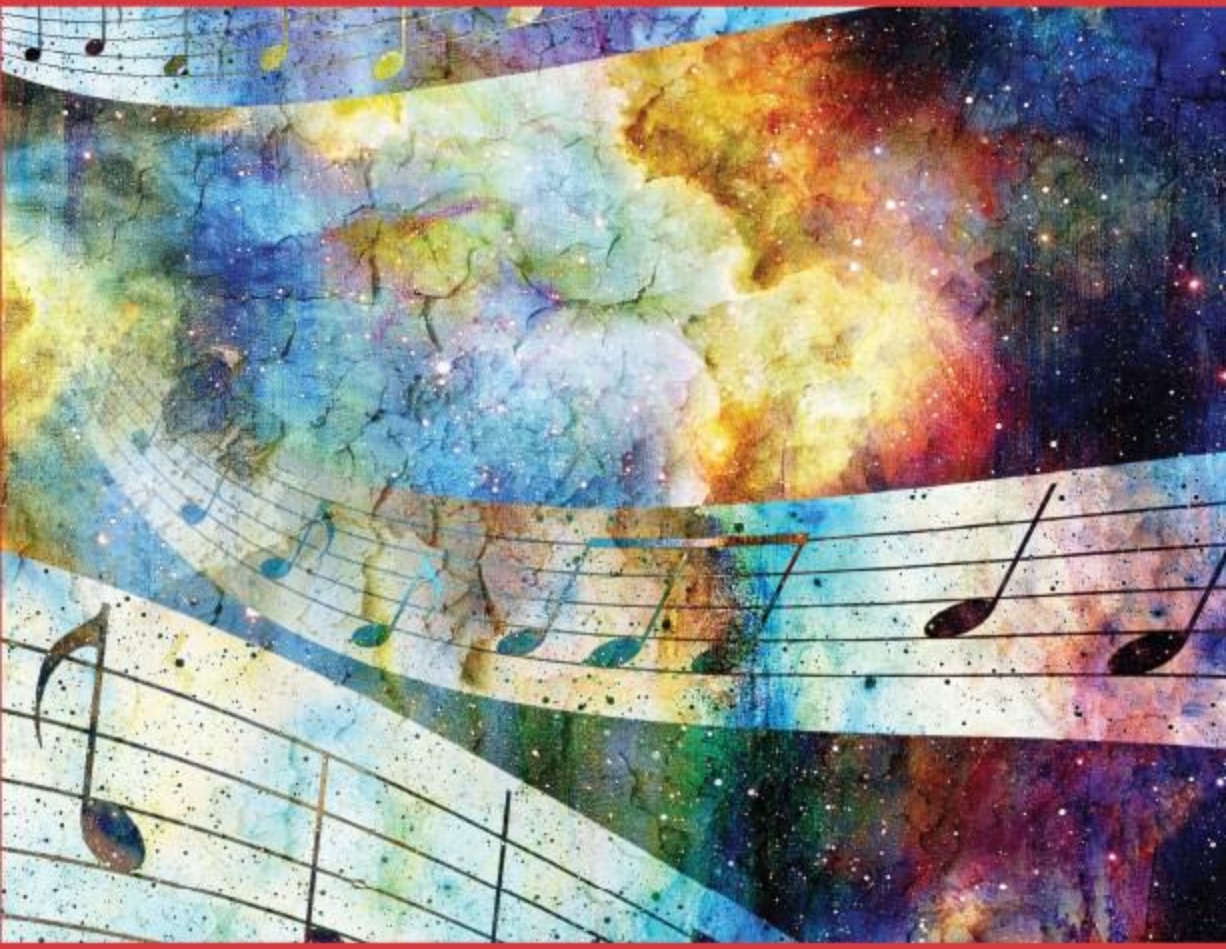
THE PRACTICE OF HARMONY

SEVENTH EDITION



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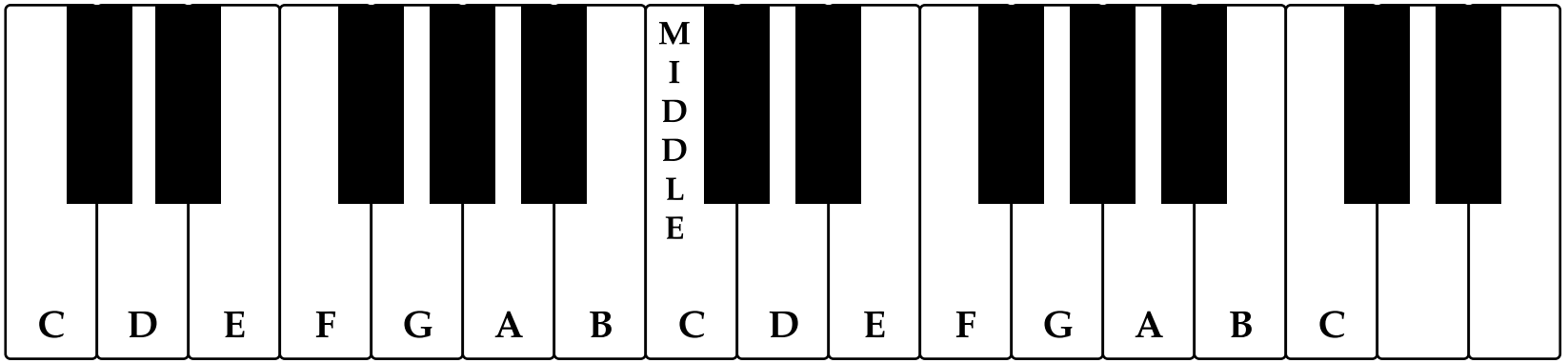
PETER SPENCER | BARBARA A. BENNETT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The Practice of Harmony

Seventh Edition

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Cover Printer: Phoenix Color
Cover Design: Lumina Datamatics, Inc.
Cover Art: Jozefklopacka/Fotolia

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Library of Congress Cataloging-in-Publication Data available upon request.

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Pearson

Books a la Carte
ISBN 13: 978-0-133-78520-3
ISBN 10: 0-133-78520-3

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Preface

Almost all music majors in colleges and universities in the United States are required to study music theory. A large portion of music theory involves the study of tertian harmony, that is, the general harmonic practice of composers from about 1700 to 1900. A thorough grasp of the basic principles of this practice is a prerequisite to the full appreciation and comprehension of the works of every composer from Bach to Brahms. One should not forget, however, that over a hundred years have elapsed since Brahms's death, and in that time a number of harmonic practices have grown that demand attention, albeit at an elementary level. The object of the seventh edition of *The Practice of Harmony* is, therefore, to give the music student, regardless of his or her major, a thorough understanding of the basic materials of harmony.

Organization of the Text

The book is divided into four parts:

Part One: Foundations—Designed to ensure that the student has a solid grasp of fundamentals before advancing to subject matter in which these fundamentals are used as the basis for further development. These early chapters establish the pedagogical strategy that is employed throughout most of the remainder of the book. The materials are presented in an additive manner, so that the student uses what was learned in one chapter to comprehend the materials in the next. Such an approach allows coverage of not only the rudiments of music theory, but also the principles behind the rudiments. Because the authors are convinced that understanding is most effectively reached by doing, each chapter contains a large number of exercises, most of which have time goals designed to force the student to operate quickly—indeed automatically.

Upon successfully completing this portion of the book, the student will be in a position to make automatic responses to questions related to reading in G, F, and C clefs; major and minor scales; key signatures and scale degrees; and all intervals, triads, and principles of rhythmic notation.

Parts Two and Three: Harmony in Common Practice—Designed to develop a complete understanding of the principles of tertian harmony as they pertain to common practice. Parts Two and Three, "The Diatonic Vocabulary" and "The Chromatic Vocabulary," respectively, continue to stress learning by doing. After each new concept has been introduced, several pages of carefully graduated exercises follow to ensure that the student completely understands that concept before approaching a new one. This method favors writing before analysis, for understanding involves more than the ability merely to analyze; it also involves a working knowledge of the problems that are inevitably encountered when musical pitches are committed to paper. One cannot begin to reach a true understanding of a Beethoven sonata, for instance, unless one has wrestled, even at a very low level, with the same kind of harmonic problems that confronted Beethoven himself. Analysis can be illuminating only to the student who understands some of the reasons for the notes in the first place. Not that analysis has been ignored; in addition to examples for analysis in the text, more elaborate *exercises* for analysis are included. New to the seventh edition is the inclusion of examples from music literature for study and analysis.

Part Four: Post-Common Practice Harmony—Designed to introduce the student to some of the more important harmonic procedures that have either evolved from or developed as a reaction to common practice. In keeping with the philosophy embraced in the previous parts, the materials in Part Four are presented concisely and reinforced by a wide variety of exercises. The absence of a continuing "common practice" in relation to several of these materials, however, precludes the possibility for the same kind of step-by-step development of concepts that students encounter in the earlier parts of the text. Nonetheless, in the spirit of the rest of the book, the emphasis in Part Four is also on the exposition of theoretical procedures rather than on individual composers' interpretations of them. The pursuit of *stylistic* considerations is beyond the scope or intention of *The Practice of Harmony,* for such considerations fall more naturally into the purview of advanced theoretical studies.

New to This Edition

1. Multiple excerpts from music literature are now included in each chapter of the Harmony in Common Practice sections. Each example contains title, composer, and measure numbers, allowing students more in-depth study and analysis. A list of additional excerpts for study has been provided.
2. Incorporated throughout the entire text are additional new exercises, ranging from preliminary through advanced.

3. A greatly expanded appendix now provides answers to many of the exercises in chapters 7 to 24.
4. The calligraphy appendix has been broadened with more tips and details on proper musical notation.
5. The text has been updated throughout to reflect contemporary pitch designation definitions, using middle C = C^4.

Available Instructor Resources

The following resources are available for instructors and can be downloaded at http://www.pearsonhighered.com/irc. Login is required.

- **Instructor's Manual:** The instructor manual lists chapter topics, after which general and specific notes associated with the topics are recorded. The manual is intended not to tell instructors how to use the text, but rather to alert them to potential pitfalls into which students may be occasionally expected to fall, and to suggest strategies to circumvent such hazards.
- **Test Bank:** The test bank portion includes tests with keys and includes recommendations on when these could be offered to students in the quarter or semester system.

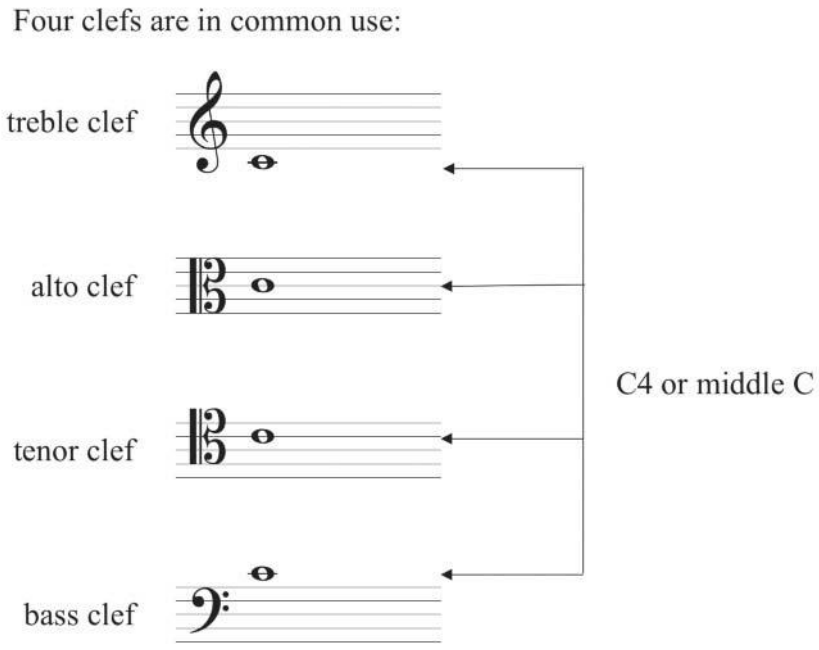
In summation, *The Practice of Harmony* is designed for students of basic theory. The authors have given considerable thought to the kind of people for whom this book would be valuable, and consequently have endeavored to present the material in an entirely systematic manner, simply and logically, so that the subject matter is not only comprehensible to the student, but also easily taught by the instructor. The seventh edition features myriad excerpts from music literature as both example and exercise; additional exercises throughout the book, both preliminary and advanced; additional solutions in the answer appendix; as well as additional notes and examples of manuscript paper in the calligraphy appendix.

PETER SPENCER

BARBARA A. BENNETT

Chapter 1
Clefs and Basic Pitch Notation*

Music notation uses seven letter names for pitches: A, B, C, D, E, F, and G. Pitches are read using a staff consisting of five lines and four spaces. A clef is used to designate where the letters are spaced on the staff.



* Because Chapter 6, *The Notation of Rhythm*, is not dependent upon the contents of the first five chapters, this chapter may be studied concurrently with Chapters 1 through 5.

Note:

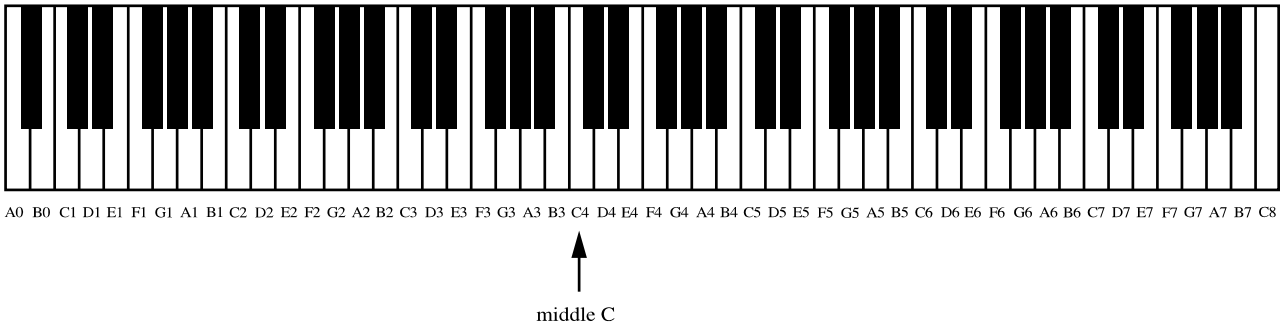
a. The treble clef is called a *G clef* because the symbol is a corruption of the letter G, the "center" of which encircles G4, the second line of the staff.

b. The alto and tenor clefs are called *C clefs* because the symbol (the same for each) is a corruption of the letter C, the center of which encircles C4, the third line of the staff for the alto clef and the fourth line for the tenor clef.

c. The bass clef is called an *F clef* because the symbol is a corruption of the letter F, the "center" of which encircles F3, the fourth line of the staff.

d. The term *pitch class* is used to describe a class of pitches with the same letter name. Thus, all Cs (C1, C2, C3, etc.) are members of the same pitch class. In addition, all pitches and their *enharmonic equivalents* belong to the same pitch class (e.g., F♯ and G♭, or E♯ and F).

Because there are only seven letter names for pitches, but at least seven audible octave transpositions of any given pitch, each pitch has its own special designation. In the pitch designation system introduced by the International Acoustic Society, the lowest C on the piano is C1. Under this designation, middle C is C4, and the piano's highest C is C8.



Note:

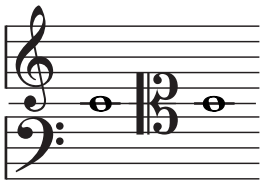
a. The shortest movement from one pitch to another, called a half step or semitone, sometimes involves a change in letter name and sometimes does not.

b. When a change of name is not involved, the pitch is raised or lowered a half step by the use of either a sharp (♯) or a flat (♭). The pitch may also be changed by two half steps without altering the letter name using a double sharp (𝄪) or a double flat (𝄫).

c. E to F and B to C are the only unaltered pitches that are one half step apart. C to D, D to E, F to G, G to A, and A to B are two half steps apart; this space or interval is called a whole step or a whole tone.

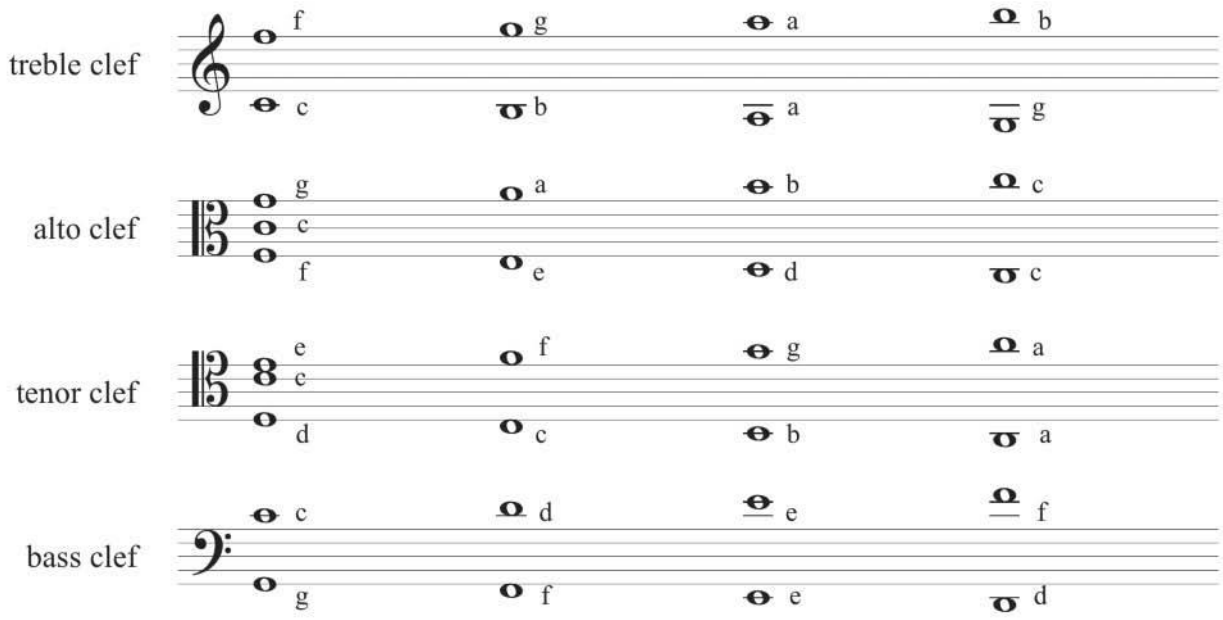
Suggestions and Strategies

Most students are more familiar with the G and F clefs than with the C clefs. You can, however, use the G and F clefs as a reference for the alto clef in the following manner:



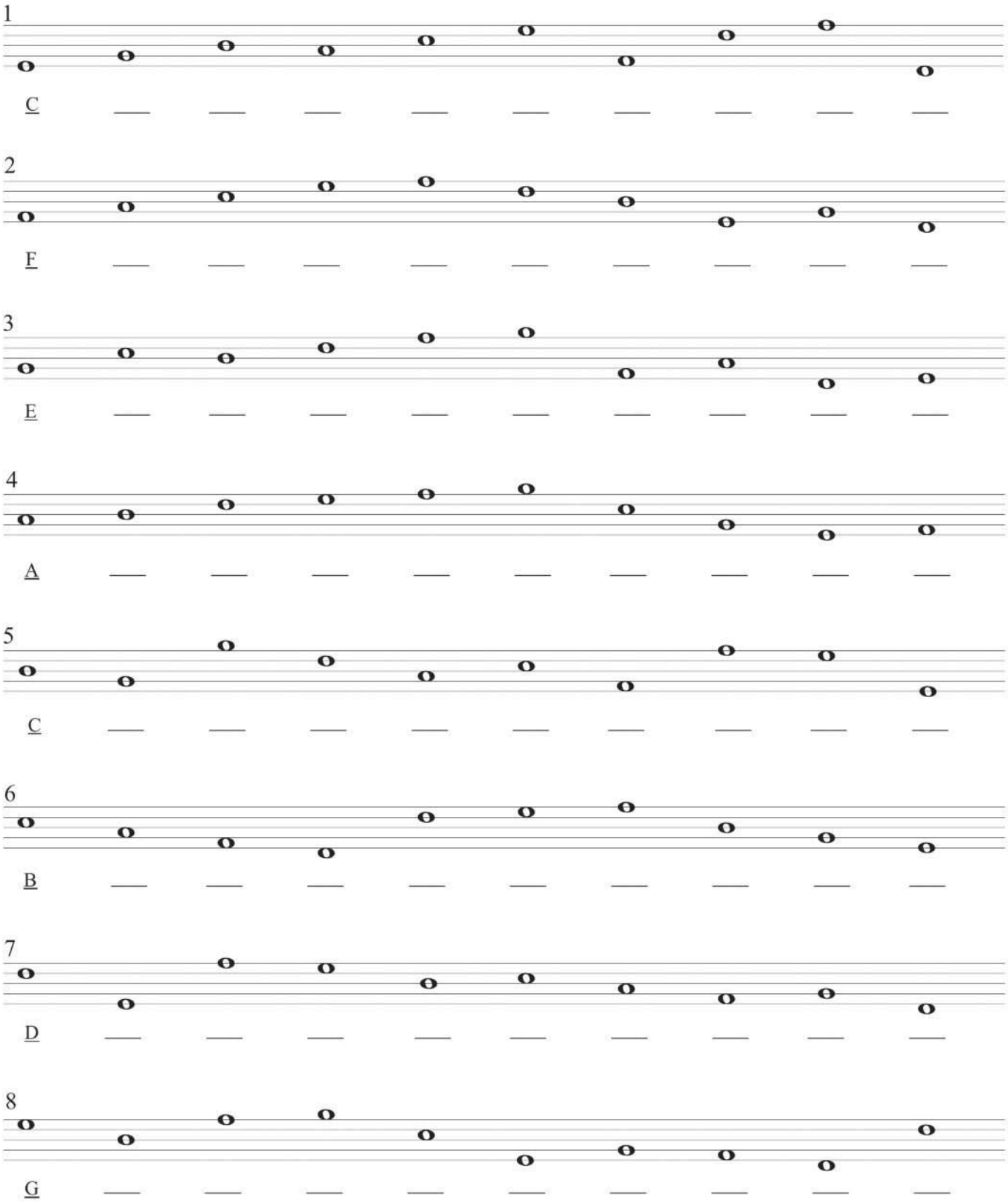
Imagine middle C belonging to both the treble and bass clefs. The alto clef may, then, be considered to link the two clefs together, so that middle C becomes a part of both of them. If you think of the clef in this way, you will quickly learn to read the lines and spaces.

Pitches often need to be placed beyond the range of the staff using short horizontal lines above or below the staff that act as extensions of the staff. These extensions are called ledger lines. An extension continues the pitch order based on the clef in use. For example, if the top line of the staff is an F, then the pitch on the first ledger line above the staff is an A, the pitch on the second ledger line is a C, and so on. Pitches that sit on top of or directly below the staff do not require ledger lines.

