

JOHN BRIMHALL'S

# THEORY NOTEBOOK

Level

3

## Complete

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## lesson 1

### LEGER LINES

LEGER LINES, the lines added above or below a staff are added in the same line-space relationship as the rest of the staff.

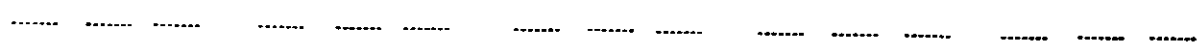
Diagram illustrating leger lines for the bass clef. The notes G, A, B, C, D, E, F, G are shown on lines above the staff. The notes D, E, F, G, A, B, C, D are shown on lines below the staff. Labels indicate the corresponding staff lines: TOP-LINE-BASS-STAFF, 4TH-LINE-BASS-STAFF, and 3RD-LINE-BASS-STAFF.

Diagram illustrating leger lines for the treble clef. The notes B, C, D, E, F, G, A, B are shown on lines above the staff. The notes F, G, A, B, C, D, E, F are shown on lines below the staff. Labels indicate the corresponding staff lines: 3RD-LINE-TREBLE-STAFF, 2ND-LINE-TREBLE-STAFF, and BOTTOM-LINE-TREBLE-STAFF.





Identify the following Leger Line notes.

Diagram showing five measures of music on a grand staff. Each measure contains a single note on a leger line. The notes are: G (top line), A (top line), B (top line), C (top line), D (top line), E (top line), F (top line), G (top line), A (top line), B (top line), C (top line), D (top line), E (top line), F (top line), G (top line).




# 32nd AND 64th NOTES AND RESTS

In addition to the basic note and rest values already learned, there are some less common values.


THIRTY-SECOND NOTE .....  =  ..... THIRTY-SECOND REST  
(Demisemi quaver)

SIXTY-FOURTH NOTE .....  =  ..... SIXTY-FOURTH REST  
(Hemidemi semiquaver)

ONE SIXTEENTH NOTE  
Equals  
TWO THIRTY-SECOND NOTES



ONE THIRTY-SECOND NOTE  
Equals  
TWO SIXTY-FOURTH NOTES






In Common Time (♩ = one count) how many counts do each of the following get?

1.  .....

2.  .....

3.  .....

4.  .....

5.  .....

6.  .....

7.  .....

8.  .....

9.  .....

10.  .....

Draw the following notes and rests.

1. A 2 count rest .....
2. A 64th rest .....
3. A 1 count note .....
4. A half count rest .....
5. A 32nd note .....

6. 4 notes equalling 1 count .....
7. A 32nd rest .....
8. A half count note .....
9. A 64th note .....
10. A 4 count rest .....



# lesson 4

## TRIPLETS



**TRIPLET** – A Triplet is a group of three equal notes played in the time of one note of the next larger value.

By the use of the Triplet, the beat may be subdivided by three instead of the normal subdivision by two. Not all groups of three eighth notes are Triplets. In order to be a Triplet there must be a slur and a 3 (  $\textcircled{3}$  ) over the notes.



Normal subdivision of the beat into 2 parts.



Triplet subdivision of the beat into 3 parts.



Three eighth notes, not a Triplet, equal a dotted quarter note (1½ beats).

Other note values, in addition to eighth notes may be used to form Triplets, although the eighth note triplet is the most common.

The only requirement of a Triplet is that it be “a group of three equal notes played in the time of one note of the next larger value.”

Historically, COMPOUND METER came about through the use of Triplets. The normal subdivision of the beat is into two equal parts. When a composer decided to subdivide the beat into three equal parts, he used the Triplet Sign. In a full piece of music it becomes very awkward to place a Triplet Sign over every beat, measure after measure. Instead, the Time Signatures for Compound Meter were devised.

2/4 Time with each beat subdivided by three became 6/8 Time. 6/8 Time has two beats in each measure, with each beat subdivided by three. When 3/4 Time was played with the beat subdivided by three, it became 9/8 Time. It has three beats in each measure, with each beat subdivided by three, for a total of 9 eighth notes. This same process of subdivision holds true for all other Compound Meter Time Signatures, including 12/8, 6/4 and others.

Following is an example of Compound Duple (3 x 2) Time, written in 2/4 Time with Triplets, and then in 6/8 Time. The sound of both examples is exactly the same. Only the notation is different.



# TIME SIGNATURES WITH UNEQUAL DIVISION

In Twentieth Century Music, jazz as well as concert, two Time Signatures with uneven division of the measure have become popular. They are 5/4 and 7/4.

<p><math>\frac{5}{4}</math> = 5 counts in each measure. Each quarter note (♩) gets one count.</p>	<p><math>\frac{7}{4}</math> = 7 counts in each measure. Each quarter note (♩) gets one count.</p>
<p><math>\frac{5}{4}</math> ♩ ♩ ♩ ♩ ♩   is the normal division of the measure, resulting in: <math>\frac{3}{4}</math> ♩ ♩ ♩   <math>\frac{2}{4}</math> ♩ ♩   <math>\frac{3}{4}</math> etc.</p>	<p><math>\frac{7}{4}</math> ♩ ♩ ♩ ♩ ♩ ♩ ♩   is the normal division of the measure, resulting in: <math>\frac{4}{4}</math> ♩ ♩ ♩ ♩   <math>\frac{3}{4}</math> ♩ ♩ ♩   <math>\frac{2}{4}</math> etc.</p>

As you have seen, any number can be the top number of a Time Signature. Since the bottom number of the Time Signature represents kinds of notes, it must be a 2, 4, 8, or rarely a 16.



