

Lesson WWW: Minor Keys and Key Signatures

Introduction:

Lesson VVV discusses how pieces that draw primarily from the pitches of a major scale are said to be in that major key. Similarly, pieces that draw primarily from the pitches of a *minor* scale—a scale based on the W-H-W-W-H-W-W pattern of whole steps and half steps—are said to be in that *minor* key. Minor key signatures can likewise be derived from the accidentals of the corresponding minor scale. It is important, however, to keep in mind that minor key signatures reflect the *diatonic* (or, *natural*) form of the minor scale, not the harmonic or melodic composites.

In this lesson we will discuss how a minor key is constructed and established as well as how minor key signatures are written and used.

Minor keys:

Lesson UUU discusses the construction of major scales and the various names given to each scale degree. All of the degrees of a minor scale have names as well. For the most part, these names are the same as those of major keys. The few differences are due to the lower scale degrees $\hat{3}$, $\hat{6}$, and $\hat{7}$. The following example shows the three systems used to label and refer to minor scale degrees:

Example 1:

The image shows a musical staff in treble clef with a key signature of two flats (B-flat and E-flat). The notes are B-flat, C, D, E-flat, F, G, A, and B-flat. Below the staff, the scale degrees are labeled with numbers 1 through 8, solfège syllables, and descriptive names.

$\hat{1}$	$\hat{2}$	$\hat{3}$	$\hat{4}$	$\hat{5}$	$\hat{6}$	$\hat{7}$	$\hat{8}(\hat{1})$
do	re	me	fa	sol	le	te	do
tonic	supertonic	mediant	subdominant	dominant	submediant	subtonic	tonic

The scale degree numbers, of course, remain the same. The solfège syllables *mi*, *la*, and *ti* are changed to *me*, *re*, and *te* to reflect the lowering of those scale degrees. The only difference in the scale degree names is that scale degree $\hat{7}$, in its lowered form, is now referred to as the *subtonic*. (The names for the raised scale degrees $\hat{6}$ and $\hat{7}$ —which, in fact, are borrowed from the parallel major—use already familiar the major-key names: *la* and *ti*, or *submediant* and *leading tone*.)

The following melody, “Greensleeves,” is in a minor key:

Example 2:

The image shows two staves of musical notation for the melody 'Greensleeves'. The first staff starts with a treble clef, a 6/8 time signature, and a key signature of one flat (F). The melody begins on A4 and ends on A4. The second staff continues the melody, starting with a 5 above the staff, indicating a fifth measure continuation from the first staff.

As with major keys, a melody or piece is said to be in a minor key if it uses primarily the pitches of a minor scale and gives the tonic a position of primary importance. This melody is in A minor: it begins and ends on A and, for the most part, uses the pitches of the diatonic A-minor scale (A, B, C, D, E, F,

and G). Notice, however, that G[#] and F[#] appear in mm. 3, 4, and 7. As discussed in Lesson 3, there are two common variations of the minor scale which intensify the tonic by borrowing the leading tone from the major mode: the harmonic minor composite (in which scale degree $\hat{7}$ is raised) and the melodic minor composite (which raises $\hat{6}$ and $\hat{7}$). G[#] and F[#]—the submediant and leading tone respectively—are the result of these varied forms of the scale.

The tonic, A, is the most important pitch in this melody. It serves as a stable starting point and brings a sense of closure when it returns at the end. All of the other pitches are organized hierarchically around A and have varying levels of stability. The E in m. 4, for example, is somewhat stable and brings a sense of arrival, but is not as stable as the final A. Were the melody to be transposed to a different minor key, the new tonic would be heard in the same way even though the pitch level would be different:

Example 3 (“Greensleeves” in G minor):

Example 3 transposes the melody to G minor. It now has a new set of pitches (those of the G-minor scale) and G is heard as the new tonic.

Activity WWW.1:

Identify the key of each of the following melodies in minor:

Exercise WWW.1a

To which minor key has “Greensleeves” been transposed below?

[Answer: “E” or “E minor.” Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again. (Hint: Look to the beginning and end of the melody for important stable notes that might represent the tonic.)”]

Exercise WWW.1b

The following melody (F. Schubert, “Der Greise Kopf,” No. 14 from *Winterreise*, D. 911, mm. 4-8) is in which minor key?

[Answer: “C” or “C minor.” Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again. (Hint: Look to the beginning and end of the melody for important stable notes that might represent the tonic.)”]