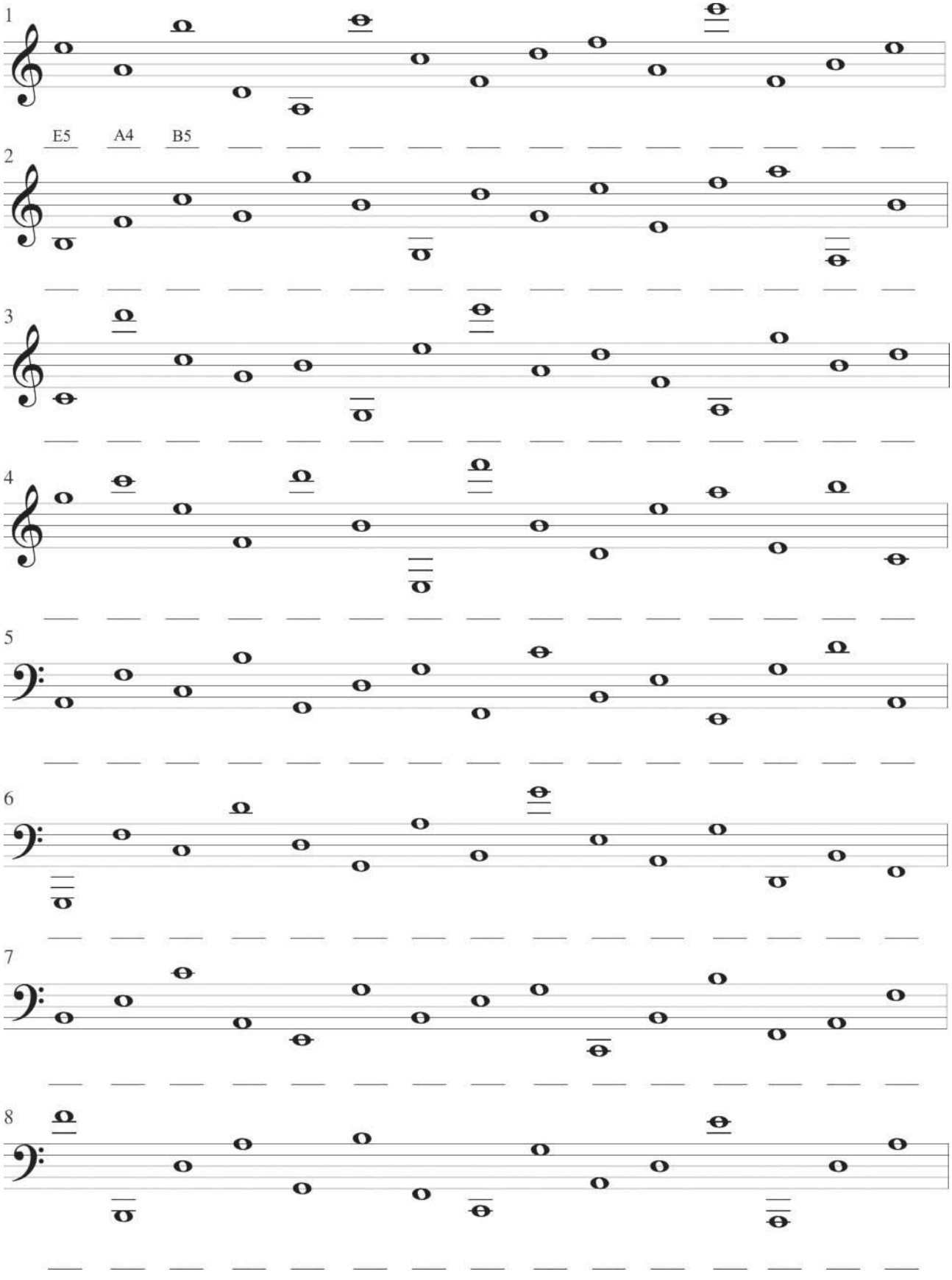


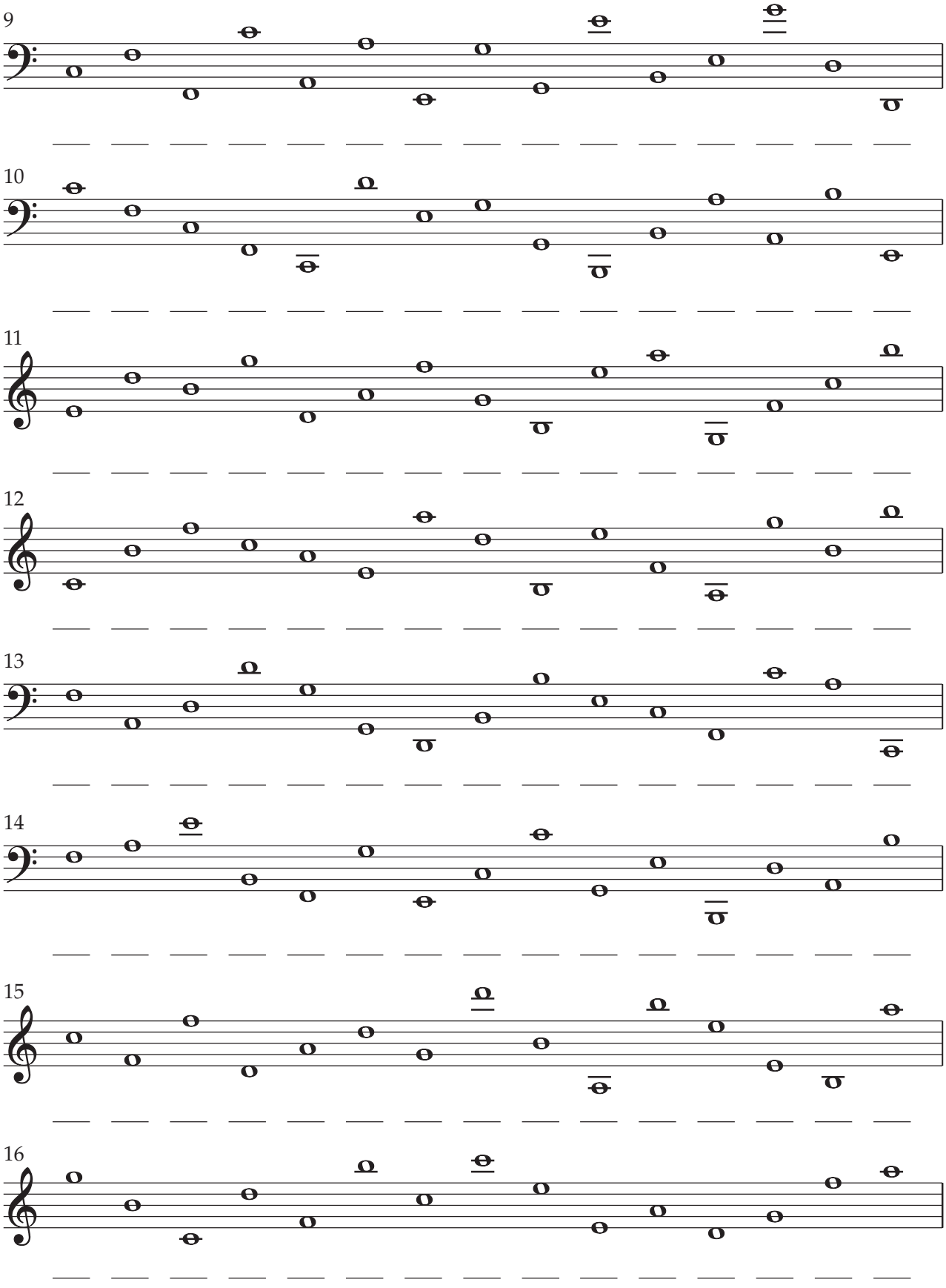
Exercises

A. Clefless exercise. The first note of each line has been designated. Use this note to determine the letter names of the remaining notes.



B. Write the letter name and octave designation for each note in the manner indicated. Time goal—45 seconds per line (middle C = C4).

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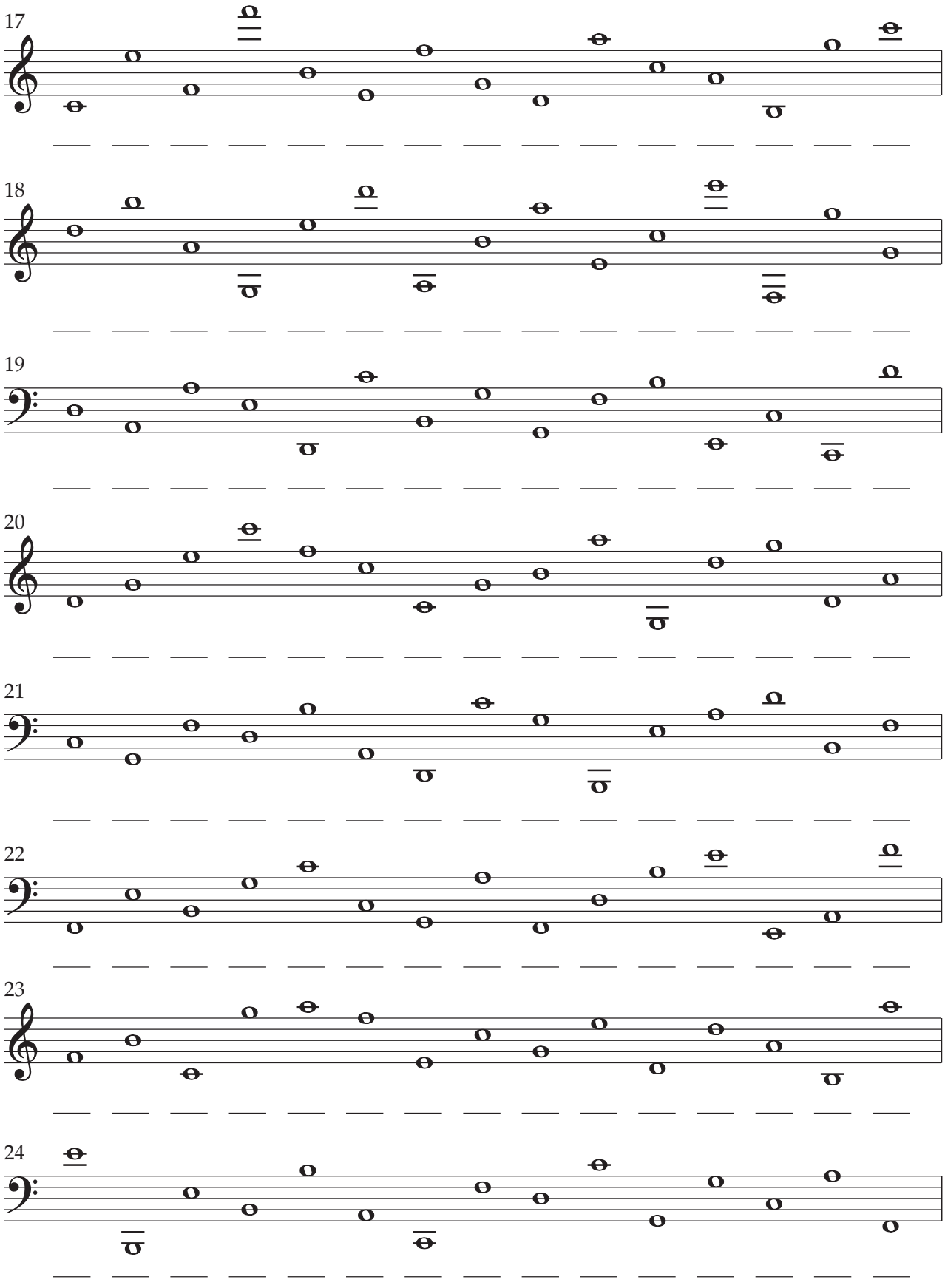
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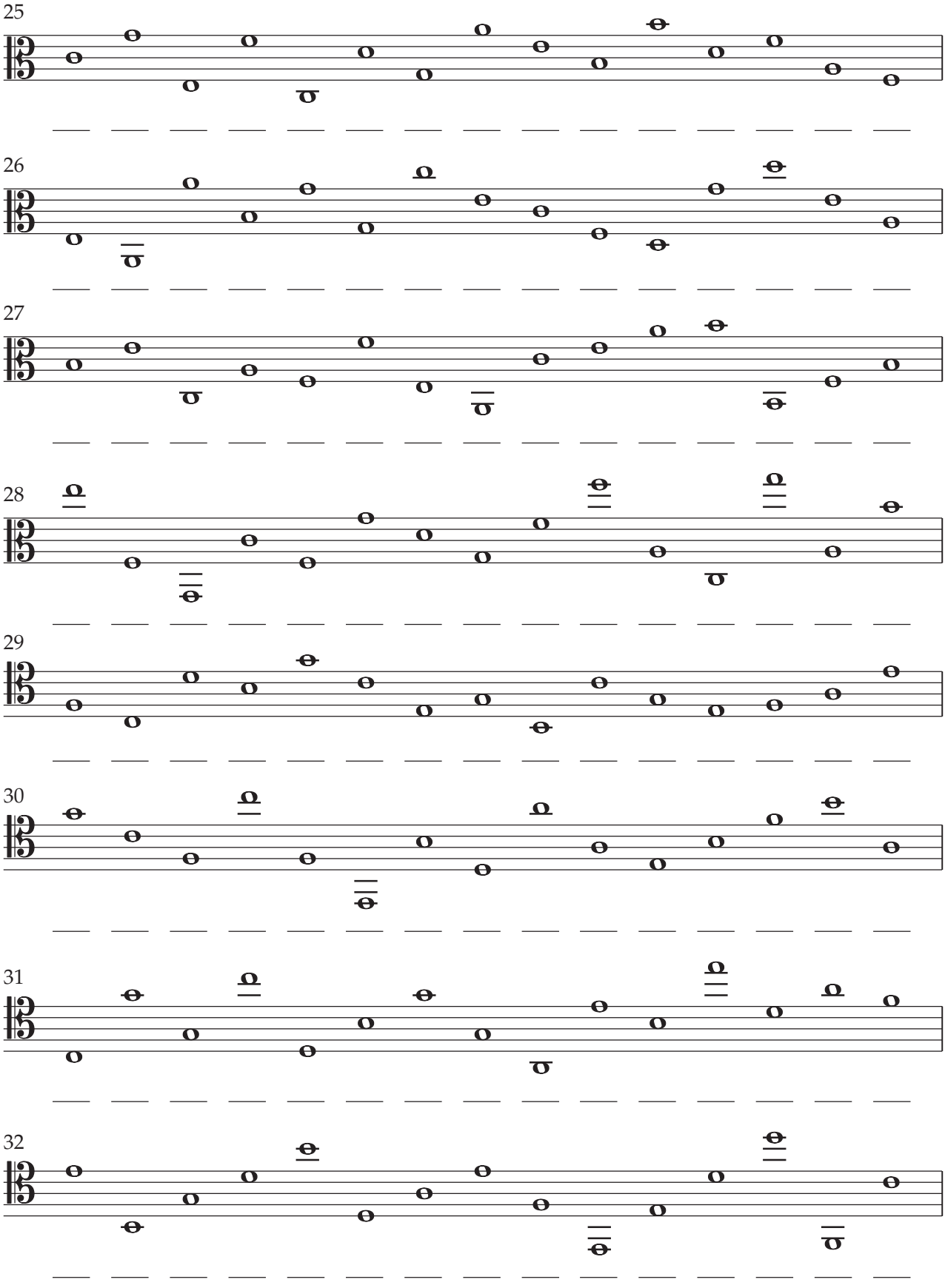
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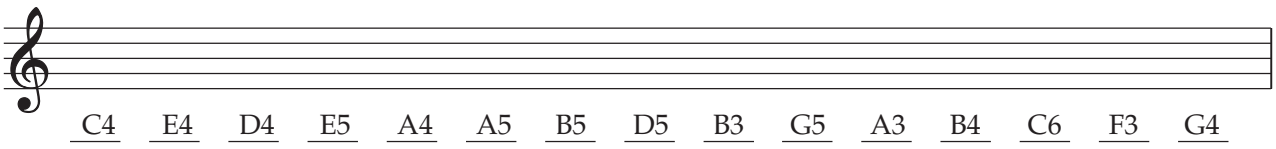
C. Notate the specified pitches. Time goal—45 seconds per line (middle C = C4).

1



C4 E4 D4 E5 A4 A5 B5 D5 B3 G5 A3 B4 C6 F3 G4

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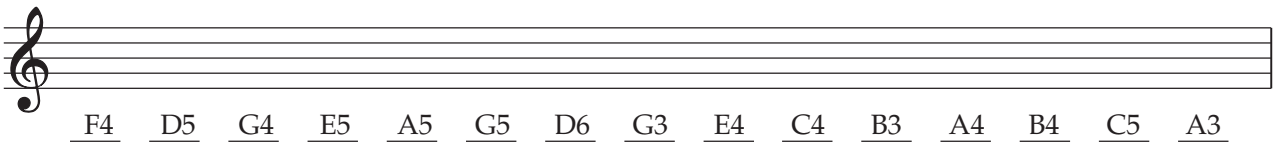
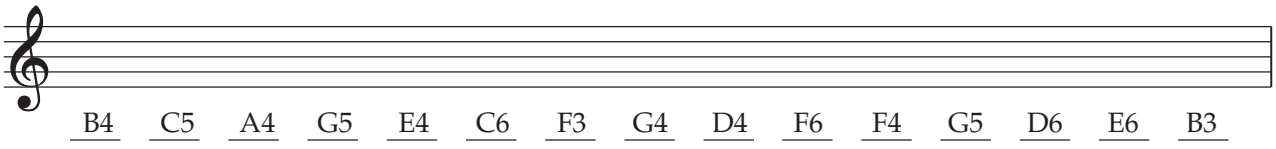


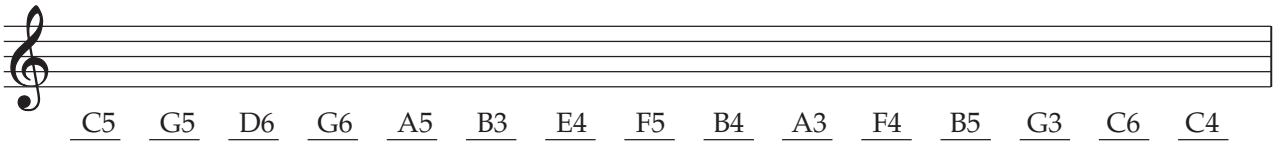
F4 D5 G4 E5 A5 G5 D6 G3 E4 C4 B3 A4 B4 C5 A3

3



B4 C5 A4 G5 E4 C6 F3 G4 D4 F6 F4 G5 D6 E6 B3

4



C5 G5 D6 G6 A5 B3 E4 F5 B4 A3 F4 B5 G3 C6 C4

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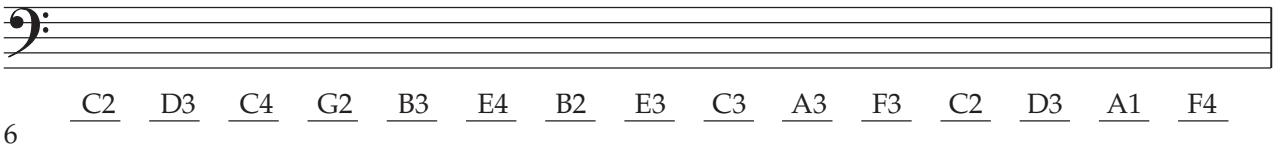

C2 D3 C4 G2 B3 E4 B2 E3 C3 A3 F3 C2 D3 A1 F4

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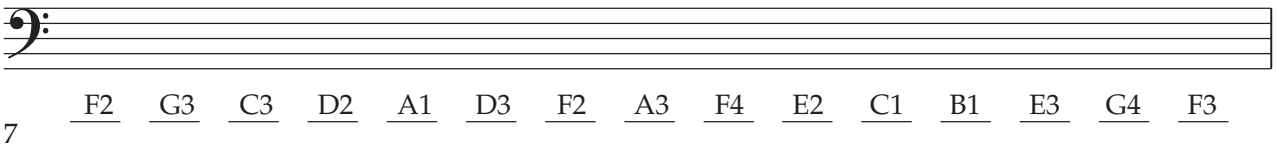

F2 G3 C3 D2 A1 D3 F2 A3 F4 E2 C1 B1 E3 G4 F3

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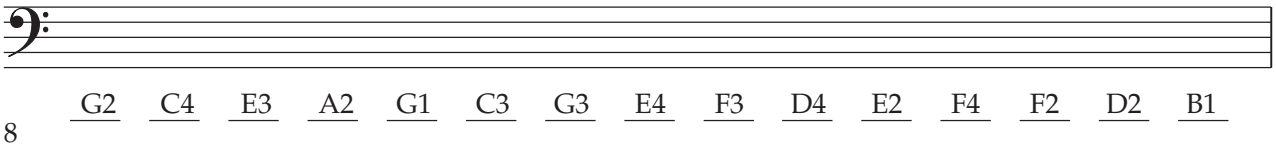

G2 C4 E3 A2 G1 C3 G3 E4 F3 D4 E2 F4 F2 D2 B1

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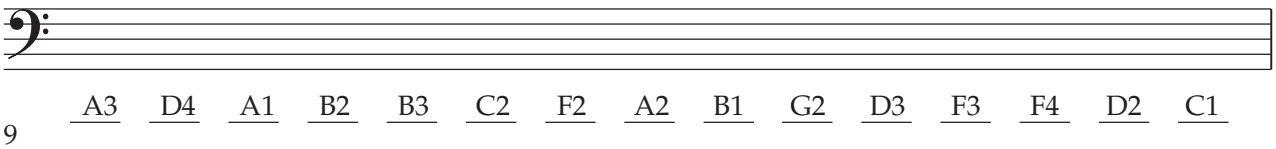

A3 D4 A1 B2 B3 C2 F2 A2 B1 G2 D3 F3 F4 D2 C1

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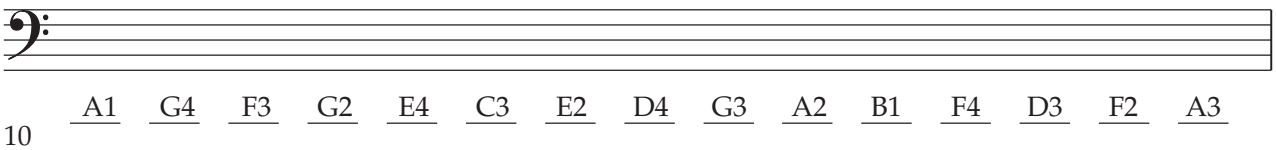

A1 G4 F3 G2 E4 C3 E2 D4 G3 A2 B1 F4 D3 F2 A3

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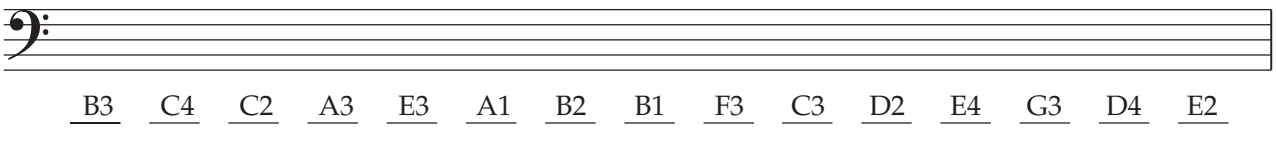

B3 C4 C2 A3 E3 A1 B2 B1 F3 C3 D2 E4 G3 D4 E2

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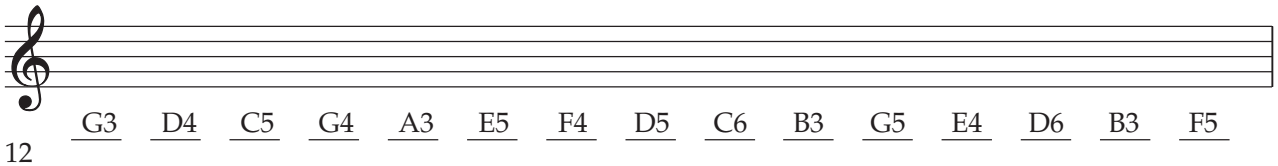
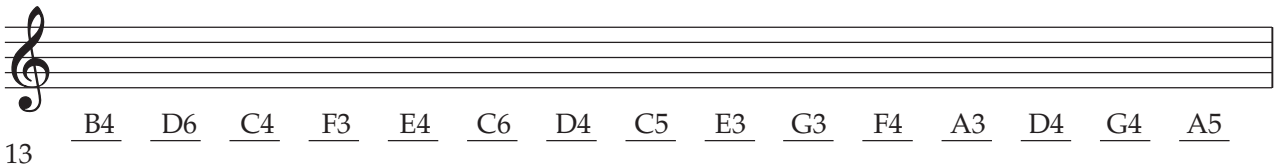


G3 D4 C5 G4 A3 E5 F4 D5 C6 B3 G5 E4 D6 B3 F5

12



B4 D6 C4 F3 E4 C6 D4 C5 E3 G3 F4 A3 D4 G4 A5

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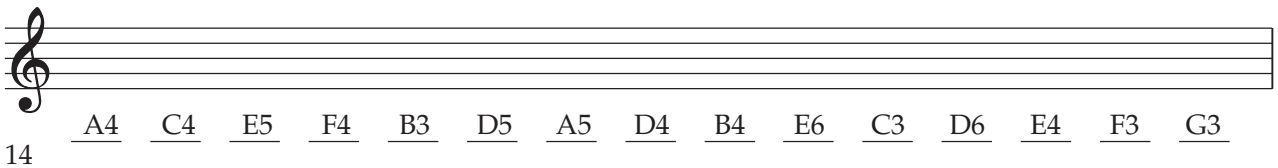

A4 C4 E5 F4 B3 D5 A5 D4 B4 E6 C3 D6 E4 F3 G3

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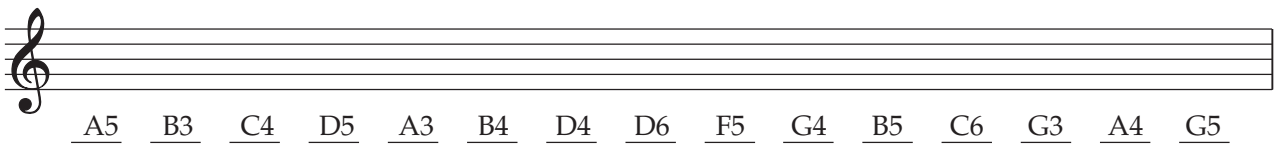

A5 B3 C4 D5 A3 B4 D4 D6 F5 G4 B5 C6 G3 A4 G5

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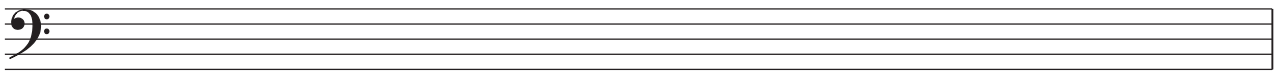

C3 G2 B3 G3 B3 D3 F4 A2 E4 D3 C4 E3 B2 D4 A3

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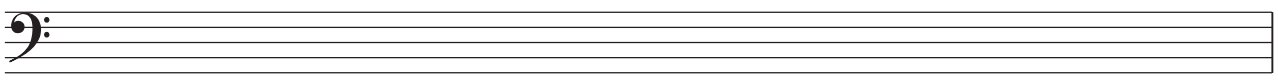

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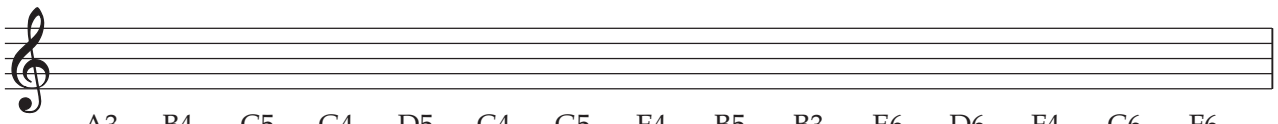

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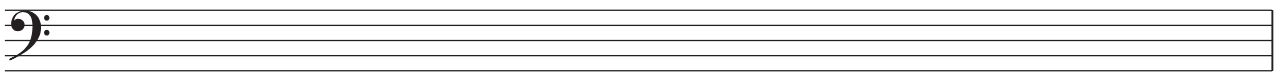

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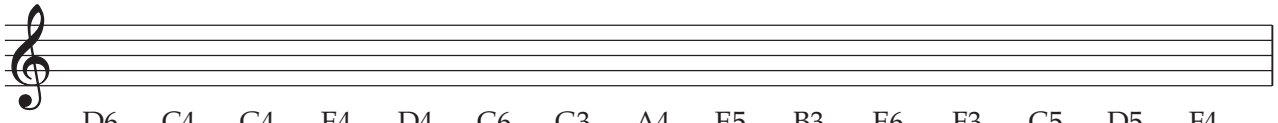

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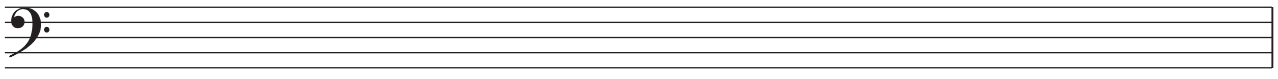