Supply the Time Signatures and add the bar lines for the following.

1. ♩ ♩ ♩ ♩ . ♩ . ♩ . ♩ ♩ ♩ ♩ ♩ ♩ ♩ . ♩ .
2. ♩ ♩ ♩ ♩ . ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ .
3. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ .
4. ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ . ♩ . ♩ .
5. ♩ . ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ ♩ . ♩ . ♩ .

# lesson 6

## INTERVALS, PERFECT INTERVALS



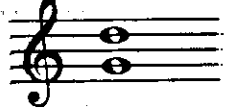
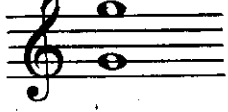
An INTERVAL is the distance between two notes.

The number size of an interval is figured by counting the total number of letter names, including the bottom and top notes. Always count up the scale.

The interval of D to G includes four letters of the alphabet – D, E, F and G. Therefore it is a 4th.

In addition to the number size of intervals, there are also types of intervals. The types are Perfect Intervals, Major Intervals, Minor Intervals, Augmented Intervals and Diminished Intervals.

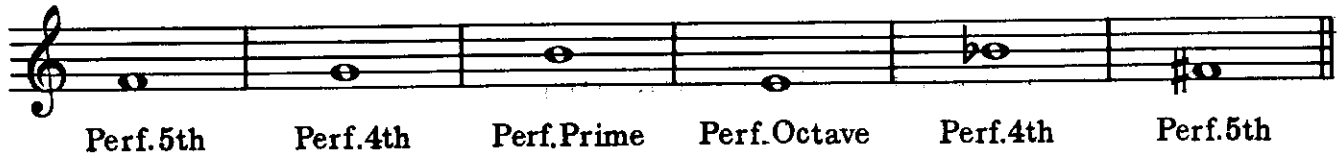
Intervals are PERFECT INTERVALS if each note of the interval may be found in the Major Scale of the other note. Intervals which may be Perfect are:

<p><b>PRIMES</b> (same note)</p> 	<p><b>4ths</b> (G is found in C Major &amp; C is found in G Major)</p> 	<p><b>5ths</b> (G is found in D Major &amp; D is found in G Major)</p> 	<p><b>OCTAVES</b> (Primes an octave apart)</p> 
--	--	---	--

Seconds, Thirds, Sixths and Sevenths may not be Perfect Intervals.




Build the following Perfect Intervals above the given notes.



Perf. 5th      Perf. 4th      Perf. Prime      Perf. Octave      Perf. 4th      Perf. 5th

Supply the lower notes for the following Perfect Intervals.



Perf. Octave      Perf. 5th      Perf. 4th      Perf. 4th      Perf. Octave      Perf. 5th

Identify these Perfect Intervals.



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# MAJOR AND MINOR INTERVALS

An interval is a MAJOR INTERVAL if the upper note may be found in the Major Key of the lower note. Seconds, Thirds, Sixths and Sevenths may be Major Intervals.

Build the following Major Intervals above the given notes.

Maj 3rd      Maj 6th      Maj 2nd      Maj 7th      Maj 3rd      Maj 6th

MINOR INTERVALS are one half step smaller than the Major Intervals with the same number size. C to E is a Major 3rd, but C to E flat or C sharp to E is a Minor 3rd. You may make the interval a half step smaller, thus changing it from Major to Minor by lowering the top note or by raising the bottom note.



Change these intervals from Major to Minor by Lowering the top note.

Maj 3rd min 3rd    Maj 6th min 6th    Maj 2nd min 2nd    Maj 7th min 7th    Maj 3rd min 3rd

Change these intervals from Major to Minor by raising the bottom note.

Maj 6th min 6th    Maj 2nd min 2nd    Maj 3rd min 3rd    Maj 6th min 6th    Maj 7th min 7th

Change these intervals from Minor to Major.

Tell whether the following intervals are Major, Minor or Perfect.

.....



# lesson 8

## AUGMENTED AND DIMINISHED INTERVALS

The following chart shows the progression of intervals from Diminished to Augmented. Notice these facts:

1. A Major Interval made 1/2 step smaller becomes a Minor Interval.
2. A Minor Interval made 1/2 step larger becomes a Major Interval.
3. A Minor or Perfect Interval made 1/2 step smaller becomes a Diminished Interval.
4. A Major or Perfect Interval made 1/2 step larger becomes an Augmented Interval.

	← Smaller		Larger →	
2nds, 3rds, 6ths, 7ths	Diminished	Minor	Major	Augmented
Primes, 4ths, 5ths, Octaves	Diminished	Perfect		Augmented



Change these intervals to Diminished Intervals by adding accidentals.

Change these intervals to Augmented Intervals by adding accidentals.

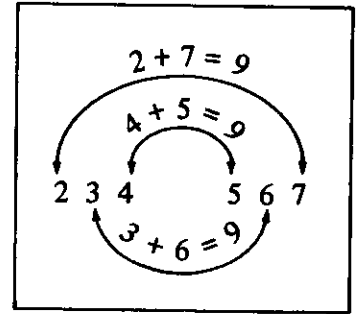
Build the following intervals above the given notes.