Minor key signatures:

Like major keys, minor keys are represented with key signatures. These contain the same sharps and flats as the diatonic minor scale. The following example adds a key signature to the transposed “Greensleeves” from Example 3:

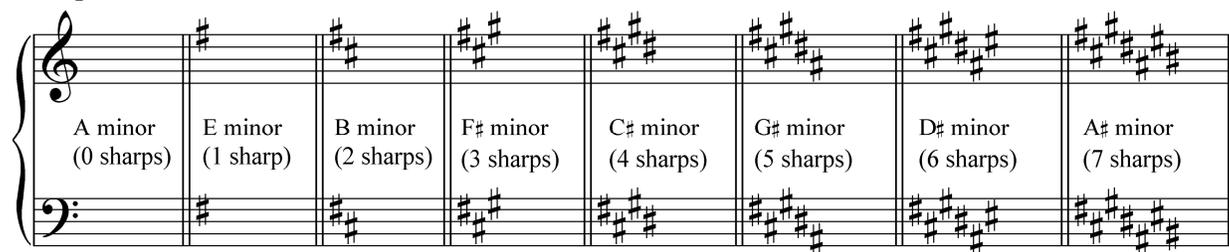
Example 4:



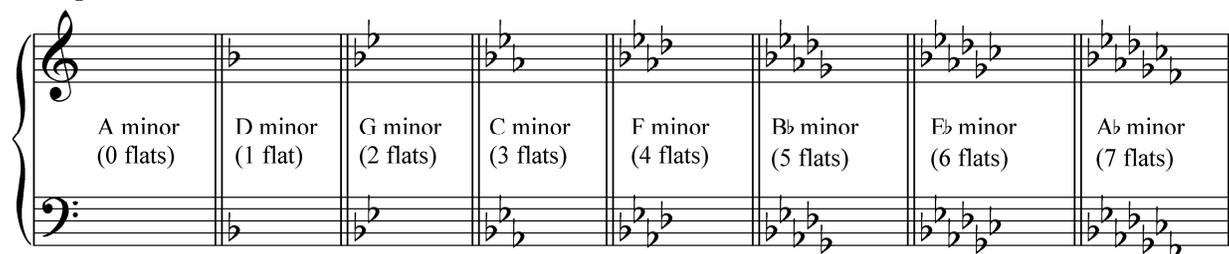
Like the diatonic G-minor scale, the G-minor key signature includes two flats: B^b and E^b. Scale degrees $\hat{6}$ and $\hat{7}$ may be raised by an accidental within the music—as they are in mm. 3, 4, and 7 of Example 4—but these alterations are not represented by the key signature.

Minor key signatures also come in two varieties: sharp and flat. The following examples show all of the minor key signatures up to seven sharps or flats:

Example 5:



Example 6:



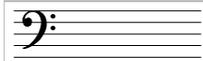
As you can see, minor key signatures look just like major key signatures. The accidentals are written in the same order and pattern on the staff.

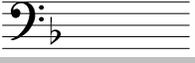
Activity WWW.2:

Write each of the following minor key signatures as requested on the staff provided.

Exercise WWW.2a

Write a D-minor key signature on the staff provided:

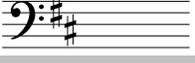


[Answer: . Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again.”]

Exercise WWW.2b

Write a B-minor key signature on the staff provided:



[Answer: . Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again.”]

Exercise WWW.2c

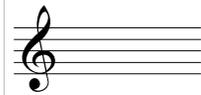
Write a B^b-minor key signature on the staff provided:



[Answer: . Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again.”]

Exercise WWW.2d

Write a C[#]-minor key signature on the staff provided:

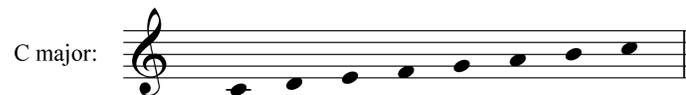


[Answer: . Response if correct: “Correct!” Response if incorrect: “Incorrect. Try again.”]

Parallel and relative keys:

Minor keys can be closely related to major keys in two different ways: *parallel* or *relative* key relations. Parallel keys, as discussed in Lesson 3, are keys that share the same tonic—C major and C minor, for example:

Example 7:



C minor is the *parallel minor* of C major, and vice versa. As you can see from Example 7, a diatonic minor scale can be derived from a major scale by lowering scale degrees $\hat{3}$, $\hat{6}$, and $\hat{7}$ by a semitone each (to E^b, A^b, and B^b, respectively). Parallel keys share the same tonic (and scale degrees $\hat{2}$, $\hat{4}$, and $\hat{5}$), but have different key signatures. C major, to use this example, has no sharps or flats while C minor requires three flats.

Activity WWW.3:

Answer the following questions regarding parallel keys and their key signatures.

Exercise WWW.3a

How many sharps or flats does the key signature for A major have?

[Answer: 3 sharps. Response if correct: "Correct! A major has three sharps in its key signature."]

Response if incorrect: "Incorrect. Try again."]

[Follow-up question:]

What is the parallel minor of A major?

[Answer: A minor. Response if correct: "Correct! A major and A minor are parallel keys."]

Response if incorrect: "Incorrect. Try again. (Remember, parallel keys have the same tonic.)"]

[Follow-up question:]

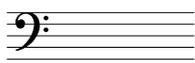
How many sharps or flats does the key signature for A minor have?