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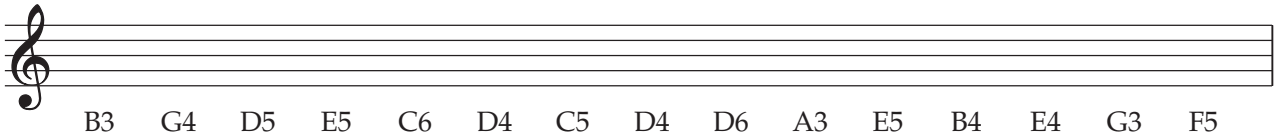

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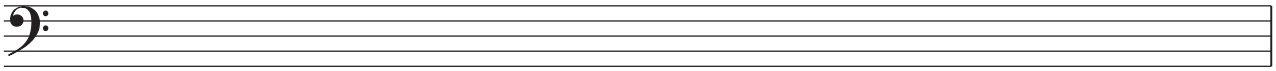

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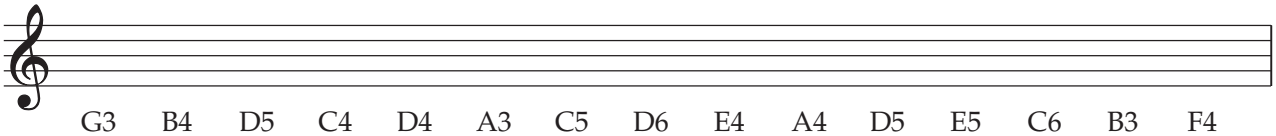

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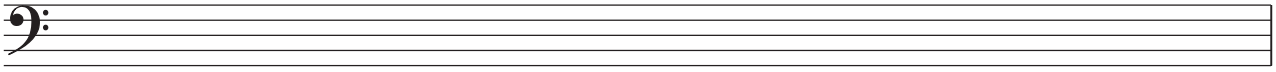

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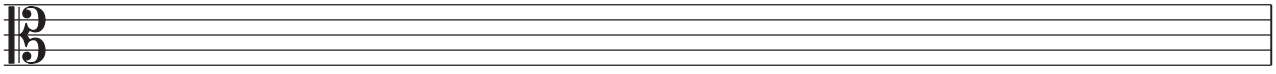

G3 A3 C5 F3 G4 B2 D3 B4 E4 B3 A4 B3 E5 D5 C3

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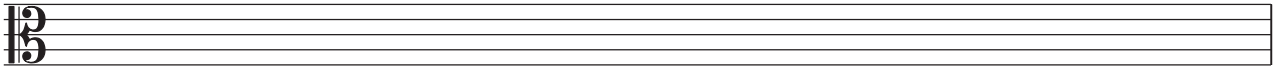

D4 F3 B2 E4 A3 B4 C4 E3 B3 F4 A2 G4 C3 A4 D3

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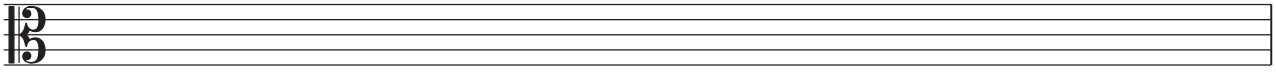

G3 A4 G4 D3 C4 F3 B2 D5 E3 C5 F4 C3 A3 D4 D5

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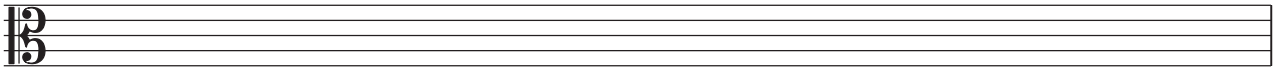

F3 A3 G4 D4 B3 A4 D3 B4 C3 E3 F4 C5 B4 E4 C4

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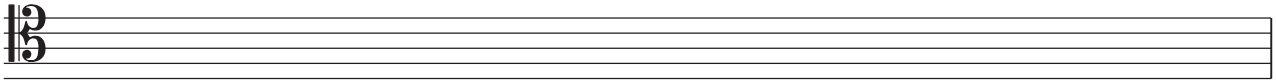

F4 A4 C3 D3 B3 G3 A2 B2 E4 G4 D4 C5 F3 A3 E3

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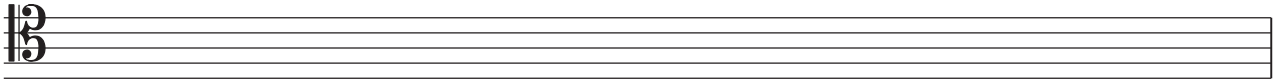

E4 D3 F4 G2 B3 D4 D3 G4 C5 A4 C3 A3 C4 A3 F2

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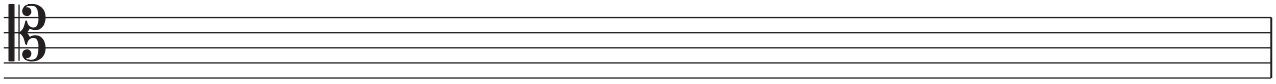
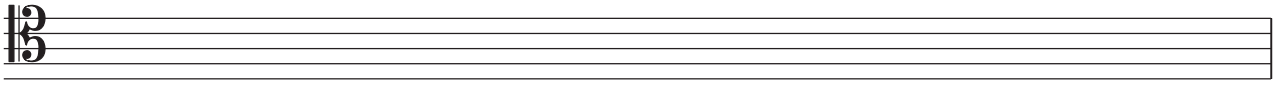


F2 A3 E4 B3 G2 D3 F4 E3 C4 A2 C5 D4 F3 C3 B4

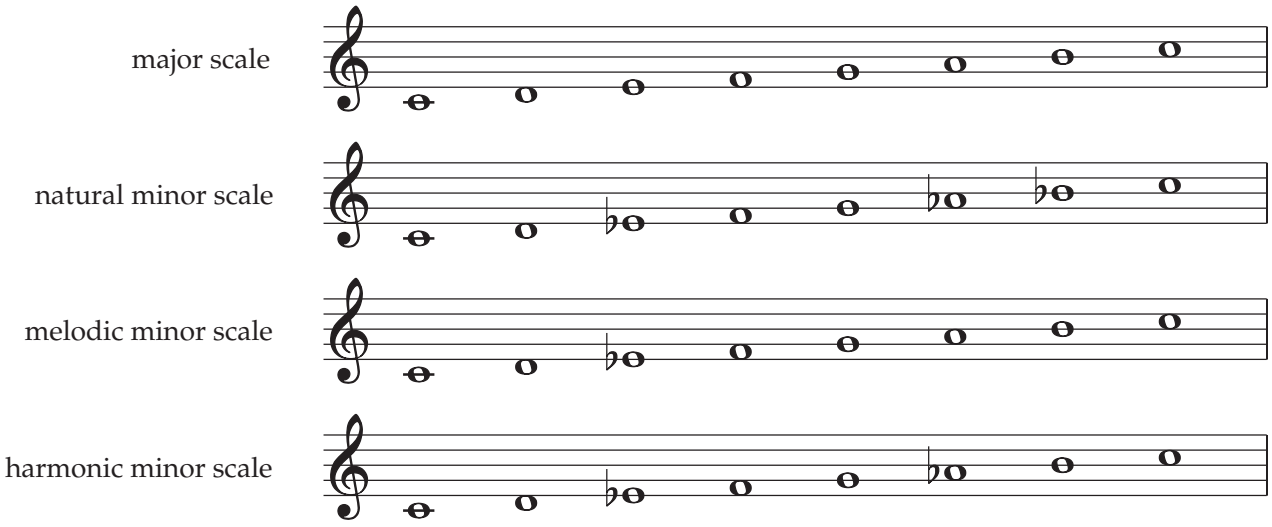
32



A4 F3 D5 G3 F4 A2 C4 B2 C3 C5 B3 G4 B1 B2 D4

Chapter 2
Scales

Strictly speaking, a scale is an ascending, ordered arrangement of pitches. In the tertian harmonic system, which is basic in the study of music theory, two scale types occur: the *major scale* and the *minor scale*. The minor scale has three variants: the *natural minor*, the *melodic minor*, and the *harmonic minor*.



Note:

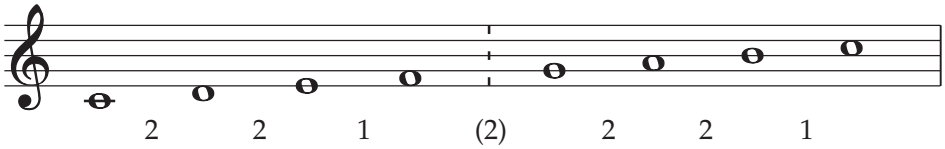
a. Each scale consists of eight pitches, the first and last being an octave apart.

b. Because any one of the scales may be built upon any given pitch, each scale has its own characteristic organization. In each case, this organization is most clearly seen when one examines not the pitches themselves, but the intervals between the pitches.

c. In all the scales, the interval between adjacent pitches is called a second. It is a *major second* if the interval between the pitches is two half steps and a *minor second* if the interval is one half step. (In the harmonic minor scale, there is one interval of three half steps. This interval is called an *augmented second*.)

2.1 The Major Scale

The major scale may be viewed as consisting of two tetrachords (four-note groups) separated by two half steps. Each tetrachord contains five half steps.

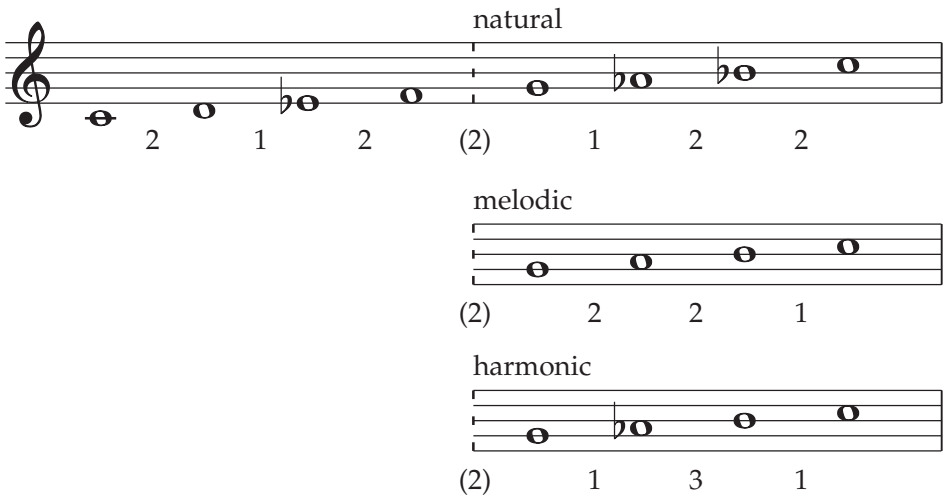


Note:
Each tetrachord has the same intervallic properties—two half steps, followed by two half steps, followed by one half step. Thus, the major scale may be expressed as

2-2-1-(2)-2-2-1

2.2 The Minor Scale

The minor scale may also be viewed as consisting of two tetrachords separated by two half steps. The upper tetrachord, however, differs for each variant. Like the major scale, each tetrachord contains five half steps.



Note:

a. All three variants have the same lower tetrachord:

2-1-2

b. The upper tetrachord of the *natural* minor scale is the retrograde of the major tetrachord (i.e., the major tetrachord written backward). The scale, therefore, may be expressed as

2-1-2-(2)-1-2-2

c. The upper tetrachord of the *melodic* minor scale is the same as that of the major tetrachord. The scale, therefore, may be expressed as

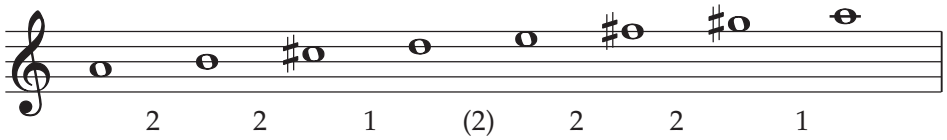
2-1-2-(2)-2-2-1

d. The upper tetrachord of the *harmonic* minor scale is palindromic (i.e., it reads the same forward and backward). The scale, therefore, may be expressed as

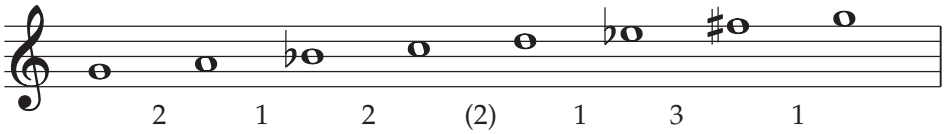
2-1-2-(2)-1-3-1

2.3 Naming Scales

A scale is named by identifying its lowest note and by describing its type, that is, major or variety of minor. Thus, the following scale



is A major and



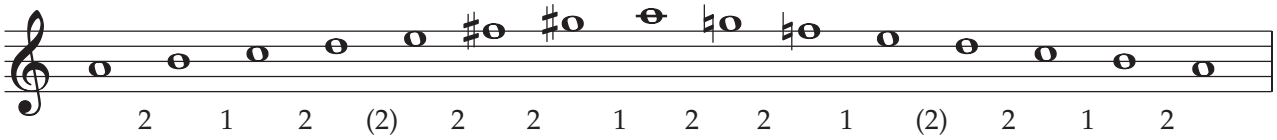
is g harmonic minor.

The major scale, by convention, is assigned an uppercase letter (e.g., A), and the minor a lowercase letter (e.g., g).

2.4 Scales in Descent

In this chapter, each scale has been presented as an ascending series of pitches. In addition, a scale may be written as a descending series without altering its intervallic organization, except in the case of the melodic minor.

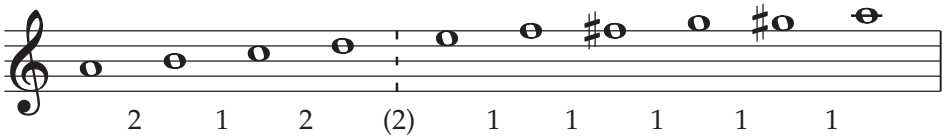
The descending melodic minor scale has exactly the same intervallic organization as the ascending (and descending) *natural minor*.



a melodic minor (ascending and descending)

2.5 The Synthetic Minor Scale

No effort has been made in this part of the text to explain when and why the various forms of the minor scale are used. In Chapter 11, the text shows that the minor scale may, for practical purposes, be considered a synthesis of all three forms, containing ten pitches:



Note:

a. The upper part of the scale, now a hexachord (six-note group), has an intervallic organization entirely of half steps.

b. Considerations of voice leading and melodic activity will determine which pitches from the hexachord are appropriately employed in a given musical situation. These issues are discussed in Part Two.

2.6 Modes

The study of the scalar structure of modes is not a necessary foundation for the majority of the chapters in this book; however, the fact that modes may be derived from the major scale makes an introductory study of them possible at this point. The reader may wish to refer, therefore, to the beginning of Chapter 27, in which the derivation of the seven modes from the major scale is shown, followed by each mode's essential characteristics.

Suggestions and Strategies

When identifying scales (Exercise A), remember that the interval between pairs of pitches without accidentals in front of them is always two half steps, unless the pitches are E to F and B to C, in which case the interval is one half step. If you fill in these intervals first, you will soon notice patterns that help you to identify scale types.

Experiment with pairs of pitches that have one or two accidentals associated with them. Are there observations to be made that are similar to the ones above?

In the second group of exercises, your first step should be to write the correct intervallic organization for the given scale, and then make the adjustments when you rewrite it.

Remember:

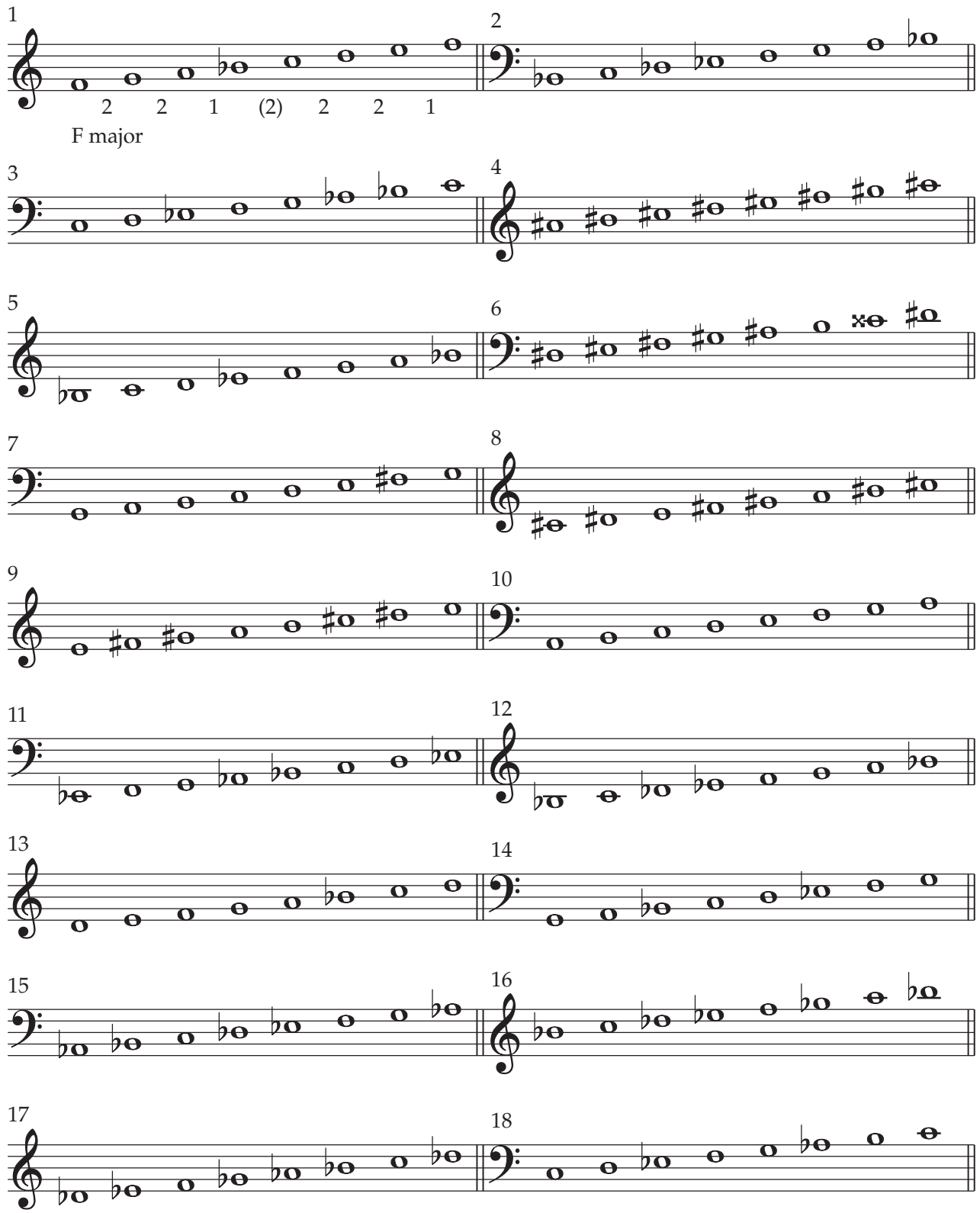
1. that the first and last pitches do not require any alteration;
2. that all alterations involve adding, changing, or removing accidentals; the note heads remain unaltered.

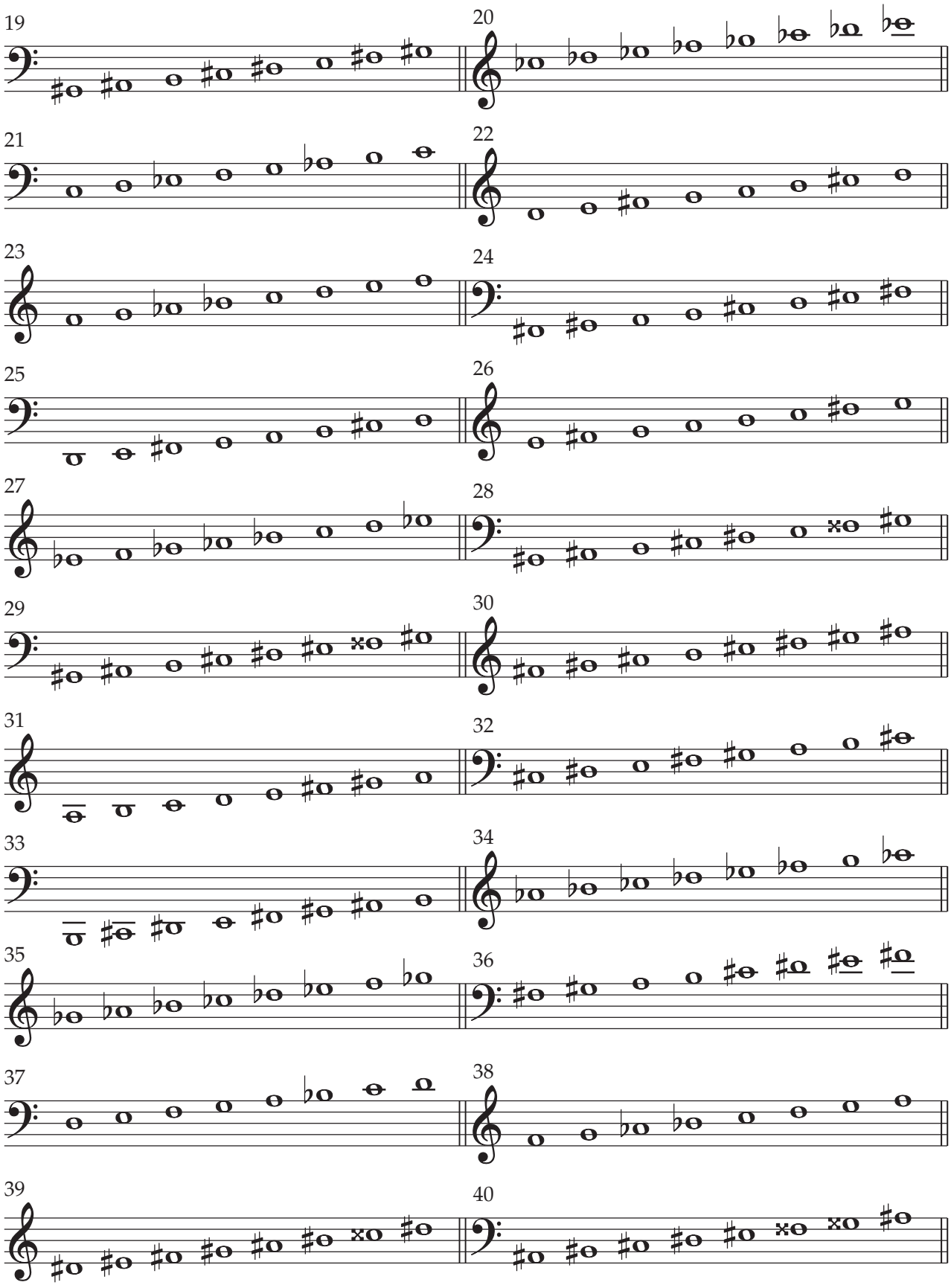
The last group of exercises (Exercise C) involves writing specified scales from a given note. Follow these procedures:

- **a.** write the scale with note heads only, so that the first and last notes are an octave apart (do not remove the accidental from the first note);
- **b.** write the intervallic organization for the given scale type;
- **c.** place accidentals in front of the note heads as necessary.

Exercises

A. Identify each scale by analyzing its tetrachord structure. Time goal—30 seconds per scale.

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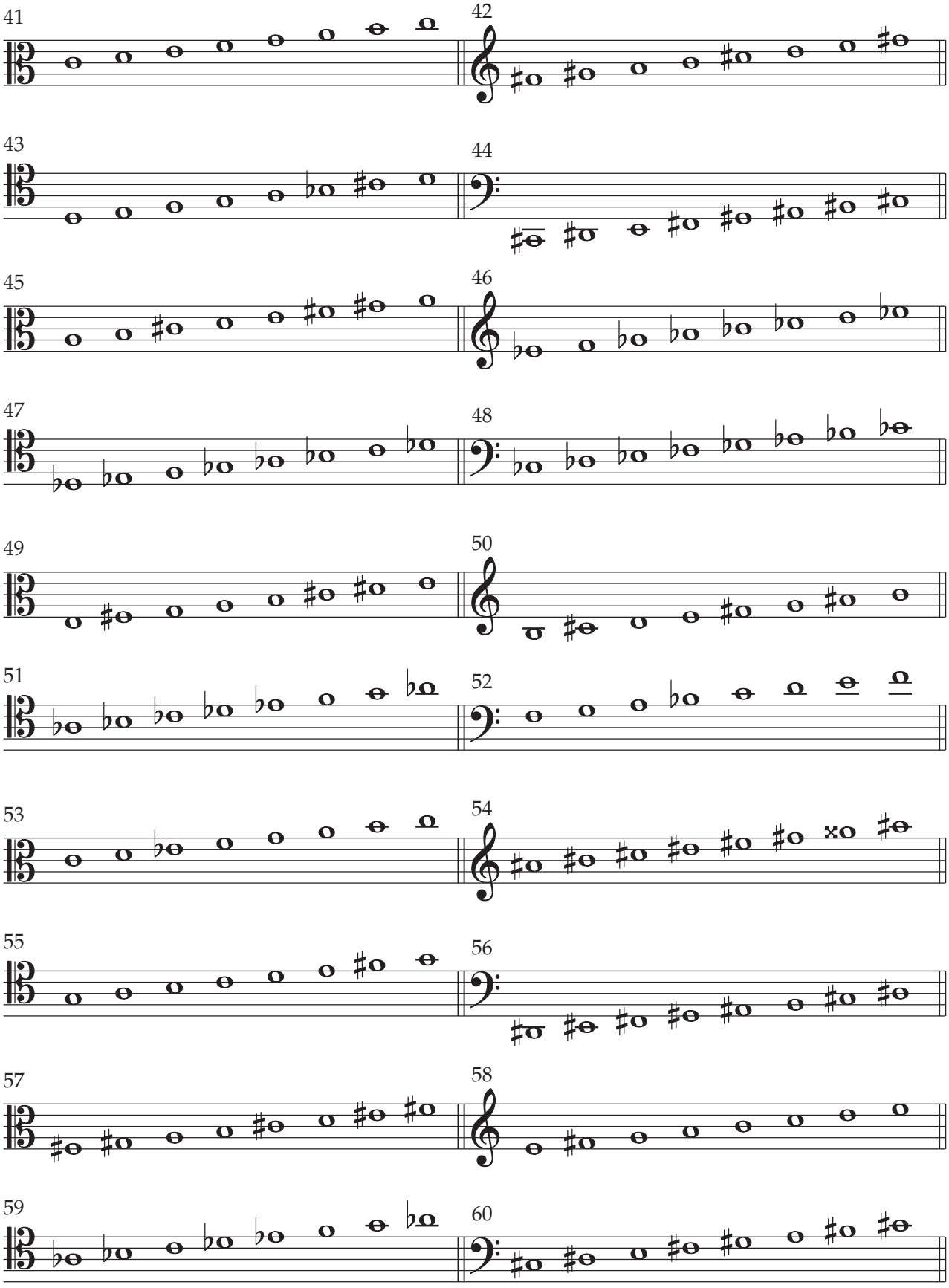
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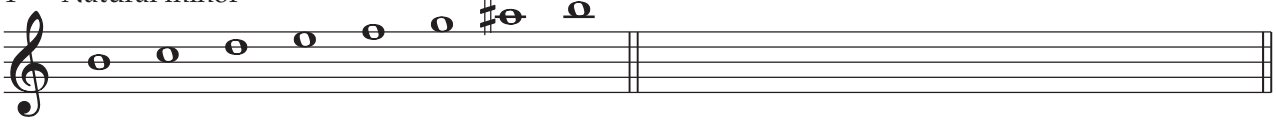
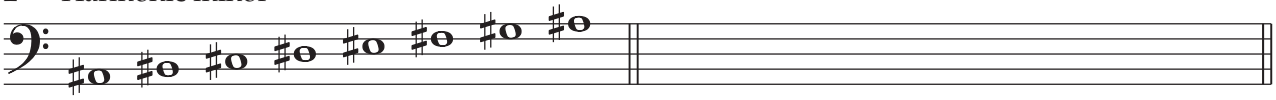
B. Identify the error(s) in each scale and write the scale correctly. Time goal—45 seconds per scale.