Dim 5th Perf. 5th Aug 5th      Maj 3rd min 3rd      min 6th Maj 6th Aug 6th

# INVERSION OF INTERVALS

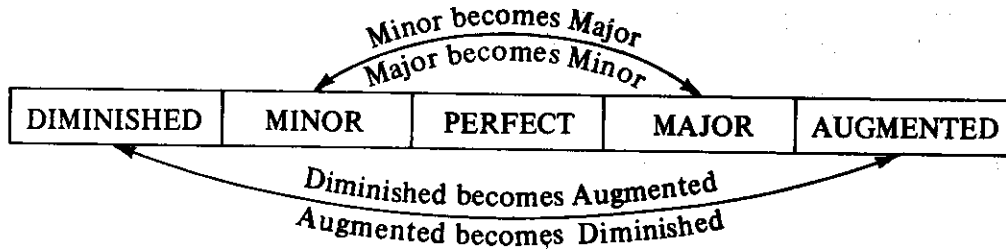
Intervals are inverted in the same manner that chords are inverted. The bottom note is moved to the top by raising it an octave. However, when intervals are inverted they become opposite, as if shown in a mirror. When intervals are inverted, both the number size and the type change.

The NUMBER SIZE of an interval and its inversion always add up to 9. Therefore, a 2nd inverted becomes a 7th ( $2 + 7 = 9$ ), a 3rd inverted becomes a 6th ( $3 + 6 = 9$ ), a 4th inverted becomes a 5th ( $4 + 5 = 9$ ), etc.



2nd becomes 7th    3rd becomes 6th    4th becomes 5th

The TYPE OF INTERVAL becomes opposite when inverted. Major becomes Minor, Minor becomes Major, Augmented becomes Diminished, Diminished becomes Augmented, but Perfect remains Perfect.



Putting these two rules together, we find that a Minor 2nd inverted becomes a Major 7th. Minor becomes Major and 2nd becomes 7th. ( $2 + 7 = 9$ ) A Diminished 3rd inverted becomes an Augmented 6th. Diminished becomes Augmented and 3rd becomes 6th. ( $3 + 6 = 9$ ) A Perfect 5th inverted becomes a Perfect 4th. Perfect stays Perfect and 5th becomes 4th. ( $5 + 4 = 9$ )



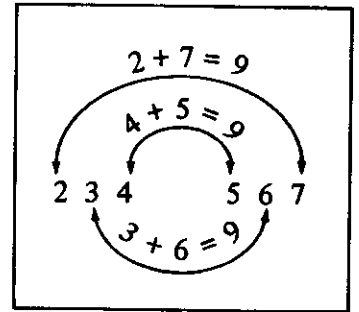
Supply these answers concerning inversions of intervals.

1. Augmented is the opposite of .....
2. Major is the opposite of .....
3. Perfect inverted is.....
4. An Augmented 4th inverted becomes a .....
5. A Minor 3rd inverted becomes a.....
6. A Diminished 7th inverted becomes an .....
7. A Major 6th inverted becomes a .....

# INVERSION OF INTERVALS

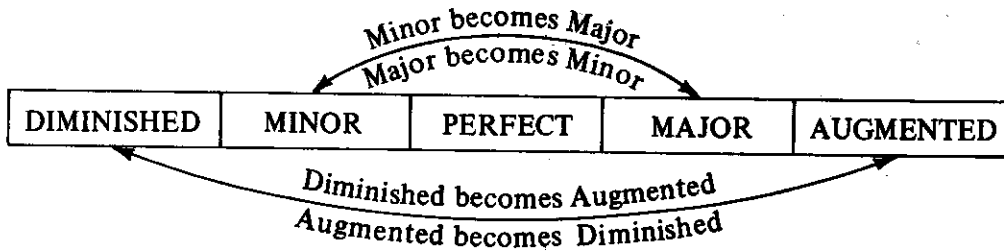
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Supply these answers concerning inversions of intervals.

1. Augmented is the opposite of .....
2. Major is the opposite of .....
3. Perfect inverted is.....
4. An Augmented 4th inverted becomes a.....
5. A Minor 3rd inverted becomes a.....
6. A Diminished 7th inverted becomes an .....
7. A Major 6th inverted becomes a .....

# lesson 10

## INTERVAL CHART AND QUIZ

### CHART OF COMMON INTERVALS

			* Enharmonic			
	Perf. Prime	Min. 2nd	Maj. 2nd	Aug. 2nd	Min. 3rd	
Half steps-	0	1	2	3	3	
		Enharmonic			Enharmonic	
	Maj. 3rd	Perf. 4th	Aug. 4th	Dim. 5th	Perf. 5th	Aug. 5th
Half steps-	4	5	6	6	7	8
	Enharmonic		Enharmonic			
	Min. 6th	Maj. 6th	Aug. 6th	Min. 7th	Maj. 7th	Perf. Octave
Half steps-	8	9	10	10	11	12

\* ENHARMONIC: Same sound but different notation.



Identify these intervals as to number and type.

.....
.....

