quarter note, a pair of eighth notes, a triplet of eighth notes, a quarter note, a quarter rest, a pair of eighth notes beamed together, a dotted quarter note, and a dotted half note.

a.

Example a shows a staff in 3/4 time with a quarter note, a pair of eighth notes, a triplet of eighth notes, a dotted quarter note, a quarter note, a pair of eighth notes, a triplet of eighth notes, a quarter rest, an eighth note, a quarter note, a quarter rest, a triplet of eighth notes, and a quarter note. Below it is a blank staff with bar lines for rewriting.

b.

Example b shows a staff in 3/4 time with a half note, a triplet of eighth notes, a quarter note, a dotted quarter note, a quarter note, a quarter rest, a triplet of eighth notes, a quarter note, a triplet of eighth notes, a quarter note, and a dotted half note. Below it is a blank staff with bar lines for rewriting.

c.

Example c shows a staff in common time (C) with a quarter note, an eighth note, a triplet of eighth notes, a pair of eighth notes, a quarter note, a quarter note, a pair of eighth notes, a triplet of eighth notes, a pair of eighth notes, a triplet of eighth notes, a pair of eighth notes, a quarter note, and a dotted quarter note. Below it is a blank staff with bar lines for rewriting.

d.

Example d shows a staff in 2/4 time with a quarter note, a pair of eighth notes, a triplet of eighth notes, a quarter note, a dotted quarter note, a pair of eighth notes, a pair of eighth notes, a pair of eighth notes, a triplet of eighth notes, a pair of eighth notes, a pair of eighth notes, and a quarter note. Below it is a blank staff with bar lines for rewriting.