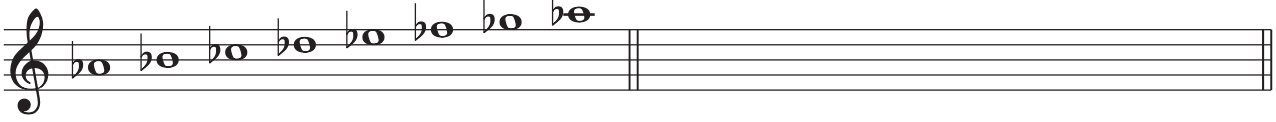
1 Natural minor



2 Harmonic minor

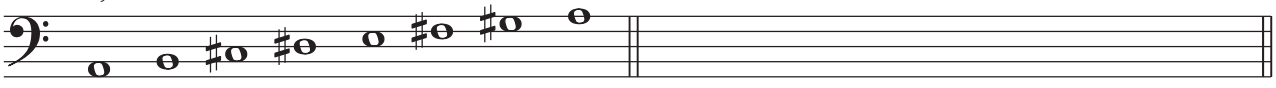


3 Melodic minor

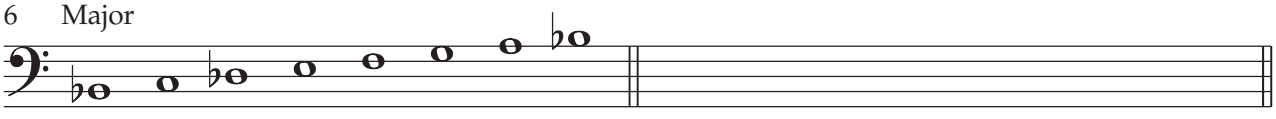


4 Harmonic minor

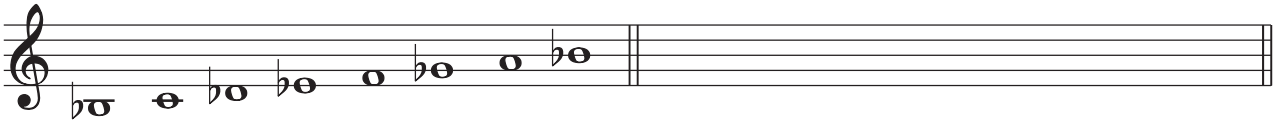
5 Major



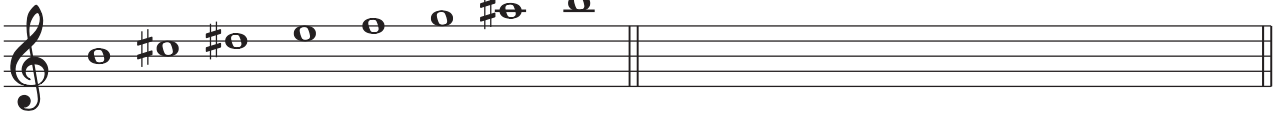
6 Major



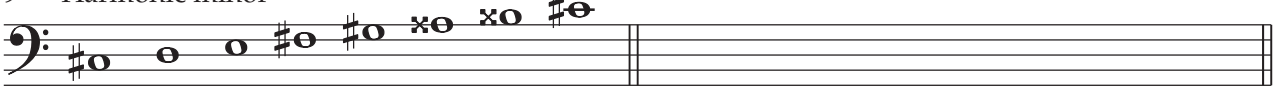
7 Natural minor



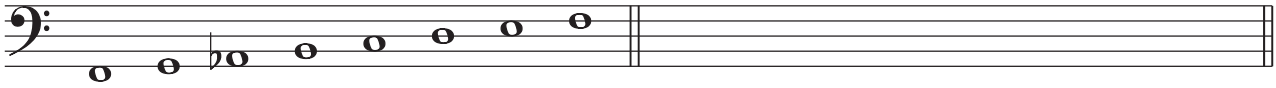
8 Melodic minor



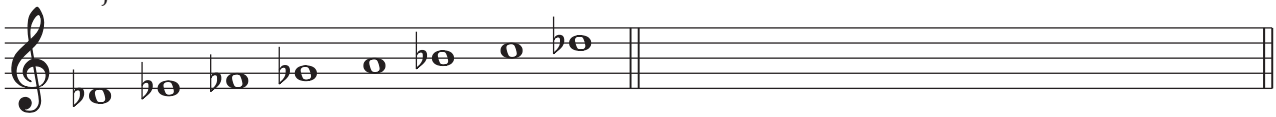
9 Harmonic minor



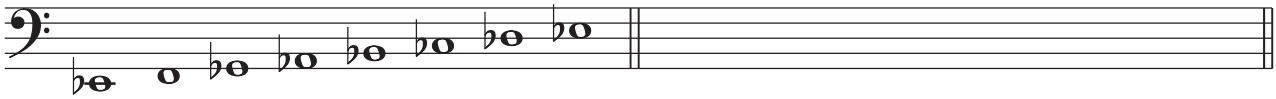
10 Natural minor



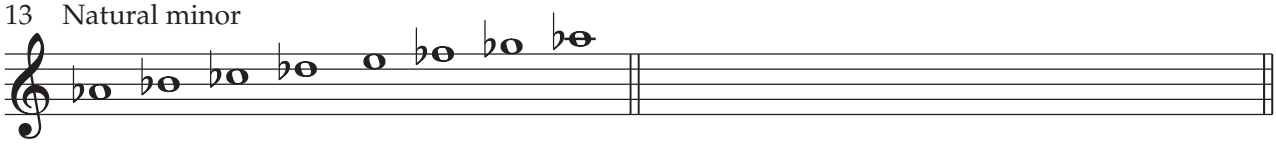
11 Major



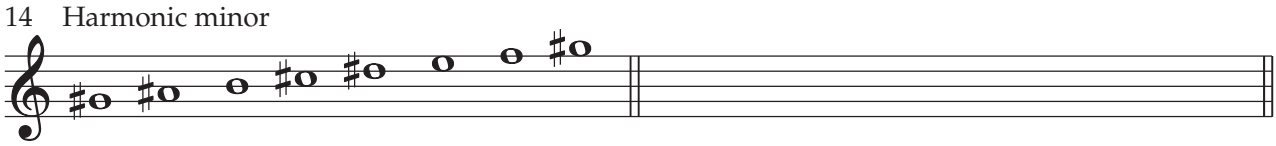
12 Harmonic minor



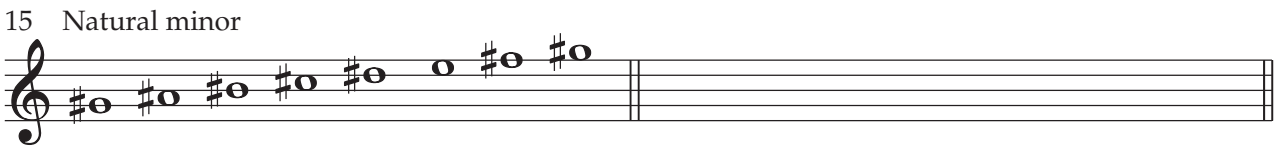
13 Natural minor



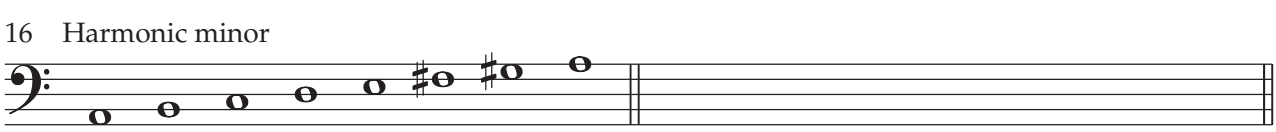
14 Harmonic minor



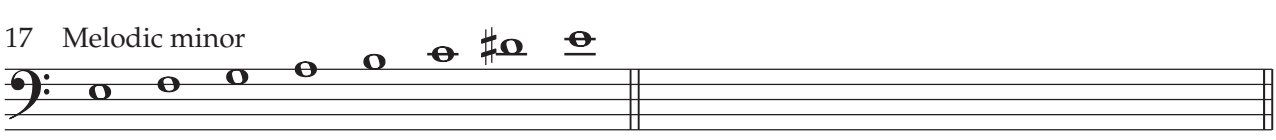
15 Natural minor



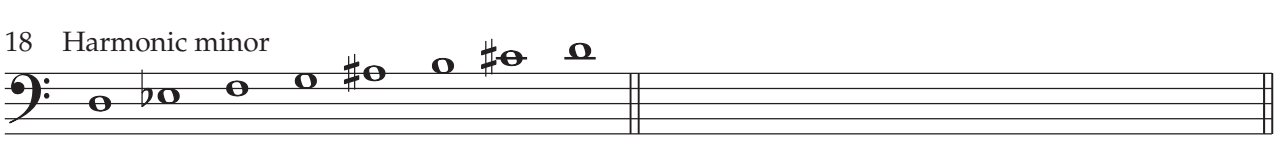
16 Harmonic minor



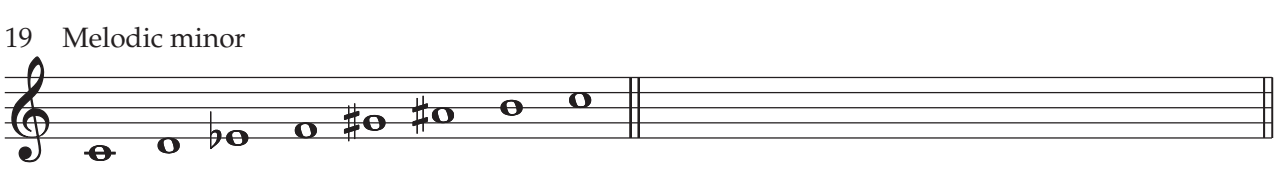
17 Melodic minor



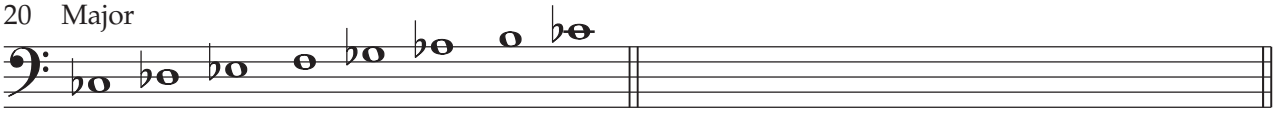
18 Harmonic minor



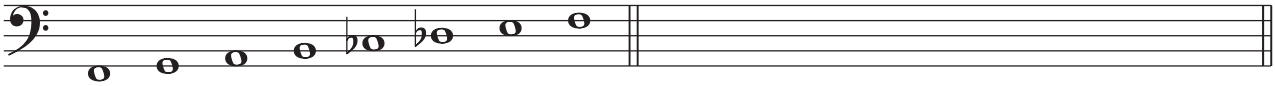
19 Melodic minor



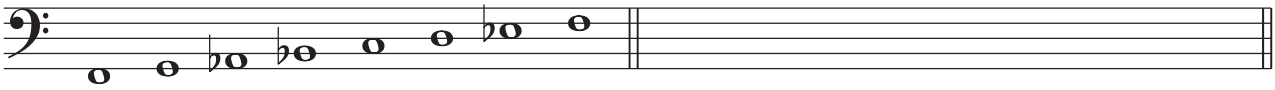
20 Major



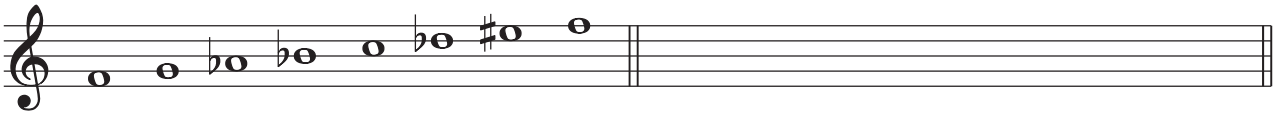
21 Harmonic minor



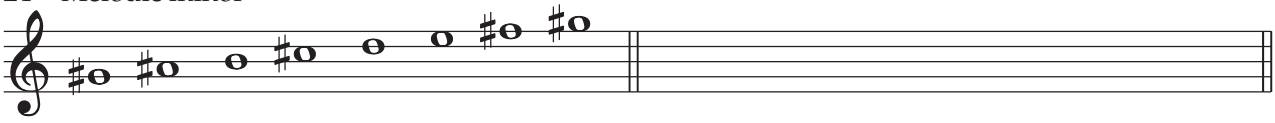
22 Major



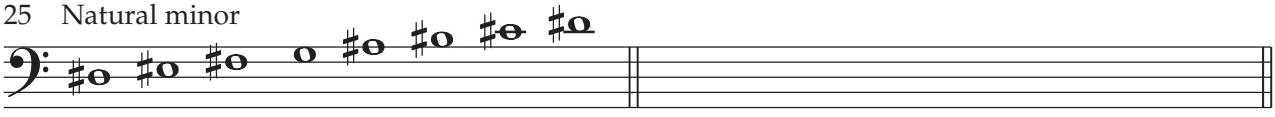
23 Natural minor



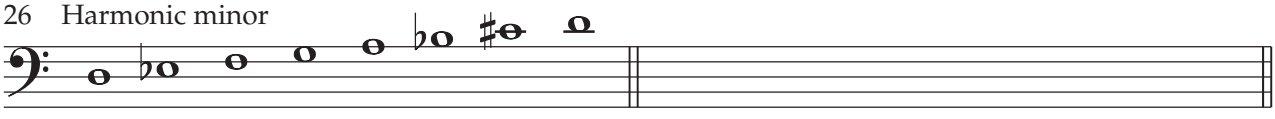
24 Melodic minor



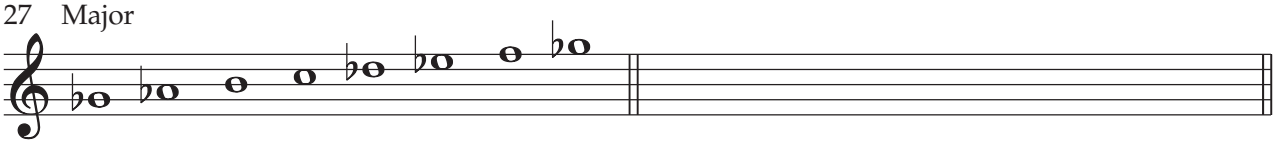
25 Natural minor



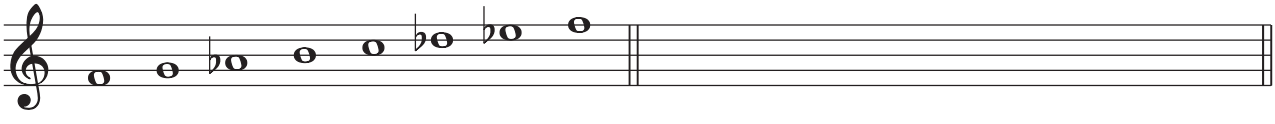
26 Harmonic minor



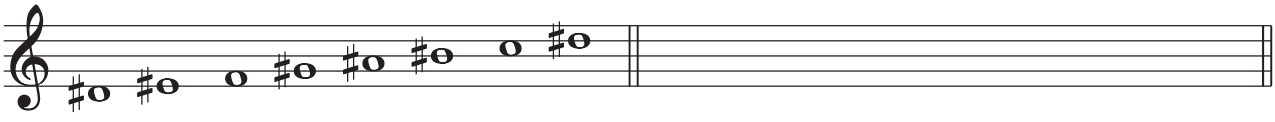
27 Major



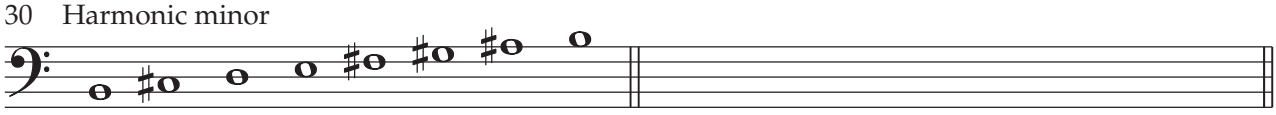
28 Melodic minor



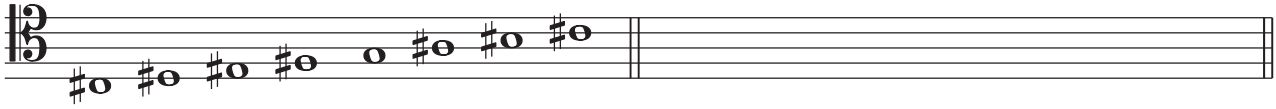
29 Natural minor



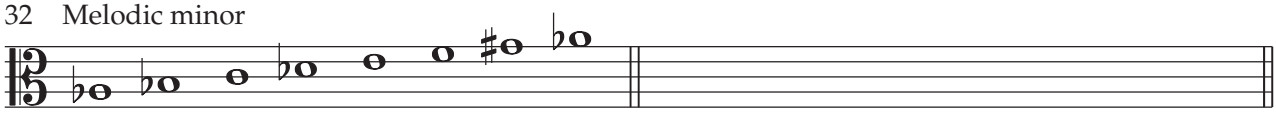
30 Harmonic minor



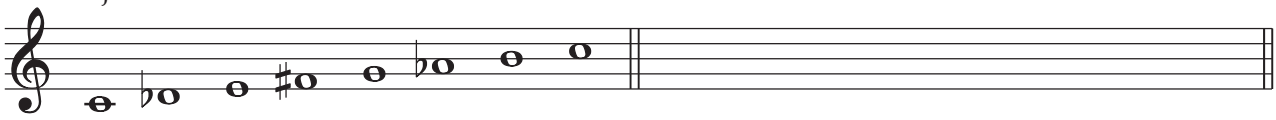
31 Melodic minor



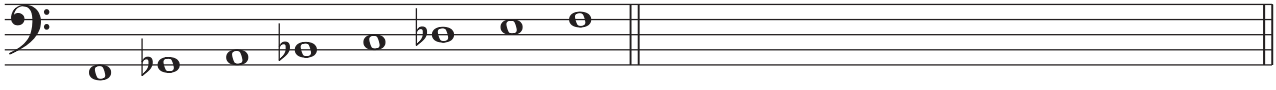
32 Melodic minor



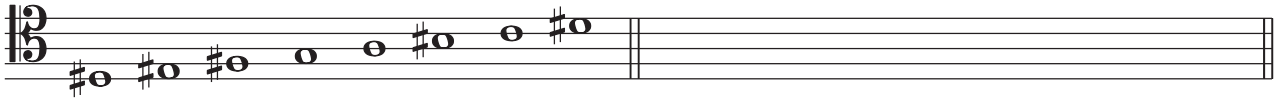
33 Major



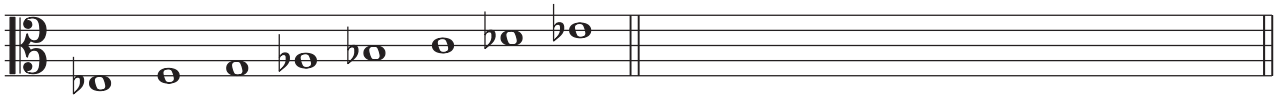
34 Harmonic minor



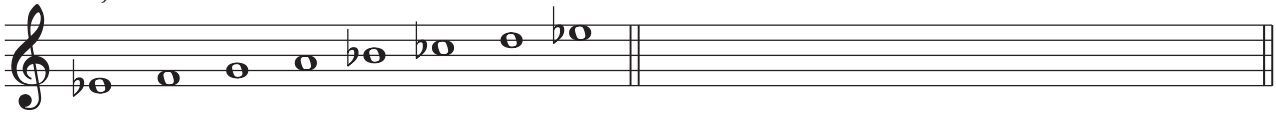
35 Harmonic minor



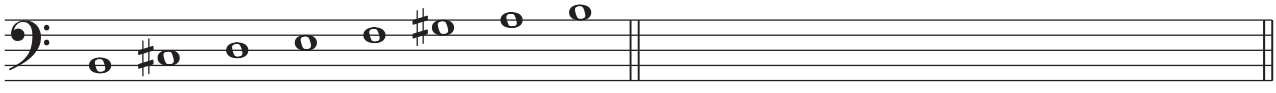
36 Melodic minor



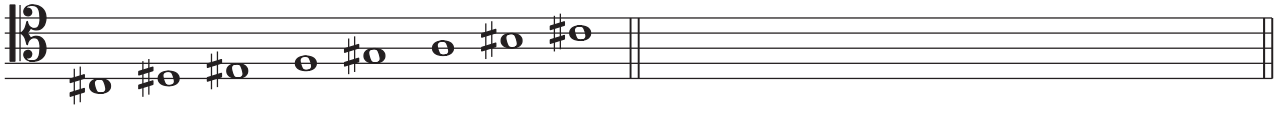
37 Major



38 Natural minor



39 Melodic minor



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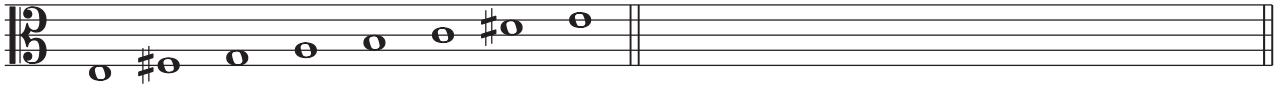
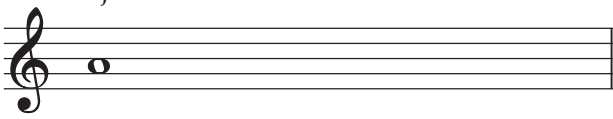
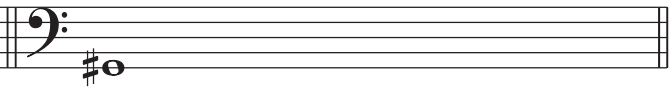