Build the following intervals:

Dim 7th    Maj 2nd    Aug 4th    Maj 3rd    Perf.4th    Maj 6th
Dim 5th    Maj 7th    Min 3rd    Min 2nd    Min 6th    Min 7th

# TRIAD REVIEW

A Triad is a three note chord. When it is in Root Position (with its name note on the bottom) it consists of alternate letter names – A C E, B D F, etc. Also, when in Root Position, the notes of the triad are either on three consecutive lines or three consecutive spaces. Triads in Root Position are built of only two types of intervals – the Major 3rd (with 4 half steps) and the Minor 3rd (with 3 half steps). In Root Position, the names of the three notes of any triad are Root, 3rd and 5th.

A Major Triad is built of a Major 3rd plus a minor 3rd.

Major 3rd      plus      minor 3rd      equals      Major Triad

A minor Triad is built of a minor 3rd plus a Major 3rd

minor 3rd      plus      Major 3rd      equals      minor Triad

An Augmented Triad is built of a Major 3rd plus a Major 3rd.

Major 3rd      plus      Major 3rd      equals      Augmented Triad

A diminished Triad is built of a minor 3rd plus a minor 3rd.

minor 3rd      plus      minor 3rd      equals      Diminished Triad

.....

Fill in the blanks, indicating type of 3rd and type of Triad.

1. \_\_\_\_\_ 3rd + \_\_\_\_\_ 3rd = \_\_\_\_\_ Triad

2. \_\_\_\_\_ 3rd + \_\_\_\_\_ 3rd = \_\_\_\_\_ Triad

3. \_\_\_\_\_ 3rd + \_\_\_\_\_ 3rd = \_\_\_\_\_ Triad

4. \_\_\_\_\_ 3rd + \_\_\_\_\_ 3rd = \_\_\_\_\_ Triad

# CHANGING TRIADS

To change a Major Triad into a Minor Triad, lower the middle note (the 3rd)  $\frac{1}{2}$  step. This changes the formula of the Major Triad – Major 3rd plus minor 3rd, into the formula of the Minor Triad – minor 3rd plus Major 3rd.

F Maj      F min

Change the following chords from Major to minor.

D Maj   D min      G Maj   G min      B Maj   B min      F# Maj   F# min

Eb Maj   Eb min      F Maj   F min      A Maj   A min      E Maj   E min

To change a Minor Triad into a Major Triad, raise the middle note (the 3rd)  $\frac{1}{2}$  step. This changes the formula of the Minor Triad – minor 3rd plus Major 3rd, into the formula of the Major Triad – Major 3rd plus minor 3rd.

D min      D Maj

Change the following chords from minor to Major.

A min   A Maj      Bb min   Bb Maj      E min   E Maj      D min   D Maj

G min   G Maj      C# min   C# Maj      B min   B Maj      C min   C Maj

To change a Major Triad into an Augmented Triad, raise the top note (the 5th)  $\frac{1}{2}$  step. This changes the formula of the Major Triad – Major 3rd plus minor 3rd, into the formula of the Augmented Triad – Major 3rd plus Major 3rd.

G Maj      G Aug

Change the following chords from Major to Augmented.

C Maj   C Aug      Eb Maj   Eb Aug      Ab Maj   Ab Aug      F Maj   F Aug

A Maj   A Aug      Bb Maj   Bb Aug      D Maj   D Aug      G Maj   G Aug

# lesson 13

## CHANGING MORE TRIADS

To change an Augmented Triad into a Major Triad, lower the top note (the 5th)  $\frac{1}{2}$  step. This changes the formula of the Augmented Triad – Major 3rd plus Major 3rd, into the formula of the Major Triad – Major 3rd plus minor 3rd.

F Aug      F Maj

Change the following chords from Augmented to Major.

G Aug   G Maj      E $\flat$  Aug   E $\flat$  Maj      A $\flat$  Aug   A $\flat$  Maj      B $\flat$  Aug   B $\flat$  Maj

D Aug   D Maj      C Aug   C Maj      F Aug   F Maj      D $\flat$  Aug   D $\flat$  Maj

To change a Minor Triad into a Diminished Triad, lower the top note (the 5th)  $\frac{1}{2}$  step. This changes the formula of the Minor Triad – minor 3rd plus Major 3rd, into the formula of the Diminished Triad – minor 3rd plus minor 3rd.

E min      E dim

Change the following chords from minor to diminished.

B min   B dim      D min   D dim      E min   E dim      F min   F dim

C min   C dim      F $\sharp$  min   F $\sharp$  dim      G min   G dim      C $\sharp$  min   C $\sharp$  dim

To change a Diminished Triad into a Minor Triad, raise the top note (the 5th)  $\frac{1}{2}$  step. This changes the formula of the Diminished Triad – minor 3rd plus minor 3rd, into the formula of the Minor Triad – minor 3rd plus Major 3rd.

B dim      B min

Change the following chords from diminished to minor.

A dim   A min      B dim   B min      E dim   E min      D dim   D min

B dim   B min      F $\sharp$  dim   F $\sharp$  min      G dim   G min      C dim   C min

# INVERSION AND TRIAD QUIZ

Here is the process of inverting the C Major Triad. Notice that each time the bottom note is moved to the top, it creates the next inversion. Remember that all chords may be inverted and often are.