[Answer: "0 sharps" or "0 flats." Response if correct: "Correct! A minor does not have any sharps or flats in its key signature." Response if incorrect: "Incorrect. Try again."]

[Follow-up question:]

Write out the key signatures for A major and A minor on the staves provided:

A major:  A minor: 

[Answers:  and . Response for each correct answer: "Correct!" Response for each incorrect answer: "Incorrect. Try again."]

Exercise WWW.3b

How many sharps or flats does the key signature for E major have?

[Answer: 4 sharps. Response if correct: "Correct! E major has four sharps in its key signature."]

Response if incorrect: "Incorrect. Try again."]

[Follow-up question:]

What is the parallel minor of E major?

[Answer: E minor. Response if correct: "Correct! E major and E minor are parallel keys."]

Response if incorrect: "Incorrect. Try again. (Remember, parallel keys have the same tonic.)"]

[Follow-up question:]

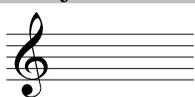
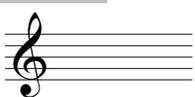
How many sharps or flats does the key signature for E minor have?

[Answer: "1 sharp." Response if correct: "Correct! E minor has one sharp in its key signature."]

Response if incorrect: "Incorrect. Try again."]

[Follow-up question:]

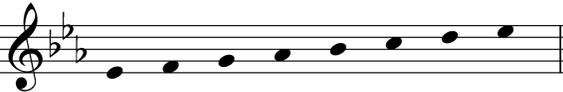
Write out the key signatures for E major and E minor on the staves provided:

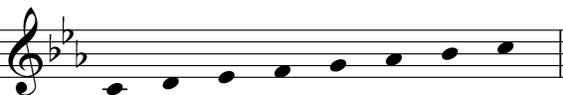
E major:  E minor: 

[Answers:  and . Response for each correct answer: "Correct!"
Response for each incorrect answer: "Incorrect. Try again."]

Relative keys, on the other hand, do share the same key signature. E^b major and C minor both have three flats in their key signature:

Example 8:

E^b major: 

C minor: 

C minor is the *relative minor* of E^b major and E^b major is the *relative major* of C minor. They share all of the same pitch classes, but emphasize different notes as the tonic. The tonic of any minor key is always a minor third below its relative major: in this case, C is a minor third below E^b. Another way to think of this is that the relative minor begins on scale degree $\hat{6}$ of a major key (or, the relative major begins on scale degree $\hat{3}$ of a minor key).

Activity WWW.4:

Answer the following questions regarding relative keys and their key signatures.

Exercise WWW.4a

What is the relative major of G minor?

[Answer: B^b major. Response if correct: "Correct! B^b major is the relative major of G minor."]

Response if incorrect: "Incorrect. Try again. (Remember, the tonic of the relative major is a minor third above the tonic of a minor key.)"]

[Follow-up question:]

How many sharps or flats does their shared key signature have?

[Answer: 2. Response if correct: "Correct! G minor and B^b major have two flats in their shared key signature." Response if incorrect: "Incorrect. Try again."]

[Follow-up question:]

Write out the key signature for G minor / B^b major on the staff provided:



[Answer: . Response if correct: "Correct!" Response if incorrect: "Incorrect. Try again."]

Exercise WWW.4b

What is the relative major of B minor?

[Answer: D major. Response if correct: "Correct! D major is the relative major of B minor."]

Response if incorrect: “Incorrect. Try again. (Remember, the tonic of the relative major is a minor third above the tonic of a minor key.)”]

[Follow-up question:]

How many sharps or flats does their shared key signature have?

[Answer: 2. Response if correct: “Correct! B minor and D major have two flats in their shared key signature.” Response if incorrect: “Incorrect. Try again.”]

[Follow-up question:]

Write out the key signature for B minor / D major on the staff provided:



[Answer:
again.”]

. Response if correct: “Correct!” Response if incorrect: “Incorrect. Try

Conclusion:

Minor scales are created by the following ascending pattern of intervals from the tonic: W-H-W-W-H-W-W. They can also be created by lowering scale degrees $\hat{3}$, $\hat{6}$ and $\hat{7}$ of a major scale by one half step each. As with major keys, minor keys are based on the pitches of the corresponding scale and are indicated by key signatures at the beginning of each new line of music. Minor key signatures are derived from the diatonic (natural) version of the minor scale. The alterations of the composite variations of the minor scale (the harmonic and melodic) are indicated with accidentals in the music itself, not in the key signature. Minor key signatures look just like major key signatures and following the same pattern and placement on the staff.

Minor keys can be closely-related to major keys in several different ways. Parallel keys—C major and C minor, for example—share the same tonic. Relative keys—C minor and E \flat major, for example—have different tonics but share the same key signature. Every key signature, then, can be used to represent two different (relative) keys.