C. Write the specified scales. Time goal—20 seconds per scale.

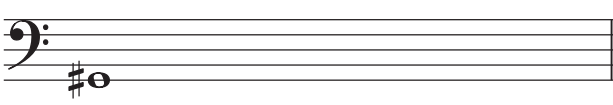
1 Major



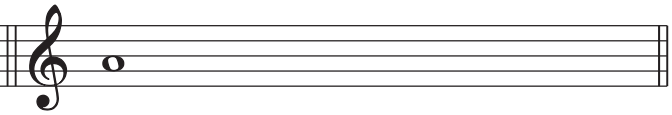
2 Melodic minor



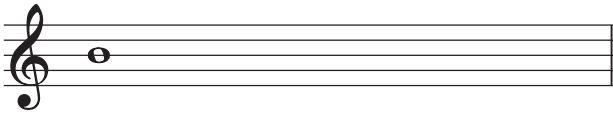
3 Natural minor



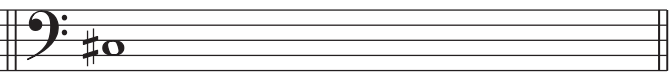
4 Harmonic minor



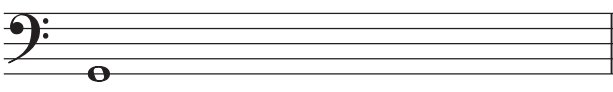
5 Melodic minor



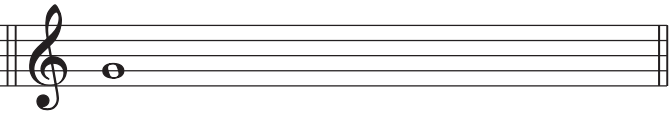
6 Harmonic minor



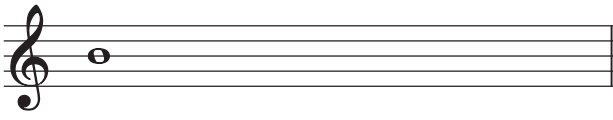
7 Melodic minor



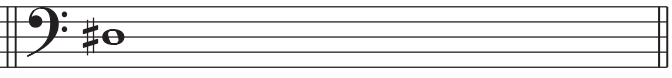
8 Natural minor



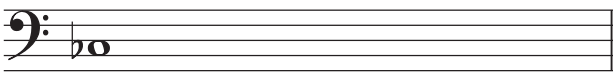
9 Natural minor



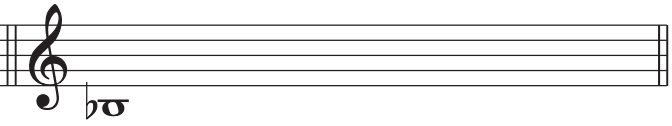
10 Harmonic minor



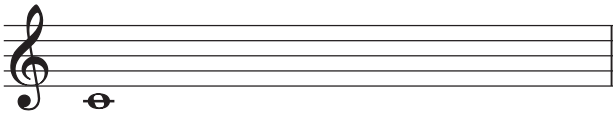
11 Major



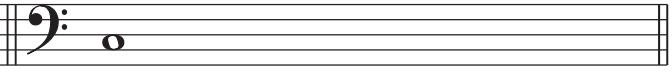
12 Harmonic minor



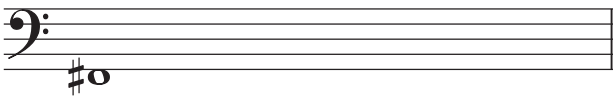
13 Harmonic minor



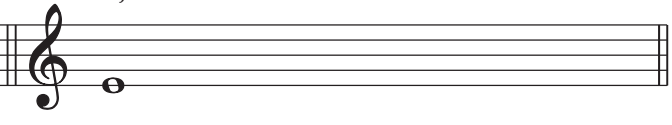
14 Melodic minor



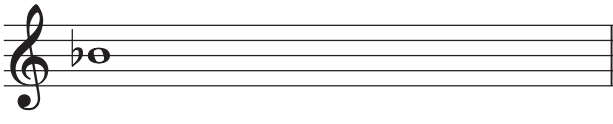
15 Natural minor



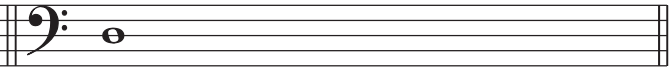
16 Major



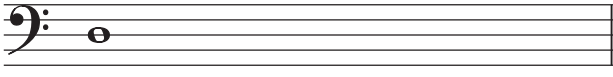
17 Natural minor



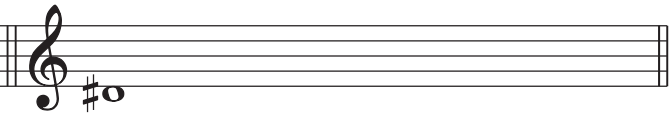
18 Melodic minor



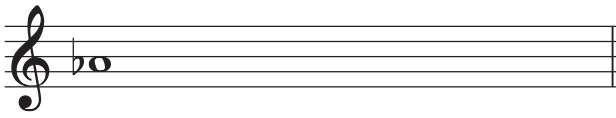
19 Harmonic minor



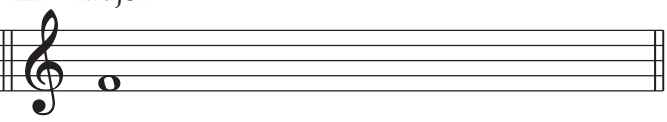
20 Harmonic minor



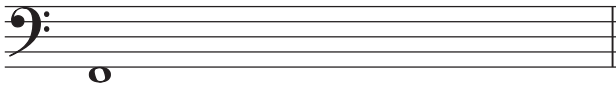
21 Melodic minor



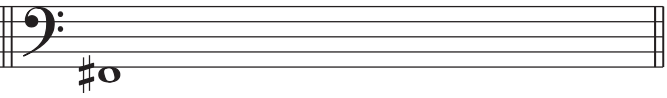
22 Major



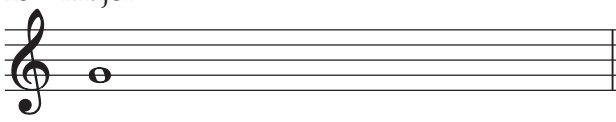
23 Natural minor



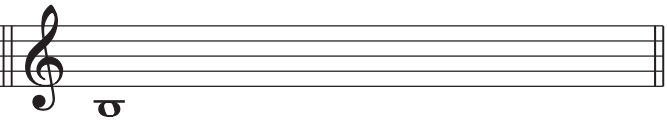
24 Harmonic minor



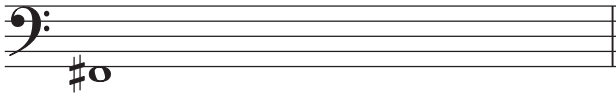
25 Major



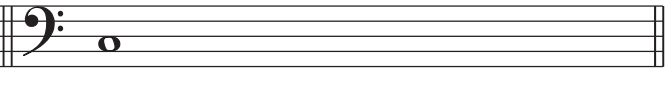
26 Natural minor



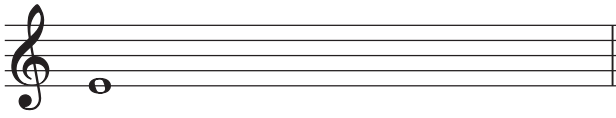
27 Major



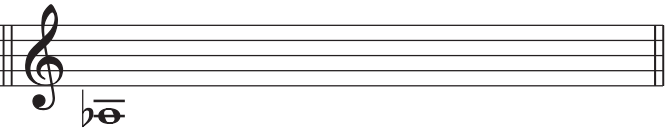
28 Natural minor



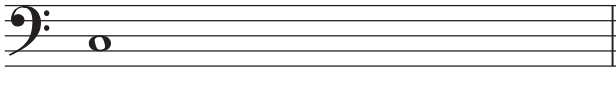
29 Melodic minor



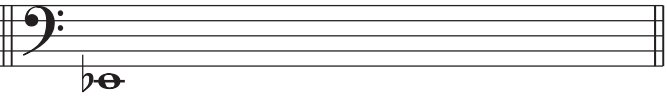
30 Harmonic minor



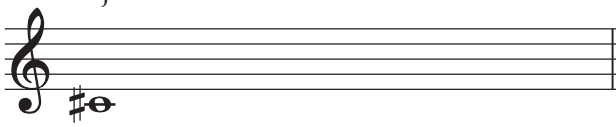
31 Major



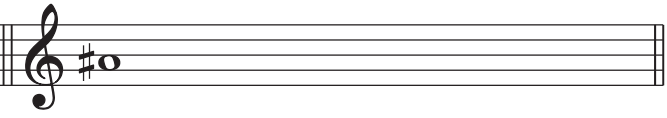
32 Natural minor



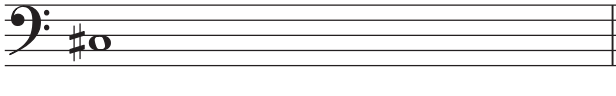
33 Major



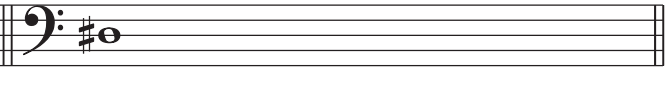
34 Melodic minor



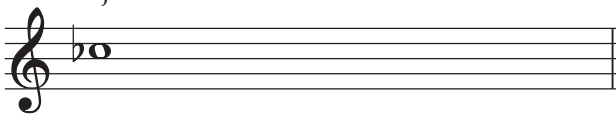
35 Melodic minor



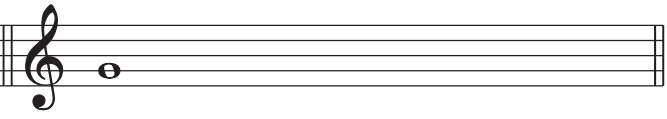
36 Natural minor



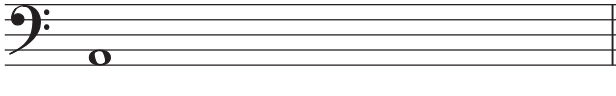
37 Major



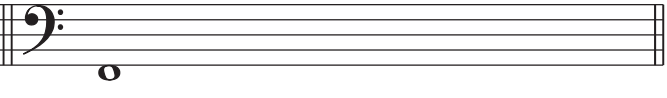
38 Harmonic minor



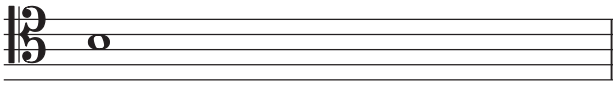
39 Melodic minor



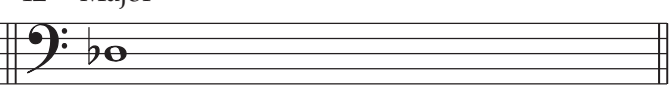
40 Major



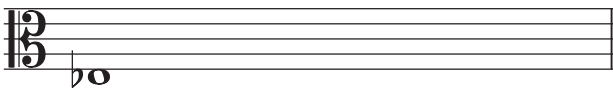
41 Major



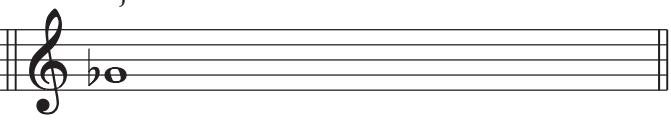
42 Major



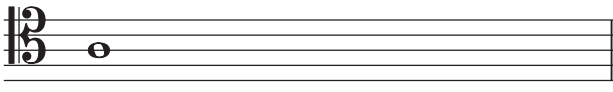
43 Major



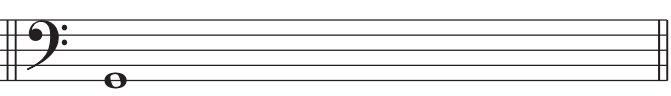
44 Major



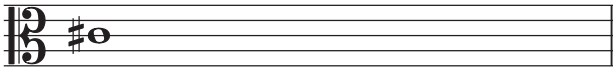
45 Harmonic minor



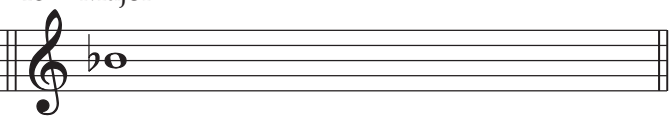
46 Natural minor



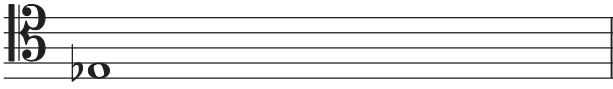
47 Melodic minor



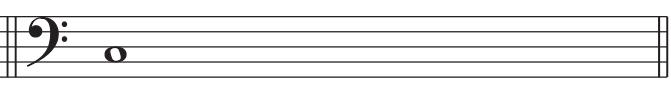
48 Major



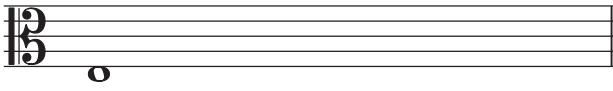
49 Harmonic minor



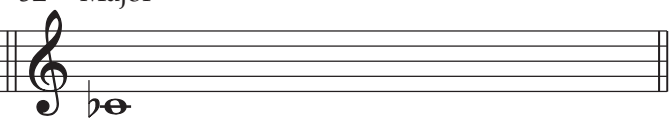
50 Harmonic minor



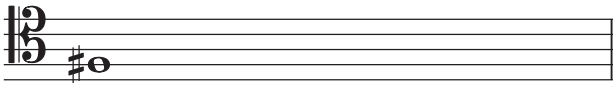
51 Natural minor



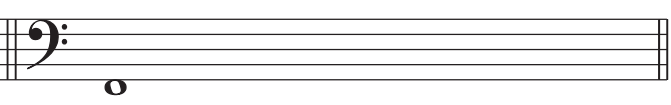
52 Major



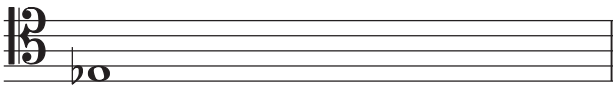
53 Melodic minor



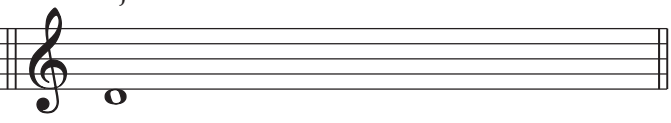
54 Natural minor



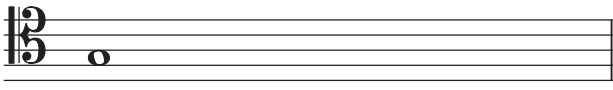
55 Major



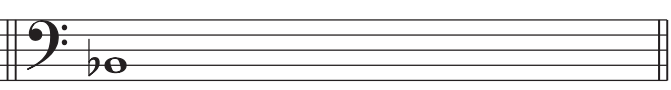
56 Major



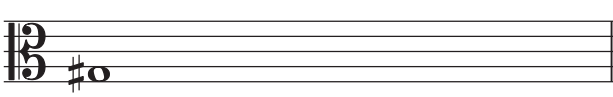
57 Melodic minor



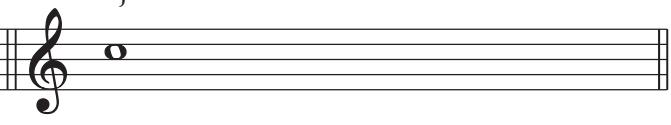
58 Natural minor



59 Harmonic minor



60 Major

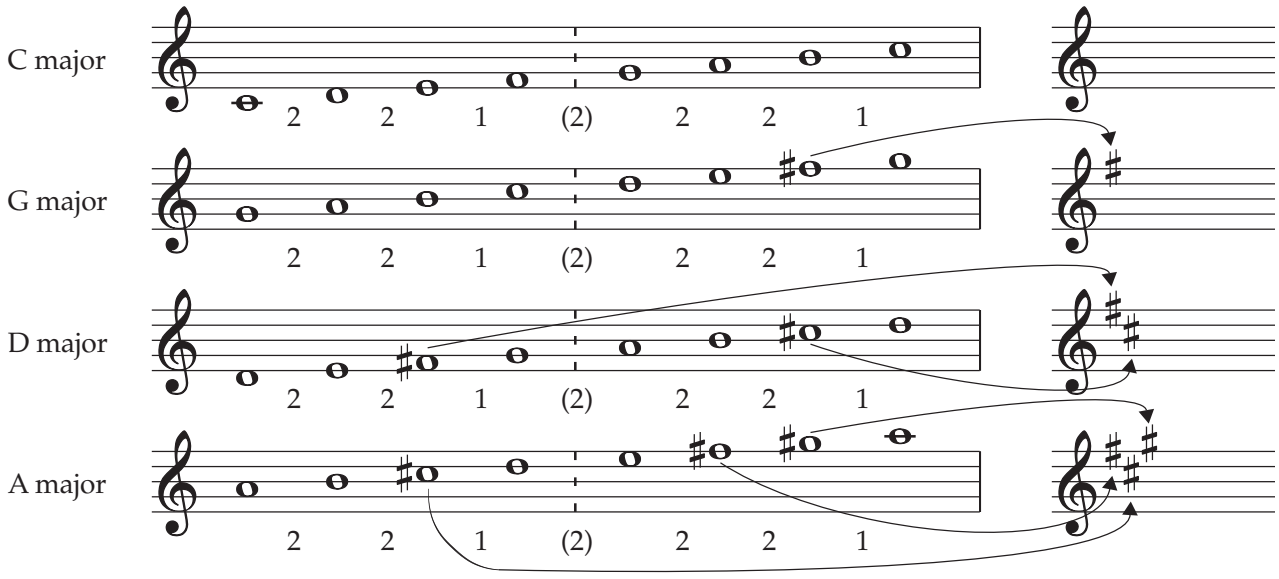


Chapter 3
Key Signatures and Scale Degrees

A *key signature*, which appears to the right of the clef sign as an arrangement of sharps or flats, gives two essential pieces of information to the musician.

1. It tells the performer which pitches are to be raised by a sharp, or lowered by a flat.
2. It indicates (by implication) that there is a central pitch around which the other pitches are organized. This pitch is the lowest member of the scale (the scale may be major or minor), is called the *tonic*, and is the pitch after which the key is named. For example, if the tonic is A, the key is either A major or a minor, depending on the number of accidentals.

Key signatures are all derived from the major scale in a completely logical manner. Let us examine key signatures made up of sharps first.



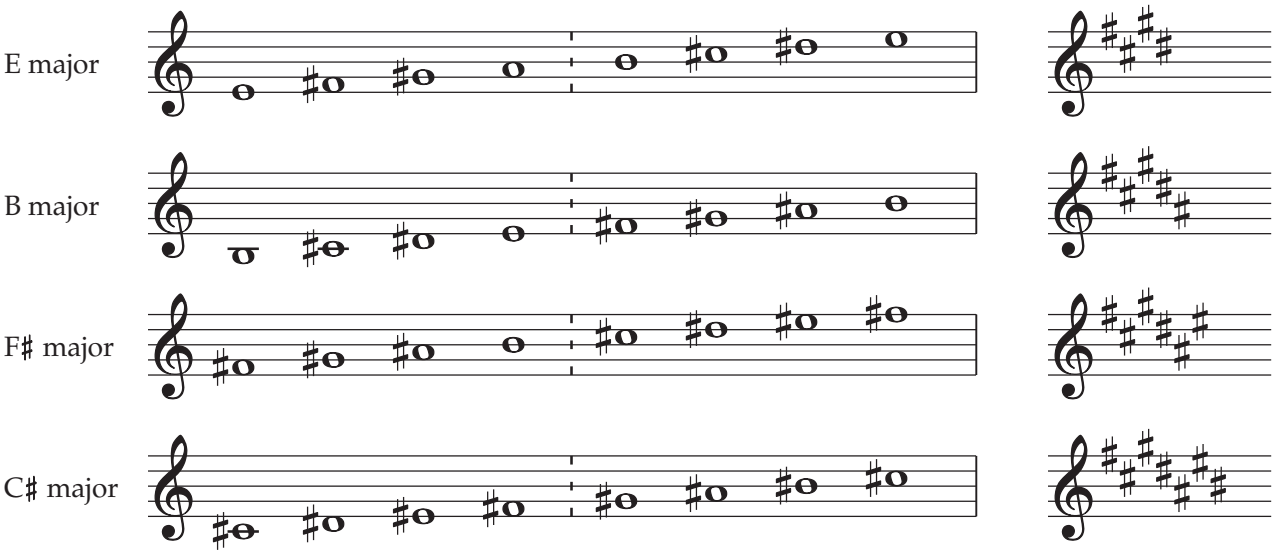
Note:

a. Each scale begins with the second tetrachord of the previous scale.

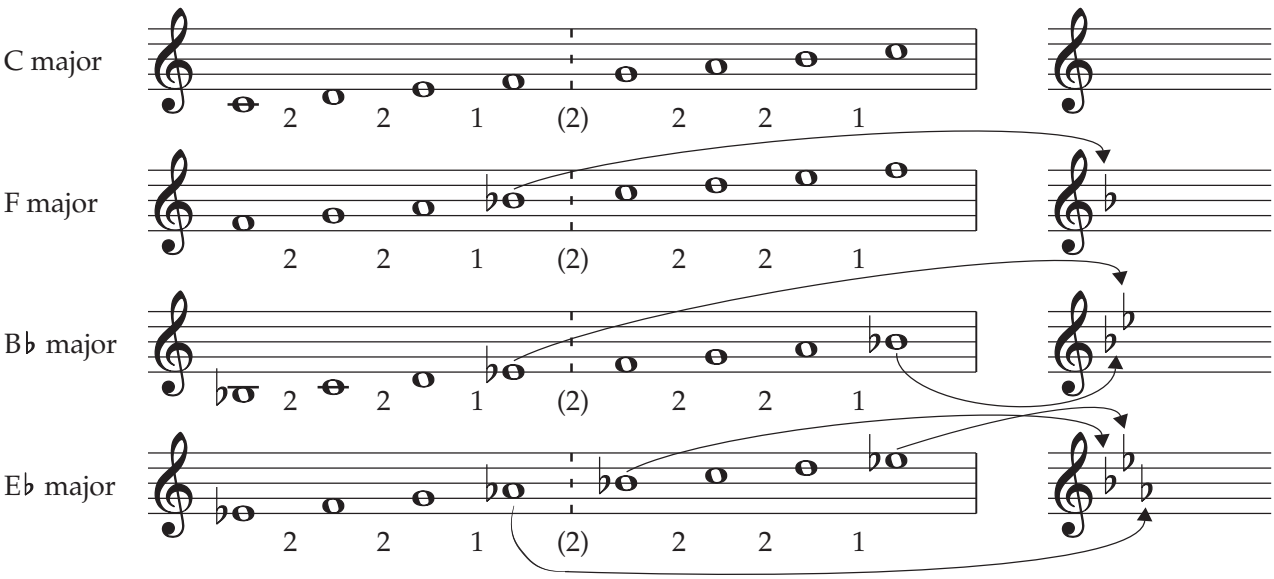
b. In each case, a new accidental is introduced to the scale as a result of having to sharp the third pitch of the second tetrachord.

c. The key signatures show an "accumulation" of accidentals, F♯ always appearing first, C♯ second, and so on.

The remainder of the major scales with sharps and their derived key signatures are



The key signatures with flats are derived from the major scale in a manner similar to the derivation of key signatures with sharps.



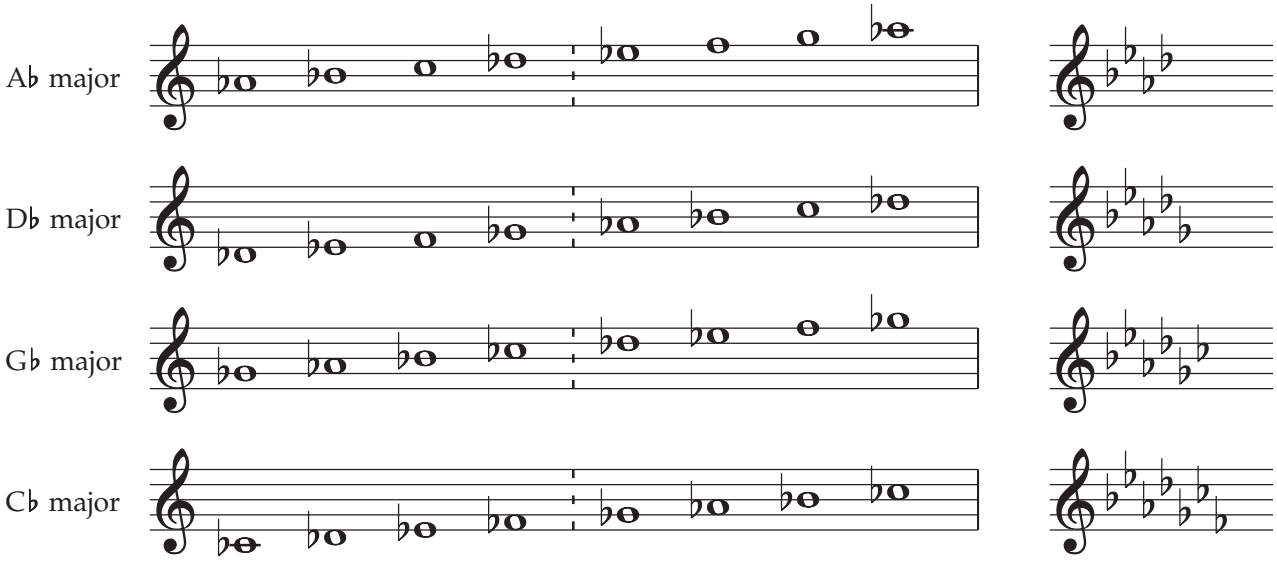
Note:

a. Each scale ends with the first tetrachord of the previous scale, and the last pitch of that tetrachord gives the new tonic.

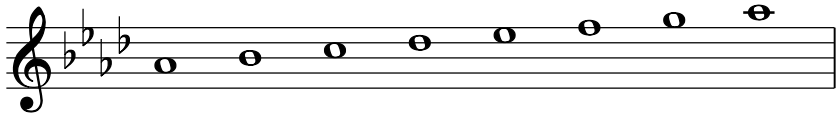
b. In each case, a new accidental is introduced to the scale as a result of having to flat the fourth pitch of the first tetrachord.

c. As with the sharps, the flat key signatures show an accumulation of accidentals, B♭ always appearing first, E♭ second, and so on.

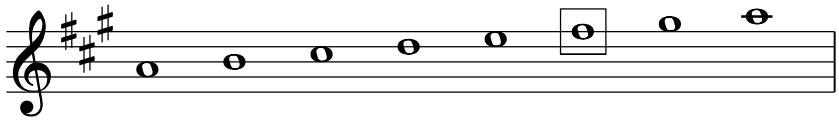
The remainder of the major scales with flats and their derived key signatures are



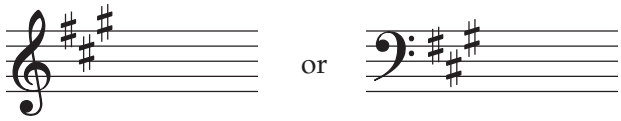
The writing of a key signature renders it unnecessary to put an accidental beside each altered pitch in the scale. Thus, with a key signature, the A♭ major scale appears as



Each major key has a companion minor key with the same signature. The companion key is known as the *relative minor*. The tonic of the relative minor is the *sixth* pitch of the major key's scale. Therefore, if the major key is A, the major scale in that key is



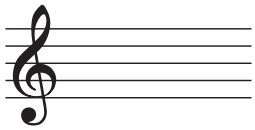
The sixth pitch (or scale step, or degree) is F♯, and so the relative minor key of A major is f♯ minor. The key signatures



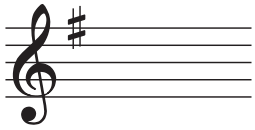
indicate a tonic of A or F♯. Examination of the organization of the music quickly reveals which one of the two is the tonic.