## C MAJOR TRIAD



Root Position (Name Note on bottom)	1st Inversion (3rd on bottom)	2nd Inversion (5th on bottom)	Root Position (Name Note back on bottom)
---	-------------------------------------	-------------------------------------	--

Place the following chords in Root Position and supply their proper names.

Musical notation for the first row of chord identification. The first chord is labeled "C min".

Musical notation for the second row of chord identification.

Invert these triads.

Musical notation for the first row of inversion exercises. Labels: F Maj, G min, A Maj. Below the staff: Root Pos. 1st Inv. 2nd Inv.

Musical notation for the second row of inversion exercises. Labels: D min, E Maj, C Aug.

Identify the following triads as to name and inversion.

Musical notation for the first row of identification. Labels: G min, 1st Inversion.

Musical notation for the second row of identification.



# DOMINANT 7th AND MAJOR 7th CHORDS

A SEVENTH CHORD is a four note chord. It gets its name from the interval between the top and bottom notes.



The most common seventh chord is the DOMINANT SEVENTH chord. A Dominant Seventh chord is built of a Major 3rd plus a minor 3rd plus a minor 3rd. (You have already learned that a Major 3rd plus a minor 3rd is a Major Triad, so a Dominant Seventh is a Major Triad plus a minor 3rd.)

Major 3rd      plus      minor 3rd      plus      minor 3rd      equals      Dominant 7th

Another seventh chord built on the Major Triad is the MAJOR SEVENTH chord. It is built of a Major 3rd plus a minor 3rd plus a Major 3rd.

Major 3rd      plus      minor 3rd      plus      Major 3rd      equals      Major 7th



Identify these seventh chords:

.....

Build the suggested seventh chords:

C Maj 7th      A (Dom) 7th      D (Dom) 7th      F Maj 7th      G Maj 7th      C (Dom) 7th

# MINOR 7th AND DIMINISHED 7th CHORDS

Another common seventh chord is the MINOR SEVENTH chord. A Minor Seventh chord is built of a minor 3rd plus a Major 3rd plus a minor 3rd. (You have already learned that a minor 3rd plus a Major 3rd is a Minor Triad, so a Minor Seventh is a Minor Triad plus a minor 3rd.)

minor 3rd    plus    Major 3rd    plus    minor 3rd    equals    minor 7th

The DIMINISHED SEVENTH Chord is built on the Diminished Triad. It is built of a minor 3rd plus a minor 3rd plus a minor 3rd.

minor 3rd    plus    minor 3rd    plus    minor 3rd    equals    Diminished 7th

The four most important types of Seventh Chords:

Major 7th      Dominant 7th      minor 7th      Diminished 7th



Identify these Seventh Chords:

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Build the suggested Seventh Chords:

D min 7th      A min 7th      C# dim 7th      E min 7th      E dim 7th      G min 7th

# TABLE OF ROOT POSITION CHORDS

Spelling of some chords has been altered to make reading easier

## MAJOR TRIAD (Maj 3rd + min 3rd)

C D<sup>b</sup> D E<sup>b</sup> E F G<sup>b</sup> G A<sup>b</sup> A B<sup>b</sup> B

## MINOR TRIAD (min 3rd + Maj 3rd)

C<sup>m</sup> C<sup>#m</sup> D<sup>m</sup> E<sup>b</sup>m E<sup>m</sup> F<sup>m</sup> F<sup>#m</sup> G<sup>m</sup> A<sup>b</sup>m A<sup>m</sup> B<sup>b</sup>m B<sup>m</sup>

## AUGMENTED TRIAD (Maj 3rd + Maj 3rd)

C<sup>aug</sup> D<sup>aug</sup> D<sup>aug</sup> E<sup>b</sup>aug E<sup>aug</sup> F<sup>aug</sup> G<sup>aug</sup> G<sup>aug</sup> A<sup>b</sup>aug A<sup>aug</sup> B<sup>b</sup>aug B<sup>aug</sup>

## DIMINISHED TRIAD (min 3rd + min 3rd)

C<sup>dim</sup> C<sup>#dim</sup> D<sup>dim</sup> E<sup>b</sup>dim E<sup>dim</sup> F<sup>dim</sup> F<sup>#dim</sup> G<sup>dim</sup> G<sup>#dim</sup> A<sup>dim</sup> B<sup>b</sup>dim B<sup>dim</sup>

## DOMINANT SEVENTH (Maj 3rd + min 3rd + min 3rd)

C<sup>7</sup> D<sup>b</sup>7 D<sup>7</sup> E<sup>b</sup>7 E<sup>7</sup> F<sup>7</sup> F<sup>#7</sup> G<sup>7</sup> A<sup>b</sup>7 A<sup>7</sup> B<sup>b</sup>7 B<sup>7</sup>

## MAJOR SEVENTH (Maj 3rd + min 3rd + Maj 3rd)

C<sup>Maj7</sup> D<sup>b</sup>Maj7 D<sup>Maj7</sup> E<sup>b</sup>Maj7 E<sup>Maj7</sup> F<sup>Maj7</sup> F<sup>#Maj7</sup> G<sup>Maj7</sup> A<sup>b</sup>Maj7 A<sup>Maj7</sup> B<sup>b</sup>Maj7 B<sup>Maj7</sup>