The key signatures for the major scales and their relative minors are shown below:

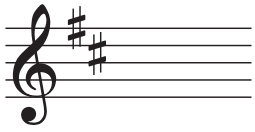
C major
a minor



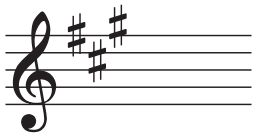
G major
e minor



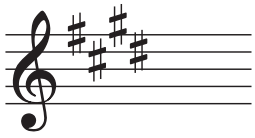
D major
b minor



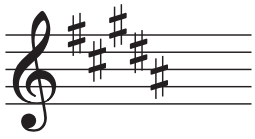
A major
f♯ minor



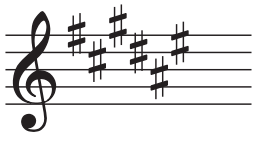
E major
c♯ minor



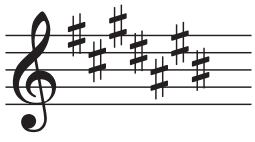
B major
g♯ minor



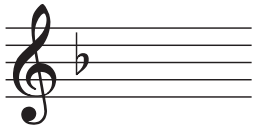
F♯ major
d♯ minor



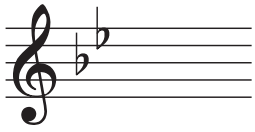
C♯ major
a♯ minor



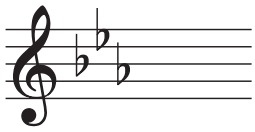
F major
d minor



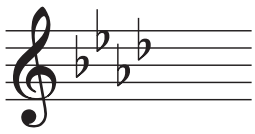
B♭ major
g minor



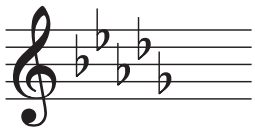
E♭ major
c minor



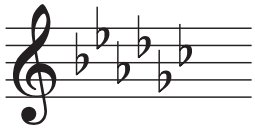
A♭ major
f minor



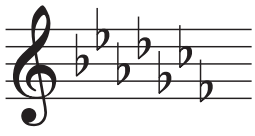
D♭ major
b♭ minor



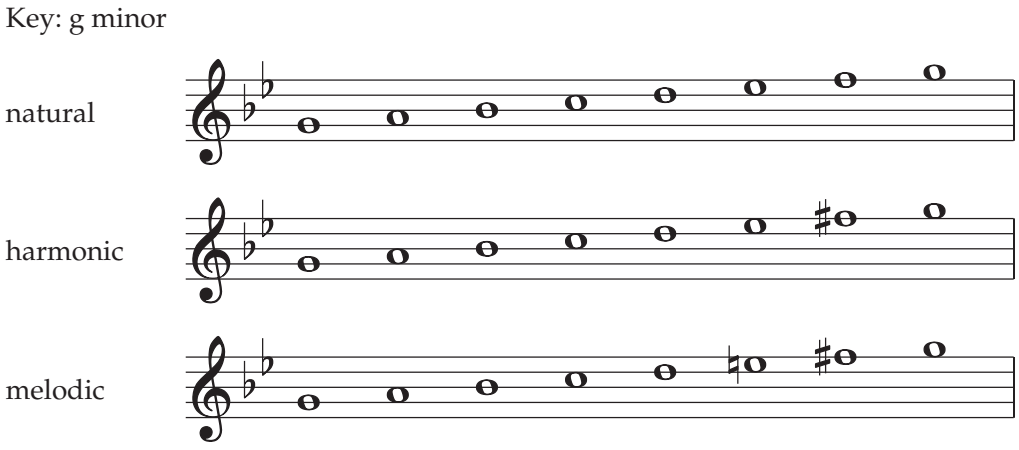
G♭ major
e♭ minor



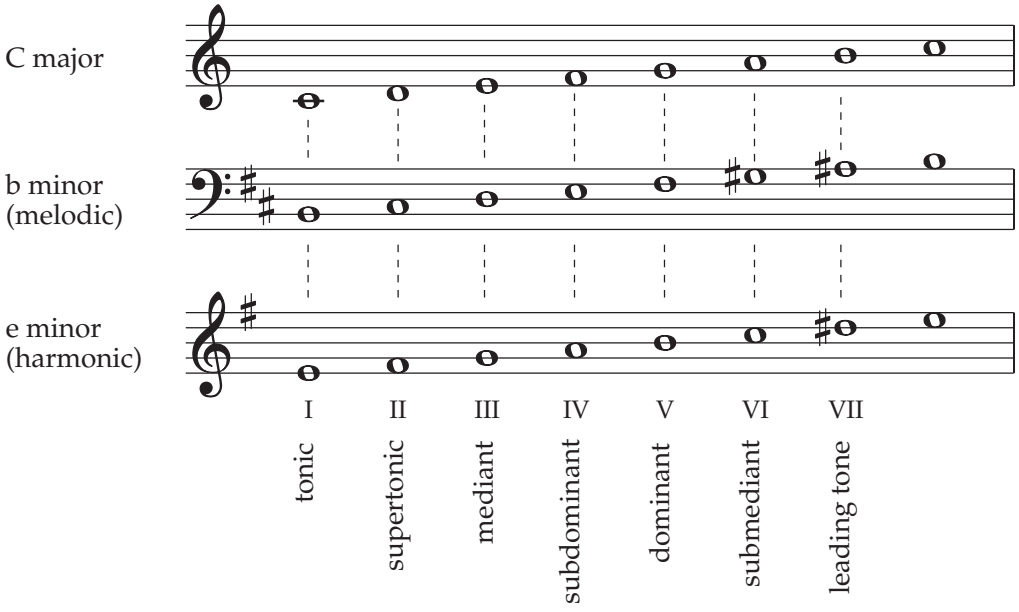
C♭ major
a♭ minor



For each tonic, there are, of course, three minor scales; however, the key signature is not affected by this variation. If the natural minor scale is being used, the accidentals in the key signature ensure the correct formation of the scale. In the case of the harmonic minor, the seventh degree of the scale has to be raised a half step by an accidental placed beside it, and both the sixth and seventh degrees have to be raised similarly if the melodic minor is being used.



Each scale degree, irrespective of key, has both a name and a number (written in Roman) by which to identify it. (Roman numerals are sometimes written in lowercase letters; see Chapter 5.)



The natural minor has no leading tone because the leading tone must *always* be a half step below the tonic. The seventh scale degree in the natural minor is called the *subtonic*.

Suggestions and Strategies

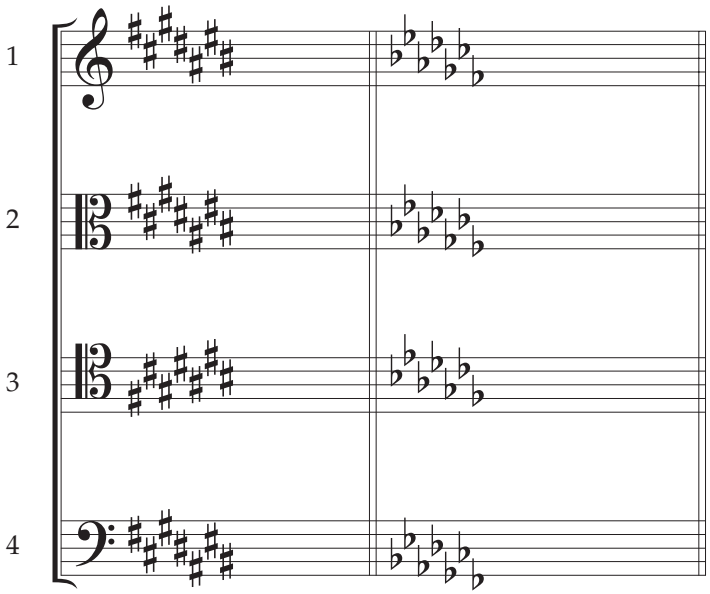
Although it is important to understand how key signatures are derived, it is equally important to be able to notate them without having to think about the process. Thus, you should practice doing so in each clef until you can commit them to paper almost automatically.

There are various memory devices (*mnemonics*) to help you in this regard. One of the simplest is to invent a seven-word sentence, in which the first letter of each word represents each of the sharps and the order in which they occur. One sentence, in fact, will do for both sharps and flats. For the ordering of the latter, simply read the sentence backward.

Make up some imaginative sentences. They should begin with the letters:

F – C – G – D – A – E – B

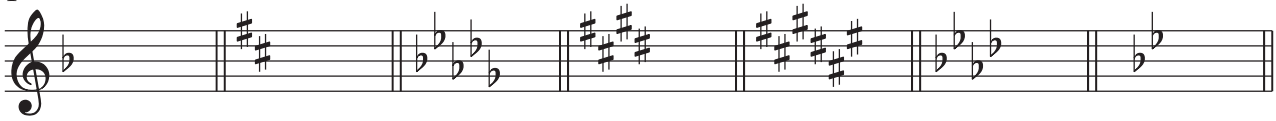
Study the following example for proper placement of sharps and flats in all four clefs:



Exercises

A. Identify the *major* key signatures. Time goal—20 seconds per line.

1



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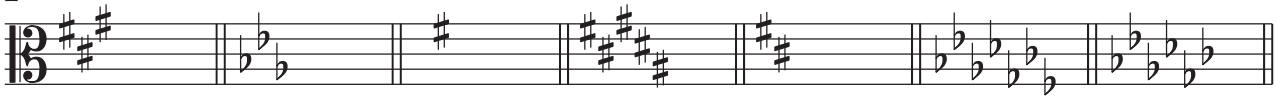

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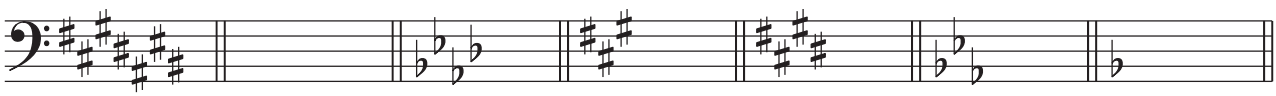

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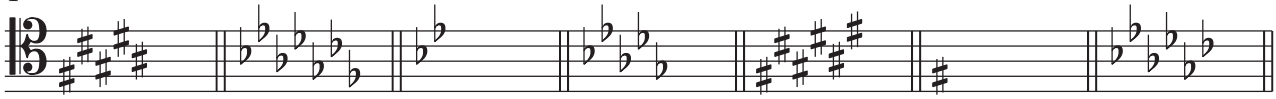

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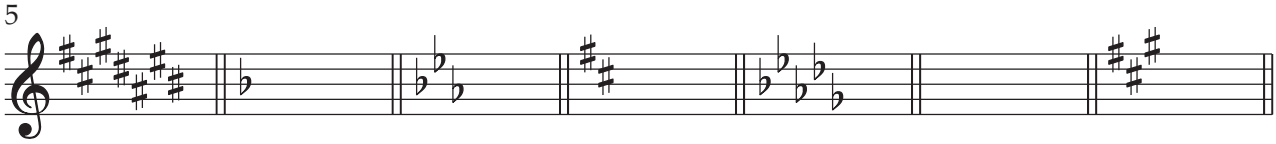

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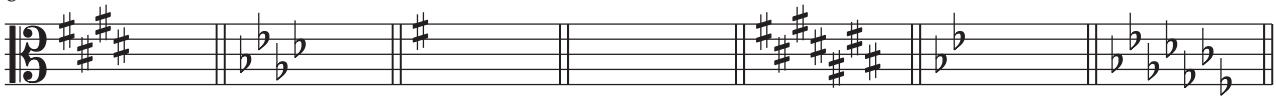

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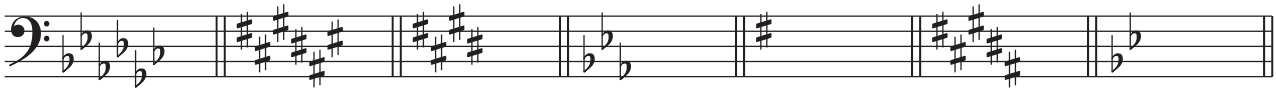

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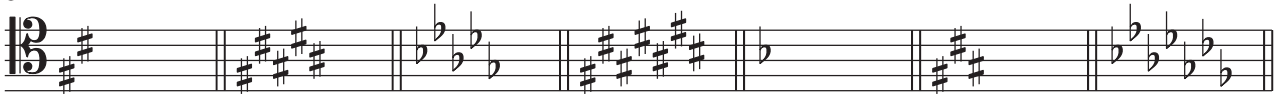

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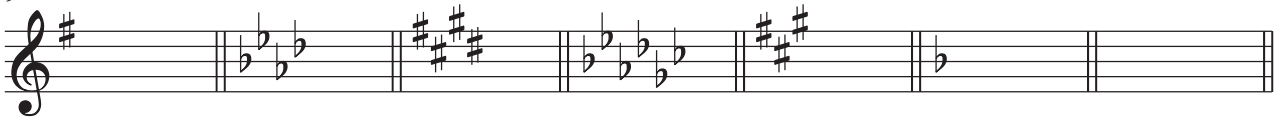

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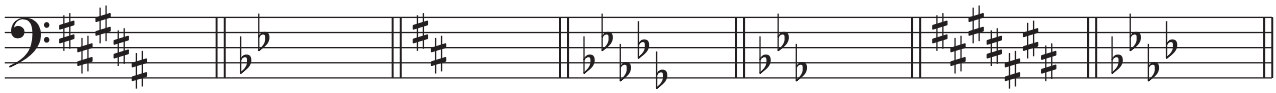
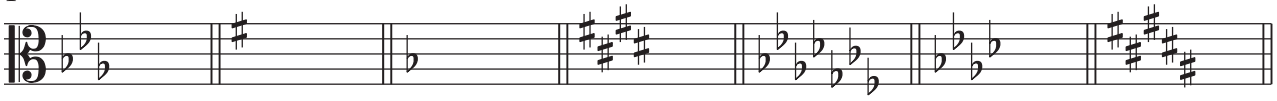


B. Identify the *minor* key signatures. Time goal—20 seconds per line.

1



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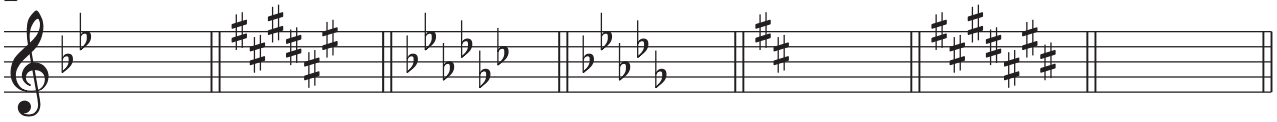

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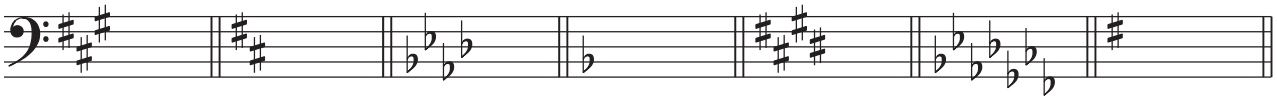

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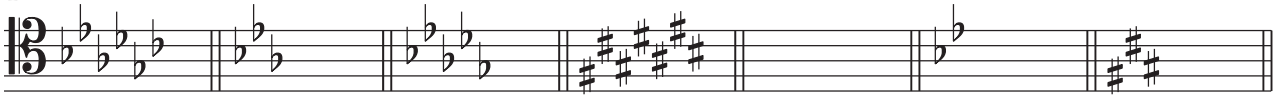

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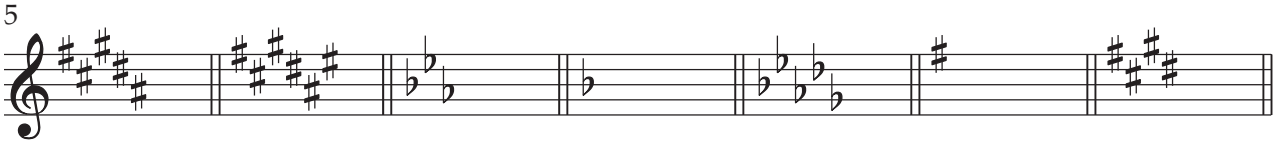

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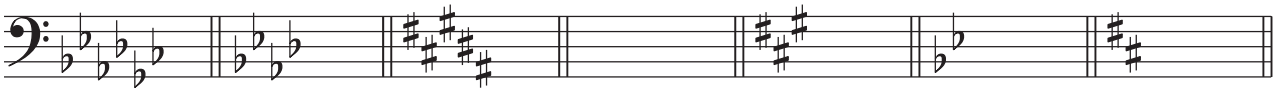

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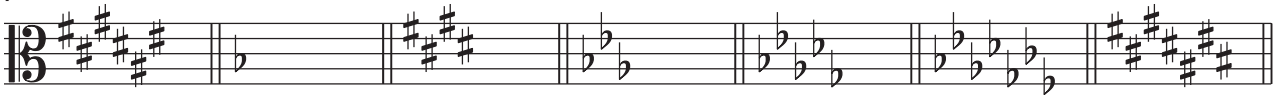

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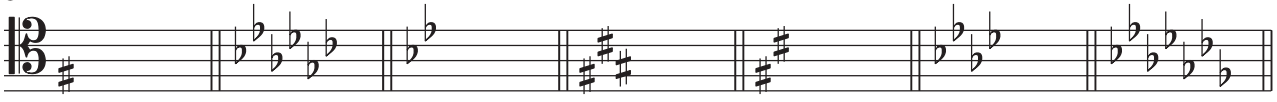

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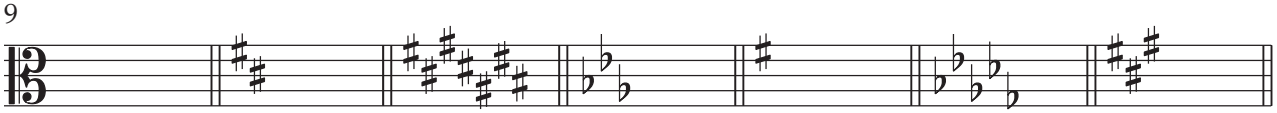

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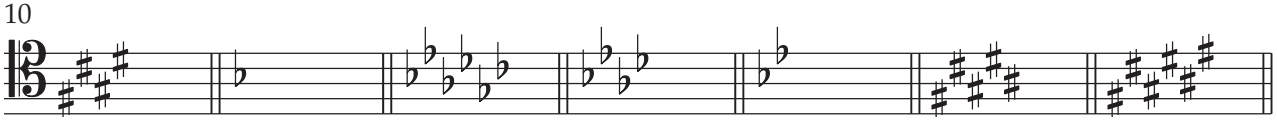
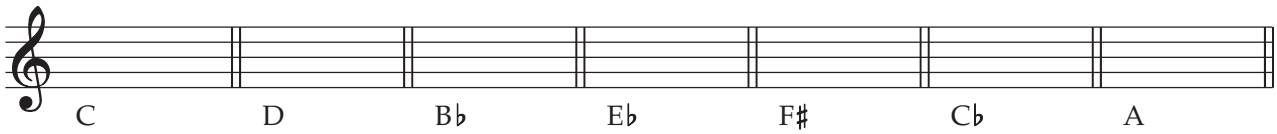


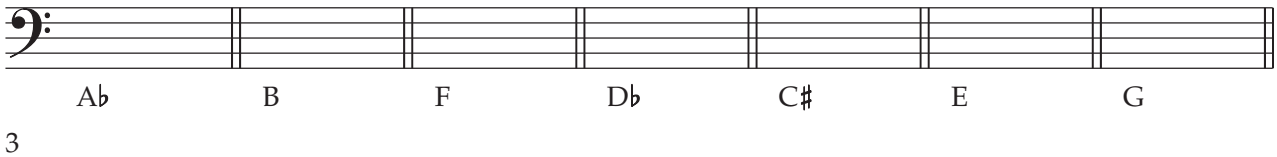
C. Supply the specified *major* key signatures. Time goal—60 seconds per line.

1



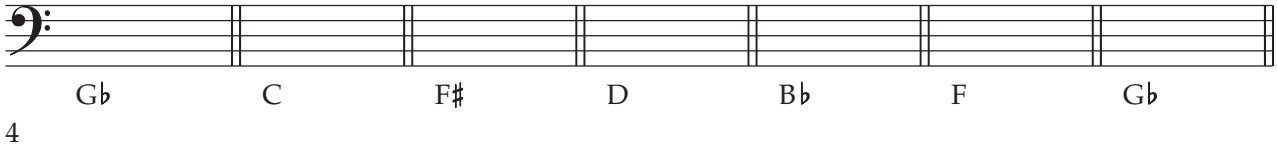
C D B♭ E♭ F♯ C♭ A

2



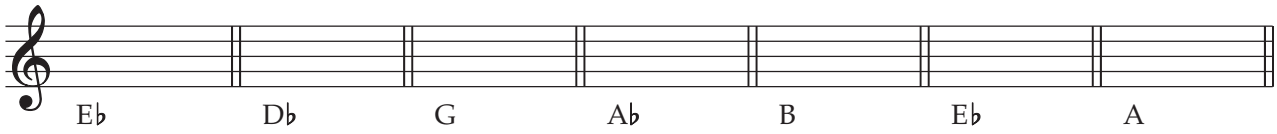
A♭ B F D♭ C♯ E G

3



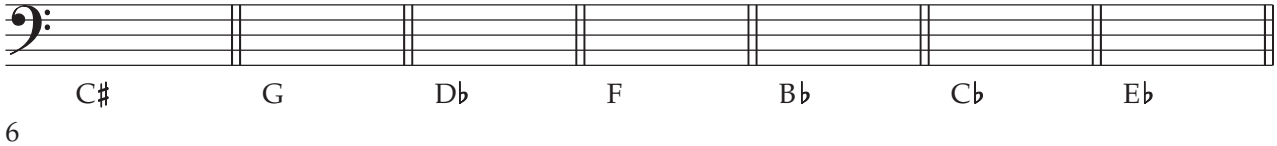
G♭ C F♯ D B♭ F G♭

4



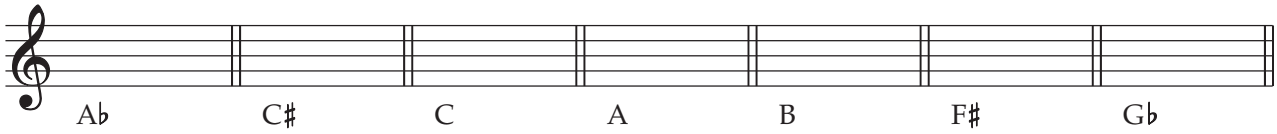
E♭ D♭ G A♭ B E♭ A

5



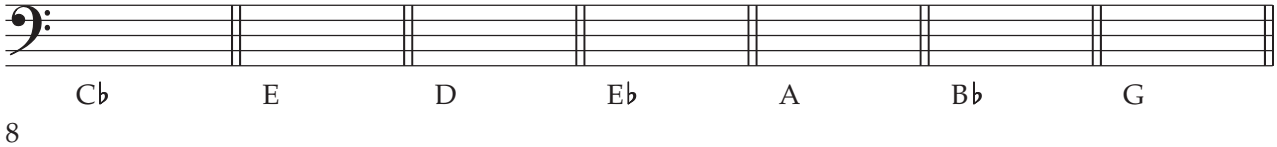
C♯ G D♭ F B♭ C♭ E♭

6



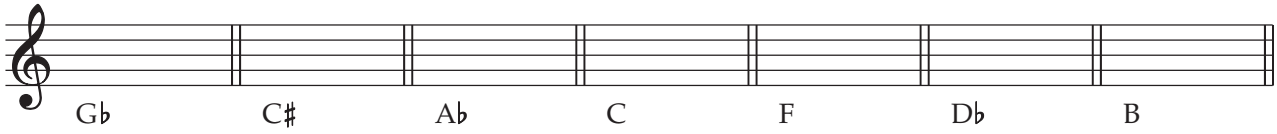
A♭ C♯ C A B F♯ G♭

7



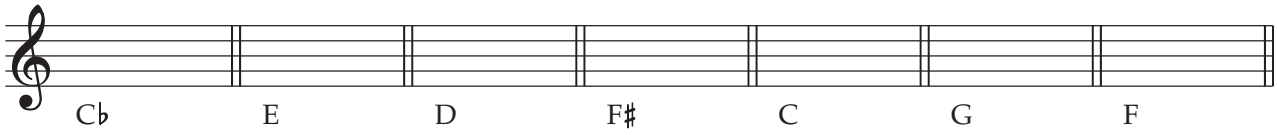
C♭ E D E♭ A B♭ G

8



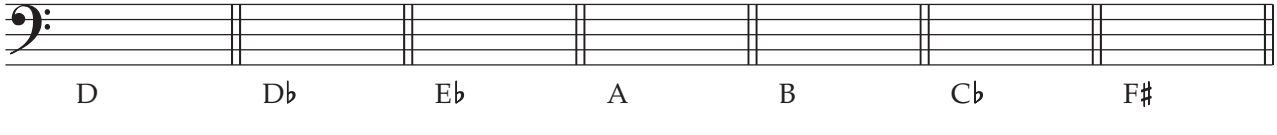
G♭ C♯ A♭ C F D♭ B

9



C♭ E D F♯ C G F

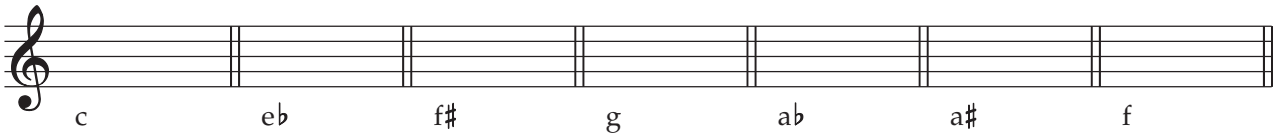
10



D D♭ E♭ A B C♭ F♯

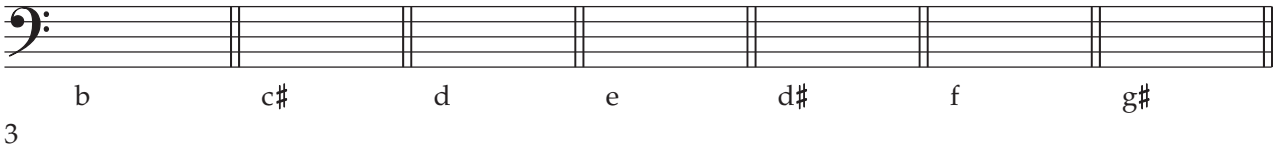
D. Supply the specified *minor* key signatures. Time goal—60 seconds per line.