## MINOR SEVENTH (min 3rd + Maj 3rd + min 3rd)

C<sup>m7</sup> C<sup>#m7</sup> D<sup>m7</sup> E<sup>b</sup>m7 E<sup>m7</sup> F<sup>m7</sup> F<sup>#m7</sup> G<sup>m7</sup> G<sup>#m7</sup> A<sup>m7</sup> B<sup>b</sup>m7 B<sup>m7</sup>

## DIMINISHED SEVENTH (min 3rd + min 3rd + min 3rd)

C<sup>dim7</sup> C<sup>#dim7</sup> D<sup>dim7</sup> E<sup>b</sup>dim7 E<sup>dim7</sup> F<sup>dim7</sup> F<sup>#dim7</sup> G<sup>dim7</sup> G<sup>#dim7</sup> A<sup>dim7</sup> B<sup>b</sup>dim7 B<sup>dim7</sup>

# GENERAL CHORD QUIZ

Fill in the blanks:

1. How many notes are there in a Triad? .....
2. The names of the notes in a Triad are the ....., ..... and .....
3. The four types of Triads are ....., ....., ..... and .....
4. The formula for the Diminished Triad is ..... plus .....
5. To convert a Major Triad to Augmented ..... the .....
6. The position of a chord with the name note on the bottom is the ..... position.
7. A Major Triad plus a minor 3rd equals a .....
8. The formula for the Minor Seventh is ..... plus ..... plus .....

Identify the following chords:

.....

.....

.....

.....

.....

.....

Build the suggested chords:

G min      Eb Aug      F Maj  
1st Inversion      C Maj 7th      E min  
2nd Inversion

A Maj      C# dim 7th      B min      E min 7th      F# dim      D (Dom) 7th  
2nd Inversion      1st Inversion

# lesson 19

## REVIEW OF MAJOR SCALES AND KEYS

The Major Scale formula is step, step, half step, step, step, step, half step. Using this formula, build Major Scales starting on the following notes. Use added sharps or flats.



If necessary, review Major Key signatures, using previous books or Lesson 20 of this book. Then, answer the following questions. Remember, there are certain sharps and flats that belong to particular keys. Each of the following can only be an example of one Major Key. Identify that key.



Key of.....



Key of.....



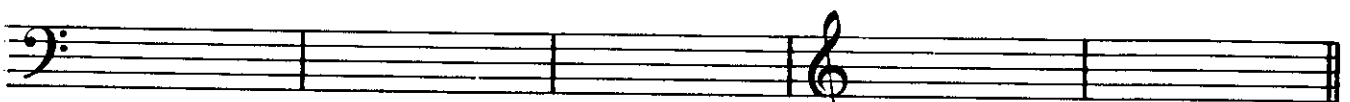
Key of.....

Identify these Key Signatures:



.....

Write these Key Signatures



E Major

D<sup>b</sup> Major

G Major

C<sup>b</sup> Major

C<sup>#</sup> Major



# RELATIVE MAJOR AND MINOR KEY SIGNATURES

The concept of Relative Major – Minor Keys is useful to help the student find the Minor Key Signatures without learning a whole new set of signatures all at once. He can do it by relating to the already learned Major Key Signatures.

Example 1. What is this Minor Key?



We know that this is the Key Signature for the Key of G Major. To find the Relative Minor, count down a minor 3rd (3 half steps). A minor 3rd down from G is E. Therefore, this is the Key Signature of the Key of E Minor.

Example 2. What is this Minor Key?



This is the Key Signature for the Key of E Flat Major. C is a minor 3rd below E flat. Therefore, this is the Key Signature of the Key of C Minor.

The proper sharps or flats for a given Minor Key Signature can also be found by relating to the already learned Major Key Signatures.

Example 1. What is the Key Signature for the Key of D Minor?

The Relative Major Key is found a minor 3rd (3 half steps) higher than its Relative Minor Key. F is a minor 3rd higher than D. We know that F Major has a Key Signature of one flat – B flat. Therefore, the Key Signature of the Key of D Minor is one flat – B flat.

Example 2. What is the Key Signature for the Key of B Minor?

D is a minor 3rd up from B. D Major has two sharps – F sharp and C sharp. Therefore, the Key Signature for the Key of B Minor is two sharps – F sharp and C sharp.

Identify the following minor key signatures:



Supply these minor key signatures:



G minor    F# minor    A minor    D minor    C minor    E minor

# MINOR SCALES

There are three types of Minor Scales.

1. **NATURAL MINOR** – This is an old scale, derived from the Gregorian Modes. This scale follows the Minor Key Signature, without any alteration.

Steps 1 2 3 4 5 6 7 8 7 6

2. **HARMONIC MINOR** – This is the most commonly used Minor Scale, designed to be used where there is harmony. It raises the 7th scale step.

Steps 1 2 3 4 5 6 7 8 7 6

3. **MELODIC MINOR** – This form of the Minor Scale was used primarily in the vocal music of the 17th and 18th centuries. Singers found the interval between the 6th and 7th scale steps of the Harmonic Minor Scale difficult to sing, so they raised the 6th scale step, in addition to the 7th, but only going up the scale. Going down the scale they used the Natural Minor form.

Steps 1 2 3 4 5 6 7 8 7 6

To help you determine which form of Minor Scale is being used, look for the following:

1. Raised 7th scale step – HARMONIC MINOR.
2. Raised 6th and 7th scale steps, going up only – MELODIC MINOR.
3. No alterations of 6th or 7th scale steps – NATURAL MINOR.

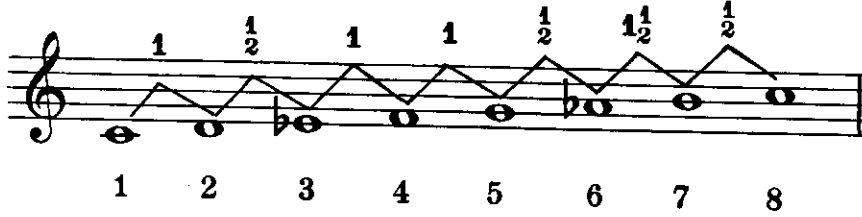


Identify the form of Minor Scale used in each of the following:



# HARMONIC MINOR SCALE

The scale formula for the Harmonic Minor Scale is step, half step, step, step, half step, step and a half, half step. (1 - ½ - 1 - 1 - ½ - 1½ - ½) Notice the large interval of 1½ steps (3 half steps), between the 6th and 7th scale steps. This is the unique characteristic of the Harmonic form of the Minor Scale.



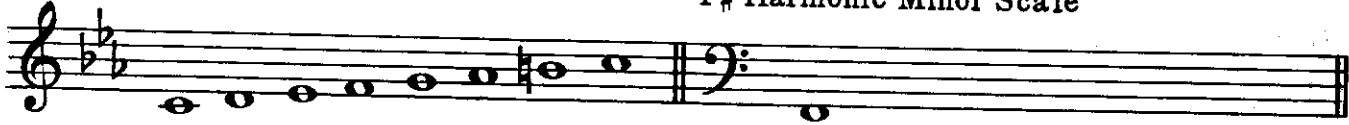
Practice building Harmonic Minor Scales by adding sharps and flats to conform to the scale formula. Don't worry about the key signature.



Supply the proper Minor Key Signature and write out the Harmonic Minor Scales requested.

C Harmonic Minor Scale

F# Harmonic Minor Scale



B Harmonic Minor Scale

A Harmonic Minor Scale



Harmonic Minor Scales can also be formed by altering the Major Scale with the same letter name. To Convert a Major Scale to a Harmonic Minor Scale, lower the 3rd and 6th scale steps of the Major Scale. In the following scales, convert Major to Harmonic Minor by lowering the 3rd and 6th. Compare your results with the scales you have just written.



# NATURAL MINOR SCALE

The Natural Minor Scale is sometimes called the Modal Minor, in reference to its origin as one of the Gregorian Modes. The Natural Minor Scale uses the Key Signature without alteration. It might help you to think of the Natural Minor Scale as a scale starting on the 6th step of its Relative Major Scale, without any alteration.

**C MAJOR SCALE**

**A NATURAL MINOR SCALE**

Build the following Natural Minor Scales through the use of the Relative Major Key Signatures. Remember, the Natural Minor Scale starts on the 6th step of its Relative Major Scale.

## D NATURAL MINOR SCALE

## G NATURAL MINOR SCALE

Natural Minor Scales can also be formed by altering the Major Scale with the same letter name. To convert a Major Scale to a Natural Minor Scale, lower the 3rd, 6th and 7th scale steps of the Major Scale. In the following scales, lower the 3rd, 6th and 7th scale steps to convert the Major Scale to a Natural Minor Scale.



Now write out the same scales as in the example above, but write them out with the proper Key Signatures instead of using accidentals. (Here is another helpful hint: A Major Key has 3 more sharps or 3 less flats than the Minor Key with the same letter name. A Major has 3 sharps. A Minor has no sharps. B Flat Major has 2 flats, B Flat Minor has 5 flats.)

# MELODIC MINOR SCALE

The Melodic Minor Scale was developed to make the singing of minor melodies easier. To avoid the difficult augmented 2nd between the 6th and 7th steps of the scale, the 6th and 7th are both raised going up the scale. The Natural Minor form is used going down the scale.

## A MELODIC MINOR SCALE

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

Write the following Melodic Minor Scale, up and back. The proper Key Signatures are supplied for you.

## C MELODIC MINOR SCALE

## F# MELODIC MINOR SCALE

Write the following Melodic Minor Scales up and back. Supply the proper Key Signatures.

## E MELODIC MINOR SCALE

## G MELODIC MINOR SCALE

Write the top portion of these Melodic Minor Scales. (Supply steps 5, 6, 7, 8, 7, 6, 5.)

## D MELODIC MINOR SCALE

## F MELODIC MINOR SCALE

5 6 7 8 7 6 5      5 6 7 8 7 6 5

## A MELODIC MINOR SCALE

## B MELODIC MINOR SCALE

5 6 7 8 7 6 5      5 6 7 8 7 6 5

# GENERAL SCALE QUIZ

Identify the following scales as to letter name and type of scale. If the scale is a Minor Scale, tell which form of minor is used.



.....



.....

Write the following scales, going up only. Do not add the Key Signatures, but use accidentals instead.

C MELODIC MINOR SCALE

D HARMONIC MINOR SCALE



A FLAT MAJOR SCALE

A MELODIC MINOR SCALE



Write the following scales, going up only. Supply the Key Signature.