1



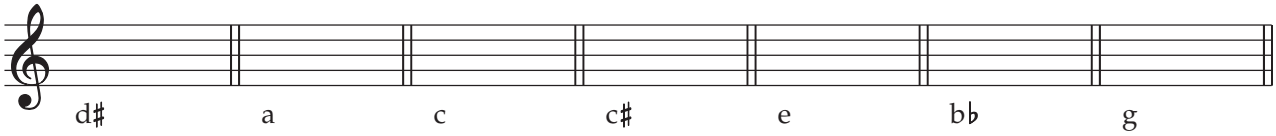
c E♭ F♯ G A♭ A♯ F

2



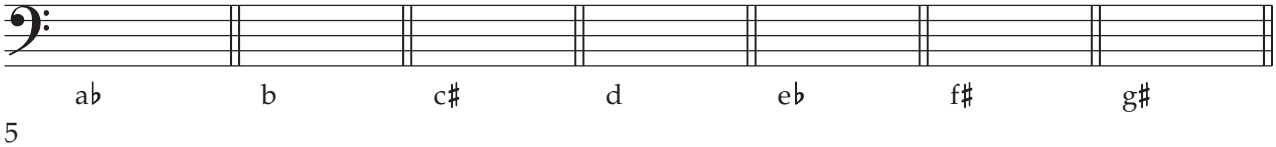
B C♯ D E D♯ F G♯

3



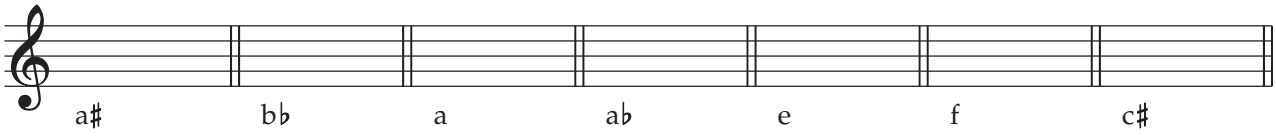
D♯ A C C♯ E B♭ G

4



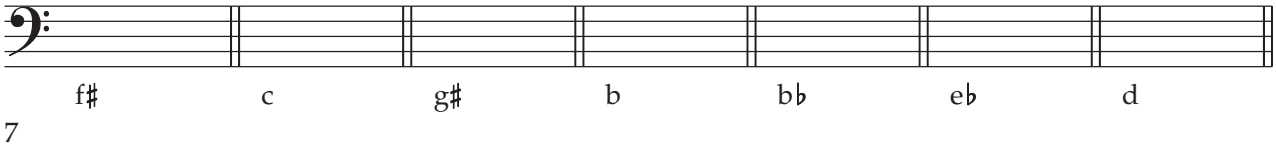
A♭ B C♯ D E♭ F♯ G♯

5



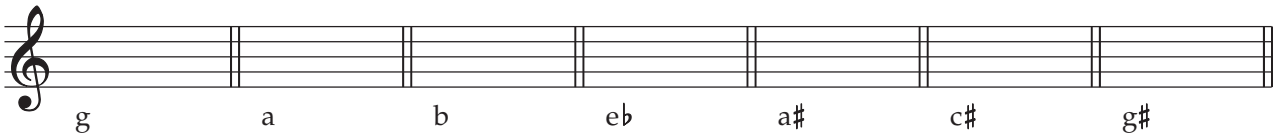
A♯ B♭ A A♭ E F C♯

6



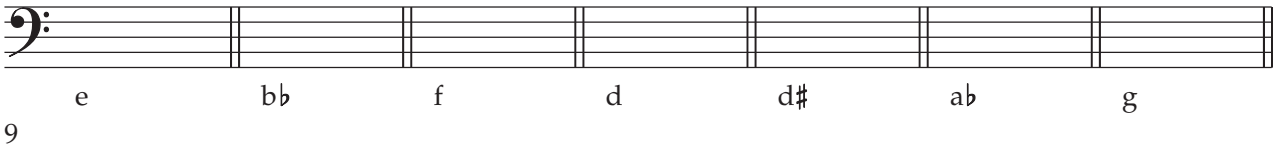
F♯ C G♯ B B♭ E♭ D

7



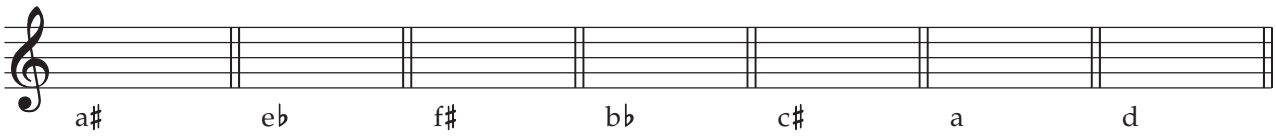
G A B E♭ A♯ C♯ G♯

8



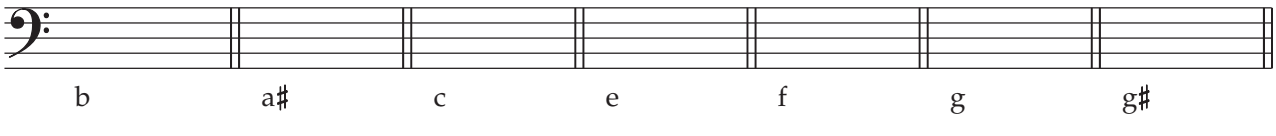
E B♭ F D D♯ A♭ G

9



A♯ E♭ F♯ B♭ C♯ A D

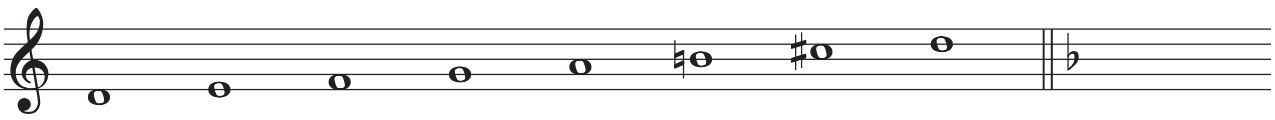
10



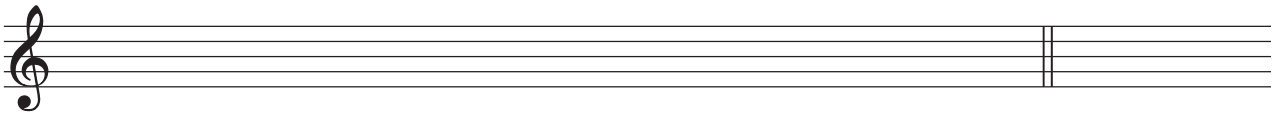
B A♯ C E F G G♯

E. Using accidentals where necessary, write the specified scales without key signatures. Then write the key signature, as shown. Time goal—30 seconds per scale.

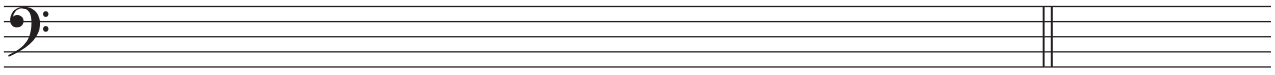
1 d melodic minor



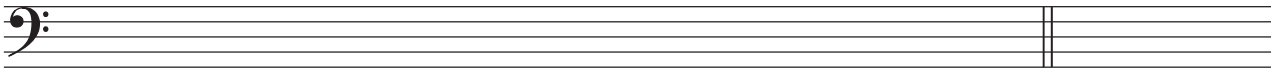
2 e harmonic minor



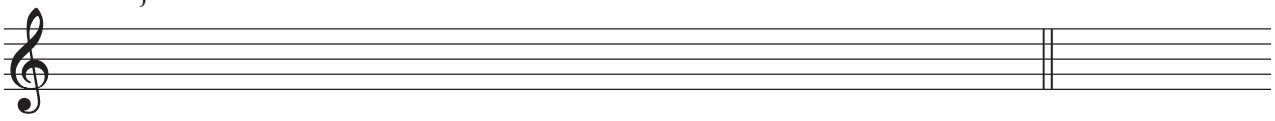
3 g♯ melodic minor



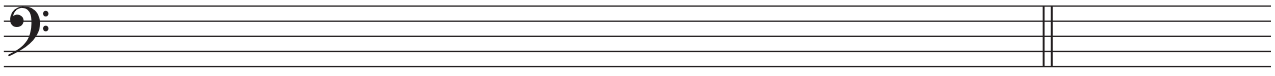
4 b natural minor



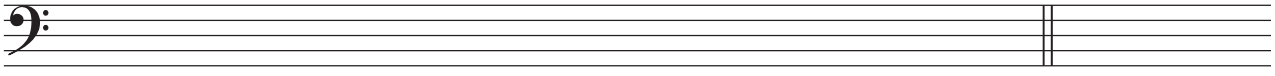
5 C major



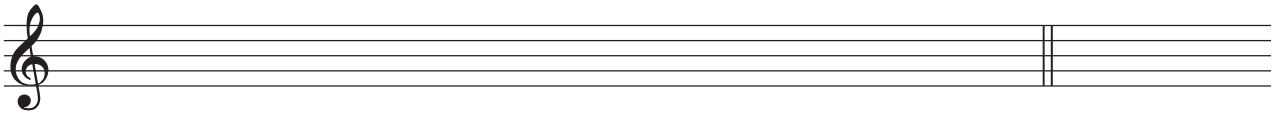
6 f♯ harmonic minor



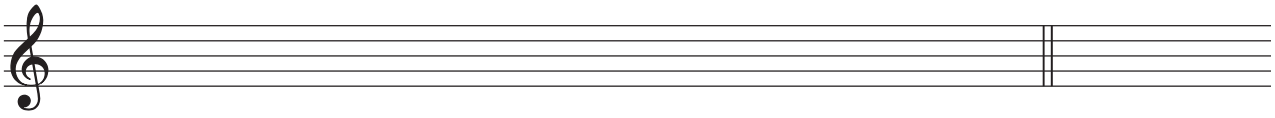
7 b harmonic minor



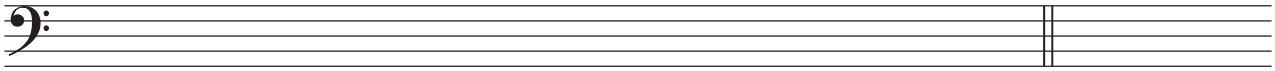
8 a♭ melodic minor



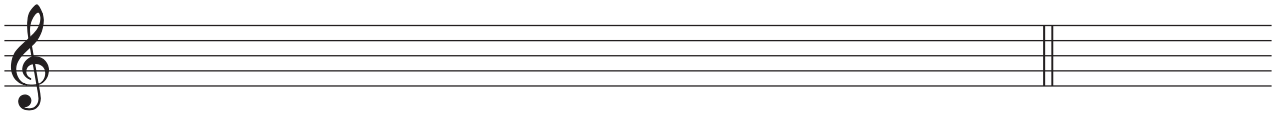
9 d♯ harmonic minor



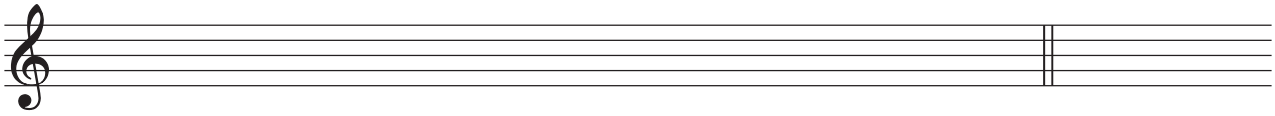
10 a natural minor



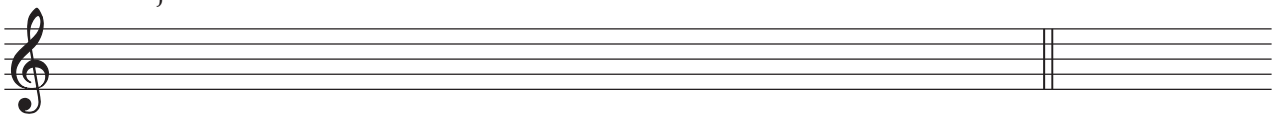
11 f harmonic minor



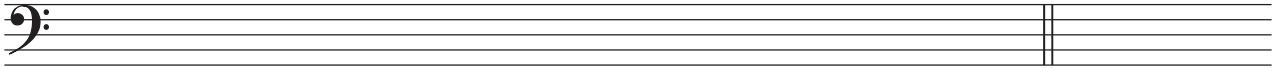
12 b♭ melodic minor



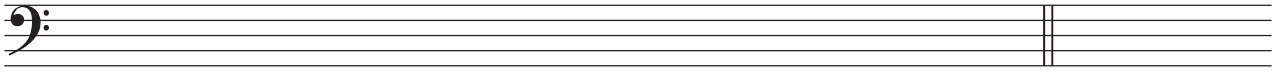
13 C♭ major



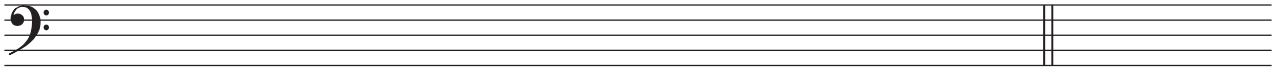
14 g harmonic minor



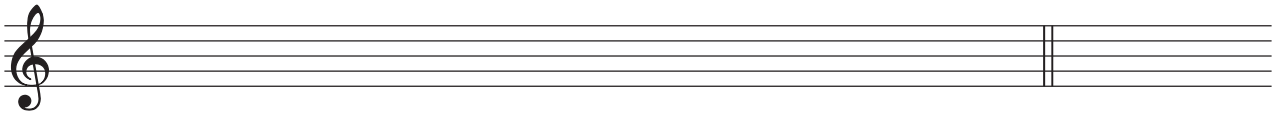
15 a harmonic minor



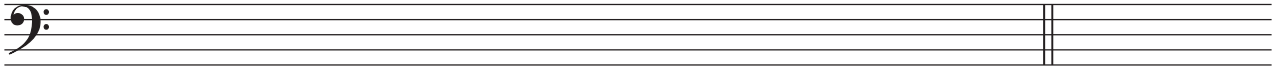
16 e melodic minor



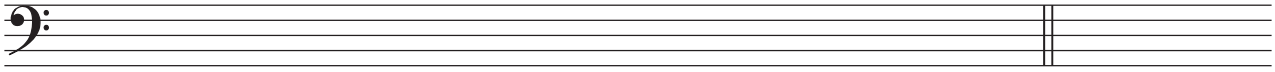
17 e♭ melodic minor



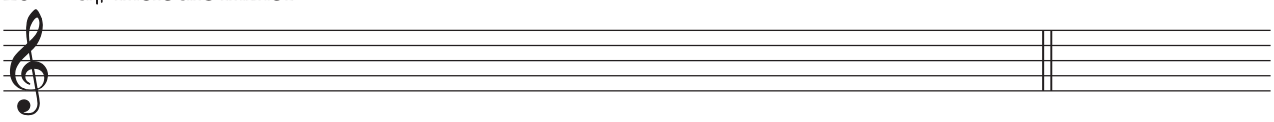
18 B major



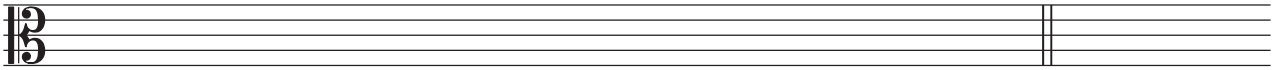
19 c♯ harmonic minor



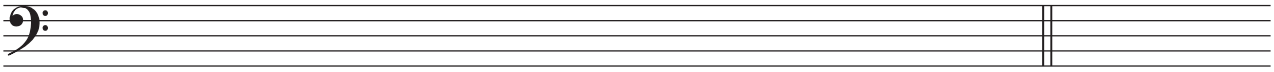
20 d♯ melodic minor



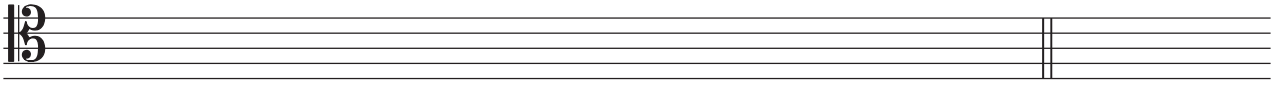
21 g natural minor



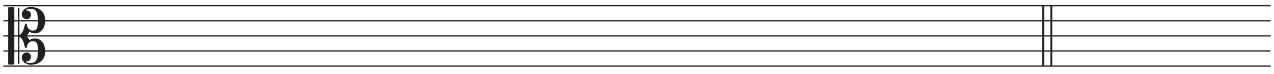
22 a♯ harmonic minor



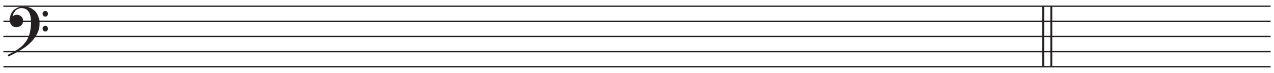
23 D♭ major



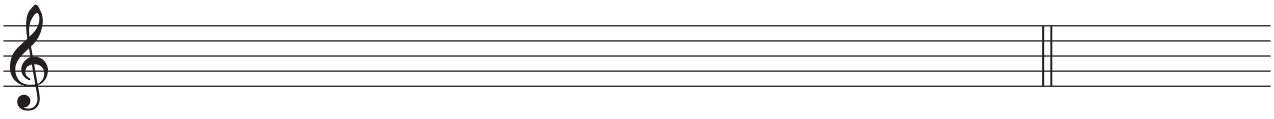
24 a melodic minor



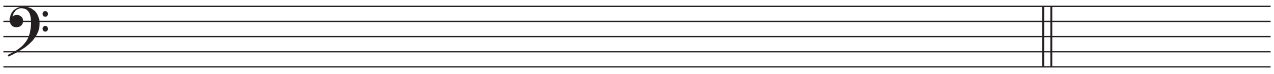
25 F♯ major



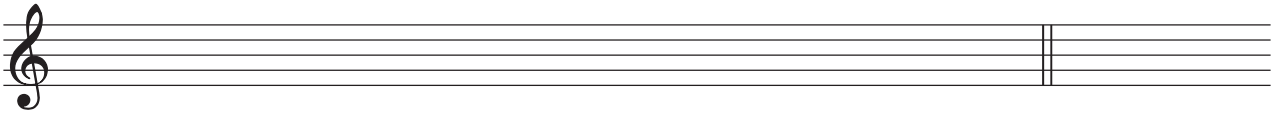
26 e♭ natural minor



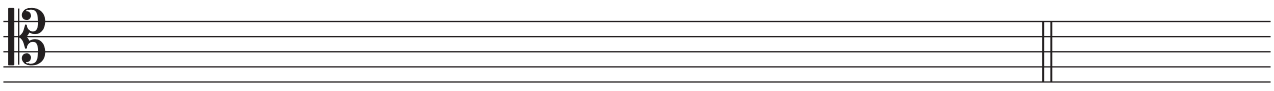
27 d harmonic minor



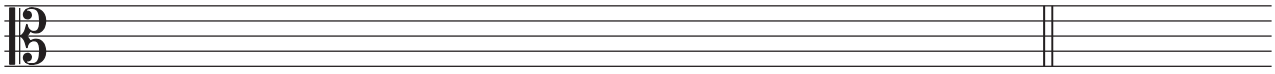
28 c melodic minor



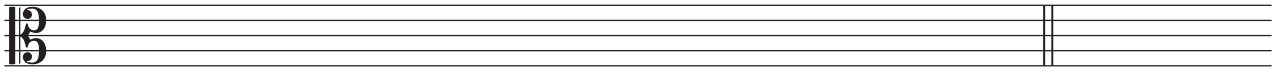
29 b♭ harmonic minor



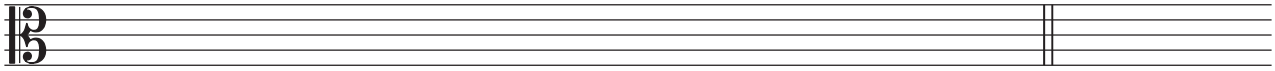
30 f♯ natural minor



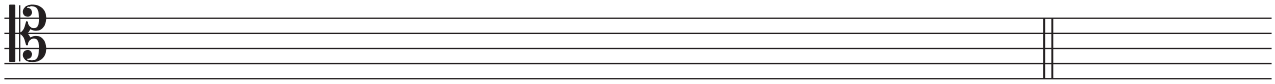
31 a♯ melodic minor



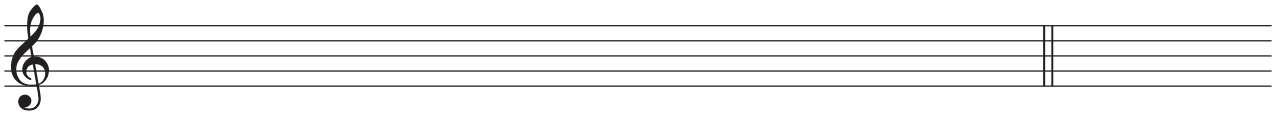
32 b harmonic minor



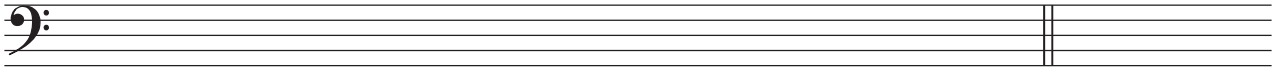
33 C♯ major



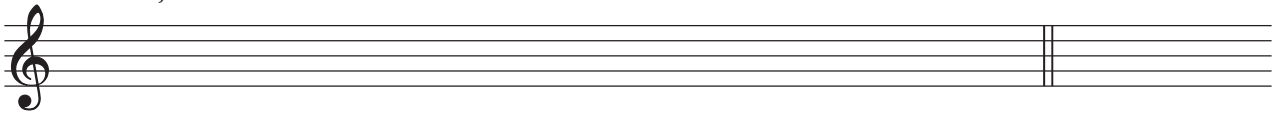
34 c♯ melodic minor



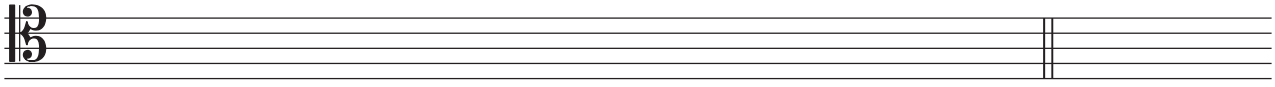
35 d natural minor



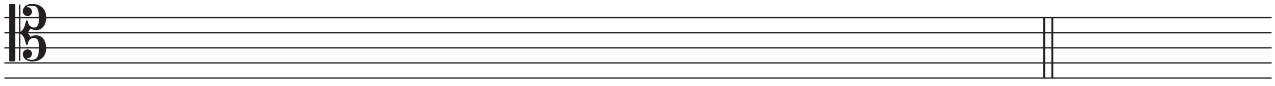
36 G♭ major



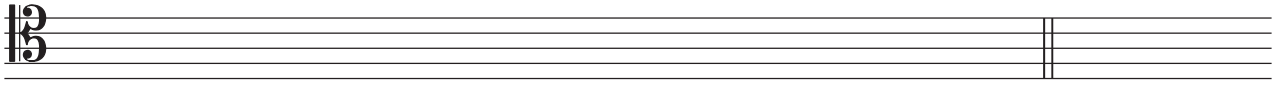
37 f♯ melodic minor



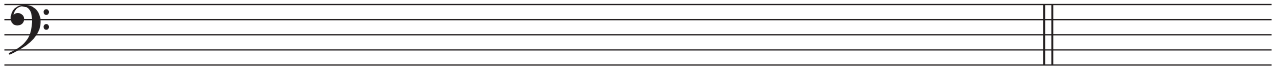
38 f natural minor



39 c melodic minor

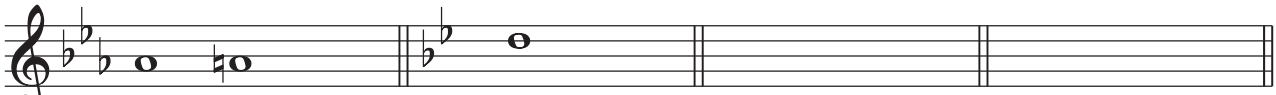


40 b melodic minor



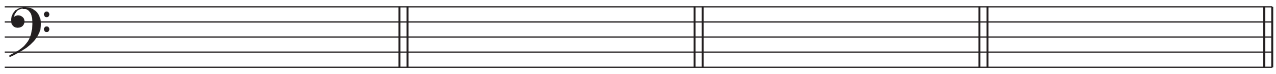
F. Write the signatures of the given keys and the pitch (es) for the specified scale degrees. Lowercase letters indicate minor keys. Time goal—40 seconds per line.