G HARMONIC MINOR SCALE

B NATURAL MINOR SCALE



Supply the 6th and 7th scale steps going up, for the following scales. Use accidentals.

A Harmonic Minor

C# Melodic Minor

B Major

G Melodic Minor

E Harmonic Minor




Which scale is each of the following from?



.....

# D.C., D.S., CODA AND FINE

There are several signs that are used to direct the player to skip backward or forward through a piece of music. These signs are used to avoid writing out long repeated passages. Some of these signs already discussed are:


**THE REPEAT SIGN**  This directs the player to play all music between these two signs twice.

**1st and 2nd ENDINGS** These direct a player to repeat a section, but to take a different ending the second time.




Some additional signs frequently used are:

**D.C. (Da Capo)** – Repeat from the beginning.



**D.S. (Dal Segno)** – Repeat from the sign. (  )




**FINE** – The end.

**D.C. al FINE (Da Capo al Fine)** – Repeat from the beginning to the end. (Fine sign)

**D.S. al FINE (Dal Segno al Fine)** – Repeat from the sign (  ) to the end. (Fine sign)

**CODA** – A section at the end of a piece.

**D.C. al  CODA** – Repeat from the beginning to the Coda Sign (  ) and then skip to the Coda.

**D.S. al  CODA** – Repeat from the Sign (  ) to the Coda Sign (  ) and then skip to the Coda.


Fill in the blanks:

1. .... means the end.
2. A Coda appears at the ..... of a piece.
3. .... is a Coda sign.
4. D.C. means to repeat from the .....


Write out this example with 1st and 2nd endings.

# SIGNS AND SYMBOLS


There are many signs and symbols used in musical notation. In addition to the notes and rests, there are many signs which tell you how to play the notes.


 **FERMATA (Hold)** – Hold the note longer than the normal value.


Example: A whole note with a fermata, at the end of a piece, might be held for 6 beats instead of the normal 4 beats.

*See*  **OCTAVE SIGN** – This sign directs a player to play the notes below the dotted line one octave higher. It is usually used to avoid writing hard to read leger lines.

Example: If an Octave Sign were above an F in the 1st space of the treble clef, you would play the F on the top line of the treble clef instead.

 **STACCATO** – The little dot above or below a note is the sign of staccato. The dot directs the performer to play the note very short, detached from all other notes.








 **ACCENT** – Give added emphasis to the note by playing it louder.

 **SLUR** – This curved line (slur) is the sign of Legato. The slur directs the performer to connect the notes under it as smoothly as possible. It is the opposite of staccato.



Match the sign or symbol with its correct identification.

**ANSWER**

- |  |       |  |
|--|-------|--|
| 1.  | ..... | a. Play short, detached                |
| 2. <i>Fine</i>   | ..... | b. Cancels a sharp or flat             |
| 3.  | ..... | c. Raises the pitch of a note 1/2 step |
| 4.  | ..... | d. Hold longer than normal value       |
| 5.  | ..... | e. Adds half to the value of a note    |
| 6.  | ..... | f. Time signature                      |
| 7.  | ..... | g. The end                             |
| 8.  | ..... | h. Give added emphasis                 |

# REVIEW QUIZ

Match the item on the left with the best descriptive phrase on the right.

ANSWER

- |                         |       |  |
|-------------------------|-------|--|
| 1. Augmented            | ..... | a. Repeat from the beginning.                    |
| 2. Harmonic Minor Scale | ..... | b. The Root is on the bottom.                    |
| 3. Relatives            | ..... | c. Minor 7th chord.                              |
| 4. 2nd Inversion        | ..... | d. Interval with 3 half steps.                   |
| 5. 4/4                  | ..... | e. Major Triad.                                  |
| 6. Major-Major          | ..... | f. Major and Minor Keys with same Signature.     |
| 7. Major-minor-minor    | ..... | g. Compound meter.                               |
| 8. Minor 3rd            | ..... | h. Made smaller.                                 |
| 9. Natural Minor Scale  | ..... | i. Interval with 4 half steps.                   |
| 10. D.S.                | ..... | j. The 5th is on the bottom.                     |
| 11. 9/8                 | ..... | k. Augmented Triad.                              |
| 12. Major-minor-Major   | ..... | l. Raises 6th and 7th steps going up only.       |
| 13. Root Position       | ..... | m. The Sign.                                     |
| 14. D.C.                | ..... | n. Dominant 7th chord.                           |
| 15. Diminished          | ..... | o. Simple meter.                                 |
| 16. minor-minor         | ..... | p. Has 1½ steps between 6th and 7th scale steps. |
| 17. Melodic Minor Scale | ..... | q. Major 7th chord.                              |
| 18. minor-Major-minor   | ..... | r. Repeat from the sign.                         |
| 19. Major 3rd           | ..... | s. Follows Key Signature without alteration.     |
| 20. Fine                | ..... | t. Diminished Triad.                             |
| 21. ☺                   | ..... | u. Minor Triad.                                  |
| 22. minor-Major         | ..... | v. Diminished 7th Chord.                         |
| 23. minor-minor-minor   | ..... | w. The 3rd is on the bottom.                     |
| 24. 1st Inversion       | ..... | x. Made larger.                                  |
| 25. Major-minor         | ..... | y. The end.                                      |
| 26. ✱                   | ..... | z. Hold longer than normal value.                |