1



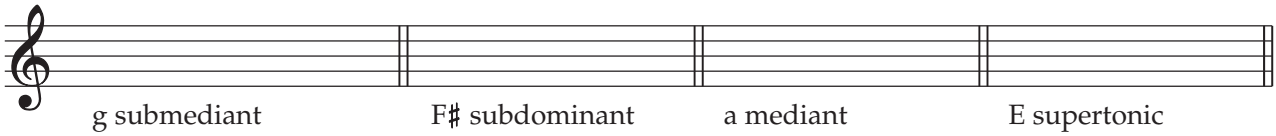
c submediant | g dominant | A♭ supertonic | f leading tone

2



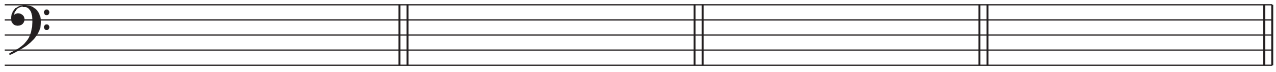
e♭ subdominant | b♭ submediant | D mediant | c subtonic

3



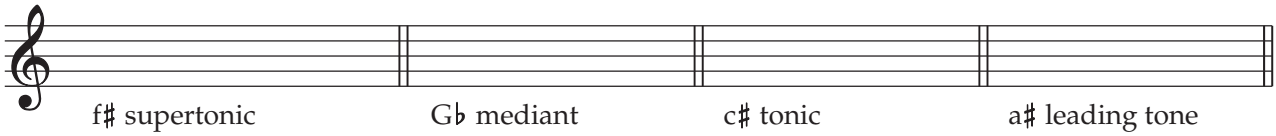
g submediant | F♯ subdominant | a mediant | E supertonic

4



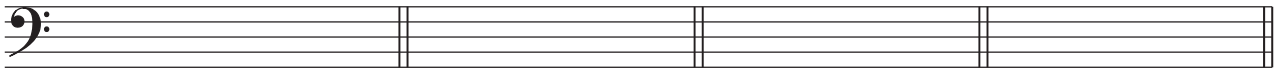
b tonic | a♭ leading tone | g♯ subdominant | C♯ dominant

5



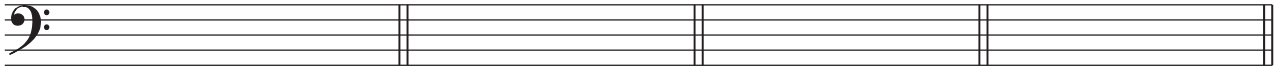
f♯ supertonic | G♭ mediant | c♯ tonic | a♯ leading tone

6



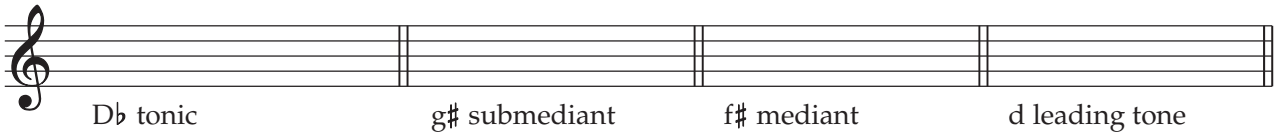
B♭ supertonic | c tonic | e mediant | C♭ dominant

7



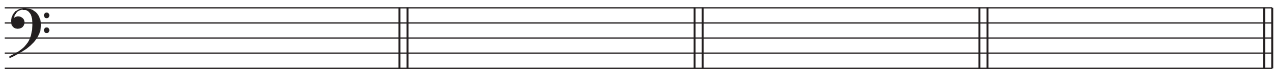
B subdominant | d supertonic | E♭ submediant | G leading tone

8



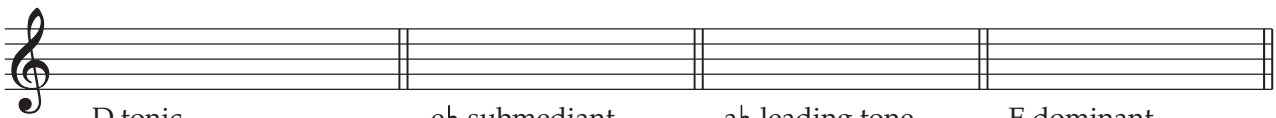
D♭ tonic | g♯ submediant | f♯ mediant | d leading tone

9



a♯ dominant | d subtonic | f subdominant | b supertonic

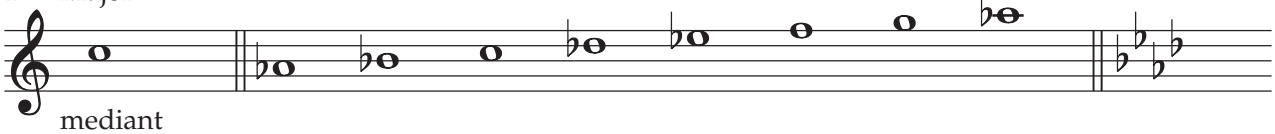
10



D tonic | e♭ submediant | a♭ leading tone | E dominant

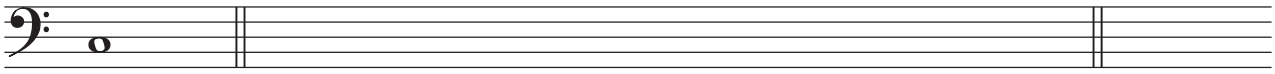
G. Using accidentals where necessary, write the specified scales around the given scale degrees without key signatures. Then write the key signature, as shown. Time goal—30 seconds per scale.

1 Major



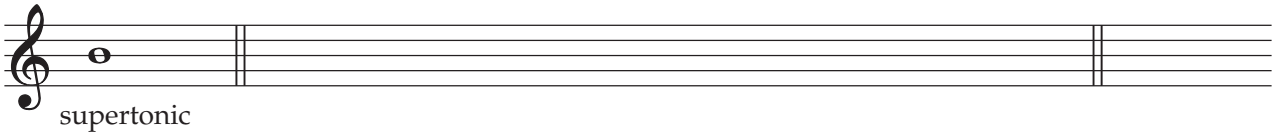
mediant

2 Harmonic minor



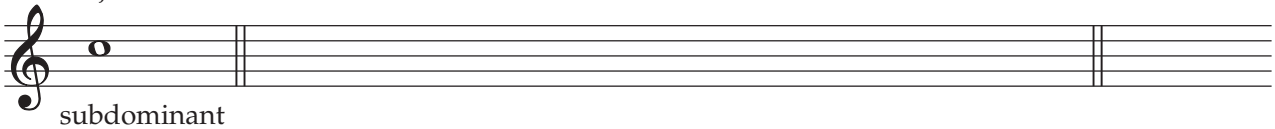
submediant

3 Melodic minor



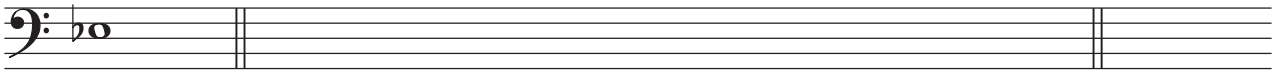
supertonic

4 Major



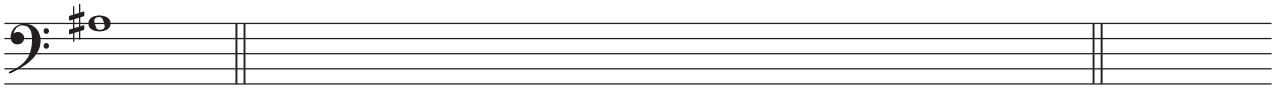
subdominant

5 Natural minor



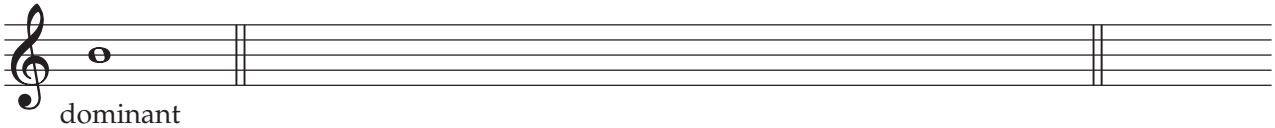
mediant

6 Harmonic minor



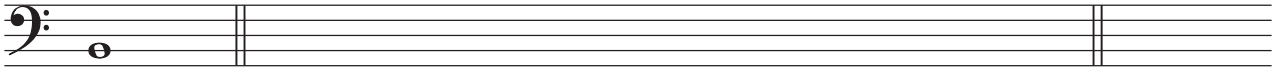
leading tone

7 Harmonic minor



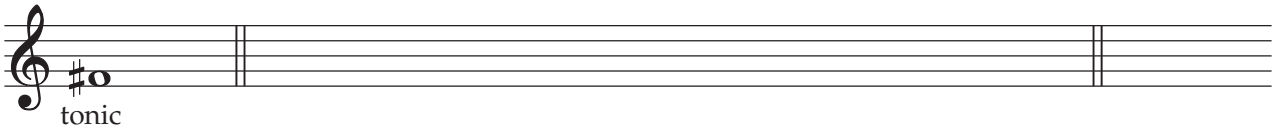
dominant

8 Melodic minor



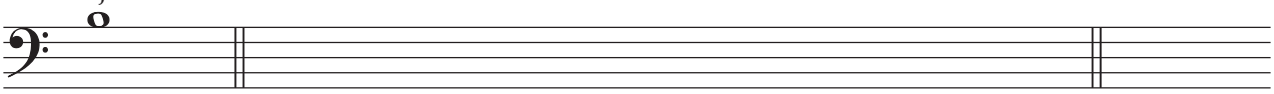
dominant

9 Natural minor



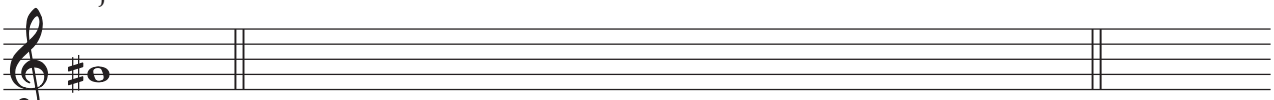
tonic

10 Major



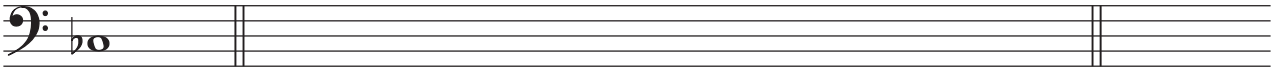
leading tone

11 Major



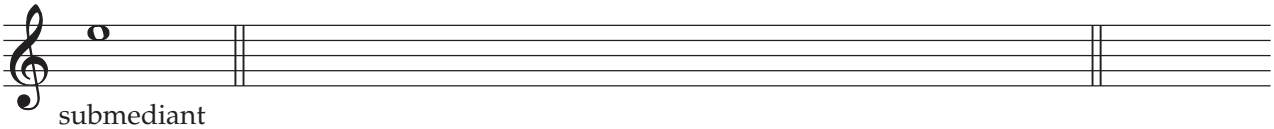
mediant

12 Harmonic minor



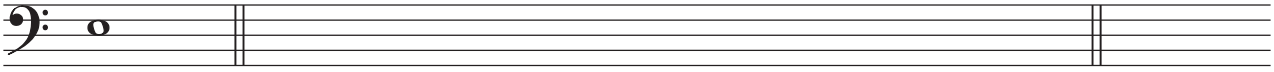
submediant

13 Melodic minor



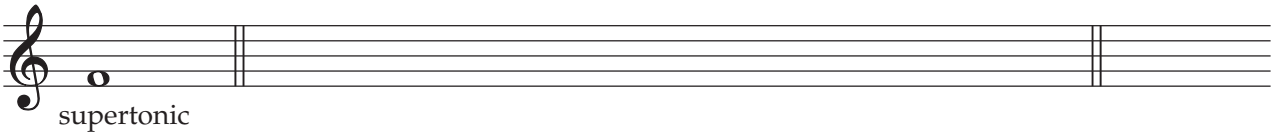
submediant

14 Natural minor



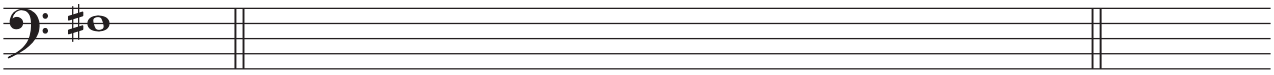
tonic

15 Harmonic minor



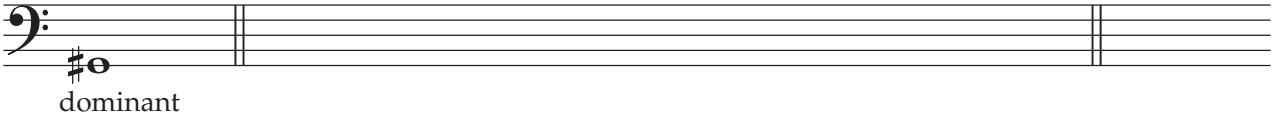
supertonic

16 Harmonic minor



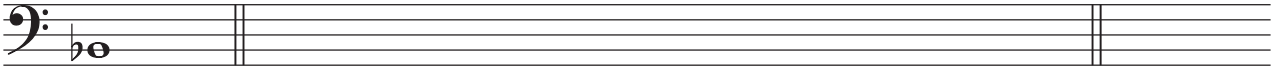
leading tone

17 Melodic minor



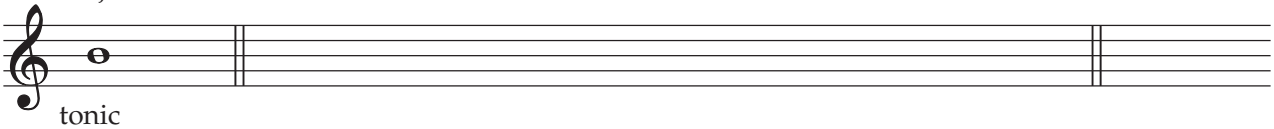
dominant

18 Major



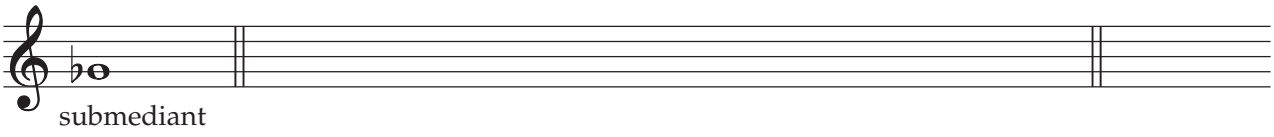
subdominant

19 Major



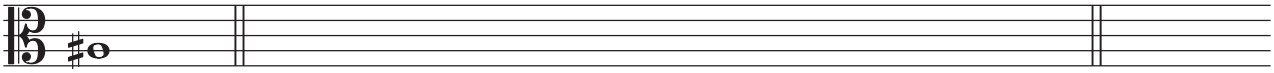
tonic

20 Natural minor



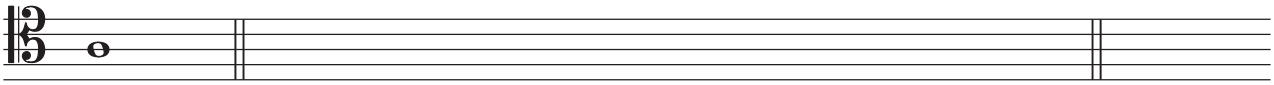
submediant

21 Melodic minor



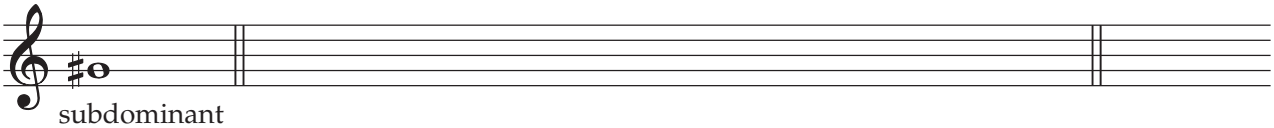
submediant

22 Major



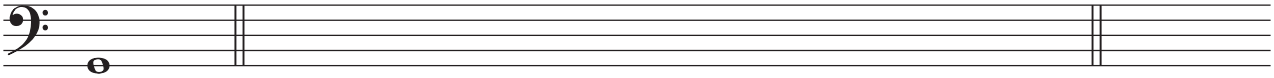
dominant

23 Natural minor



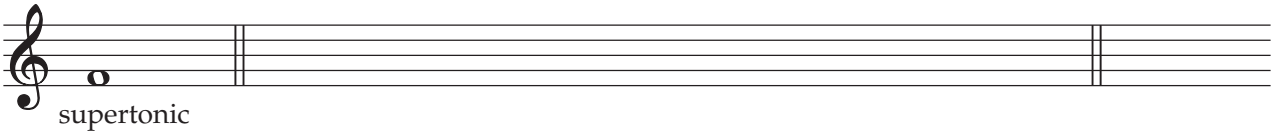
subdominant

24 Major



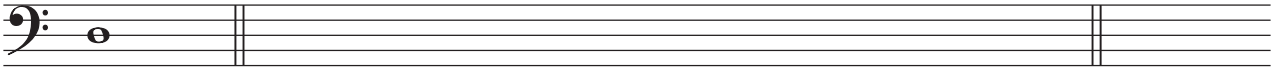
mediant

25 Natural minor



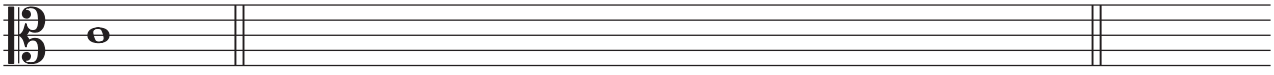
supertonic

26 Melodic minor



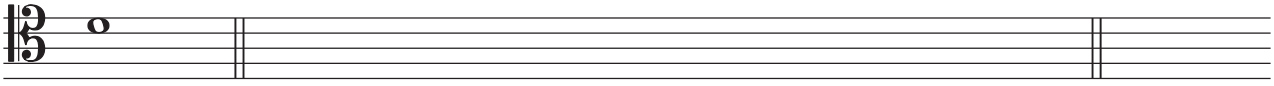
submediant

27 Natural minor



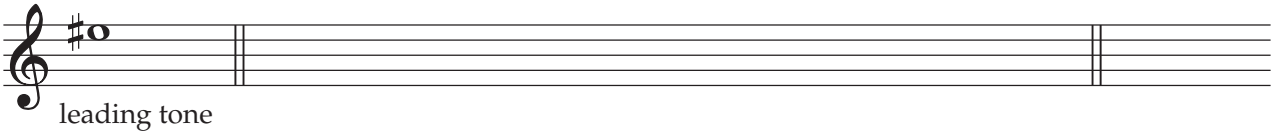
dominant

28 Melodic minor



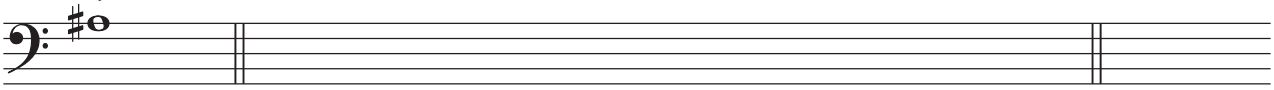
leading tone

29 Melodic minor



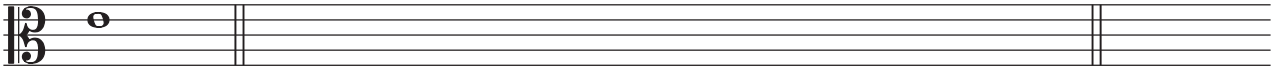
leading tone

30 Major



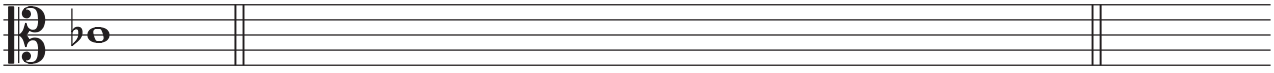
mediant

31 Melodic minor



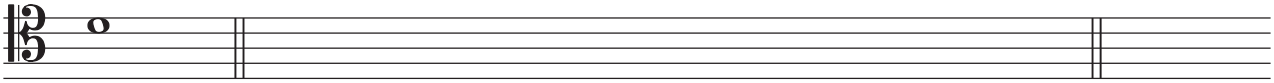
mediant

32 Major



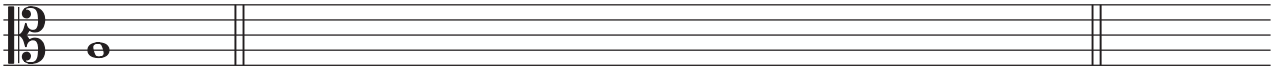
tonic

33 Melodic minor



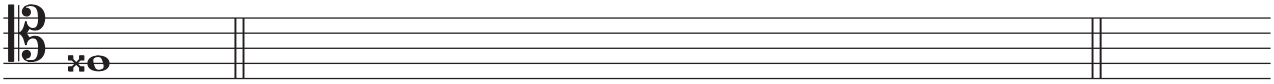
dominant

34 Harmonic minor



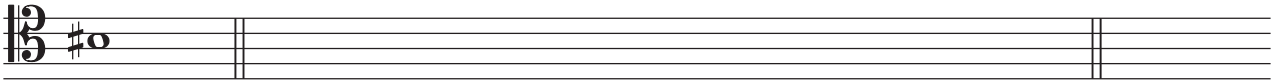
mediant

35 Melodic minor



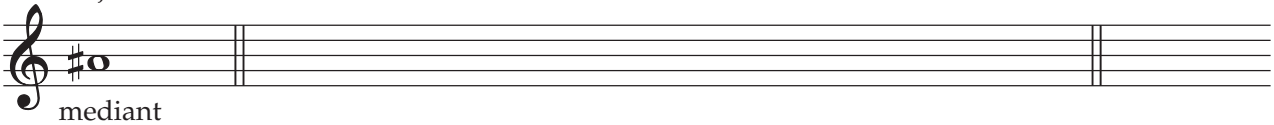
submediant

36 Harmonic minor



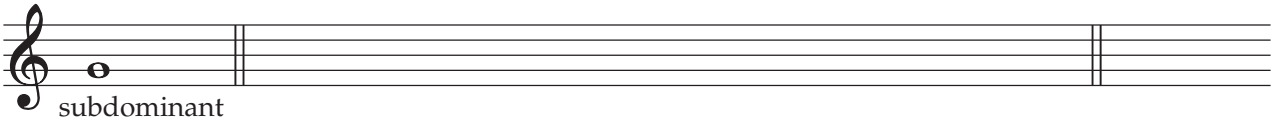
leading tone

37 Major



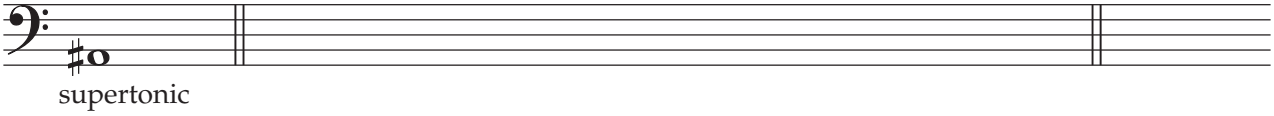
mediant

38 Natural minor



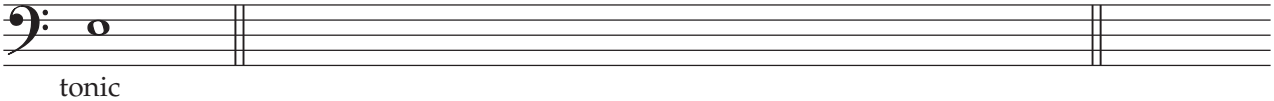
subdominant

39 Melodic minor



supertonic

40 Major



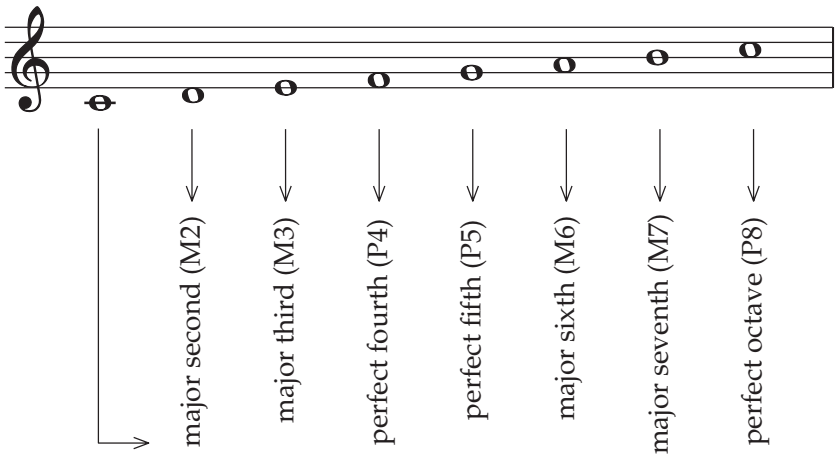
tonic

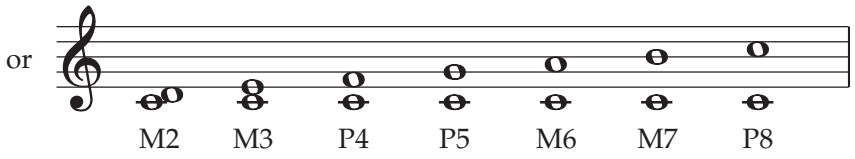
Chapter 4
Intervals

The spatial relationship between two pitches is called an interval. In Chapter 2, to enable the notation of scales, the interval of the second was introduced. To notate an interval with accuracy, one needs to know the following:

1. The precise names of the intervals.
2. The correct spelling of the intervals.
3. The number of half steps the intervals contain.

The major scale provides an excellent starting point for a formal study of intervals.





Note:

a. Each interval has a qualitative and a quantitative component in the description of its name. Take, for example, the major sixth. *Major* describes quality (type); *sixth* describes quantity (numerical value).

b. The quantity of each interval (e.g., third, sixth, etc.) coincides precisely with the number of note names as well as the number of lines and spaces on the staff it contains. For example, the perfect fifth, C up to G, is called a fifth because there are five note names in the interval—C D E F G. It is important to understand that the interval C up to G is *always* a fifth in quantity even if an accidental is placed beside either or both of the notes, thus altering its quality.

c. Each interval with a precise name (M2, P4, M7, etc.) spans a characteristic number of half steps. The major scale above shows that

M2 spans two half steps

M3 spans four half steps

P4 spans five half steps

P5 spans seven half steps

M6 spans nine half steps

M7 spans eleven half steps

P8 spans twelve half steps

An understanding of these three points is most valuable, since it enables one to write or identify all of the intervals above without reference to the major scale.

4.1 The Quality of Intervals

The major scale contains all the perfect and major intervals within the span of an octave. The qualities, *but not the quantities*, of these intervals may be altered by the appropriate placing of accidentals in the following manner.

1. A *perfect* or *major* interval may be made larger by a half step. This interval is then said to be *augmented*.