Music Theory

CADET MUSIC PROGRAMME

CADETS CANADA

LEVELS

BASIC – V

National Defence / Défense nationale

A-CR-CCP-166/PT-004

CADET MUSIC THEORY PROGRAM

(ENGLISH)

Cette publication est disponible en français sous le numéro A-CR-CCP-166/PT-005.

Issued on Authority of the Chief of the Defence Staff

OPI: D CDTS 3

2004-06-01

Canada

LIST OF EFFECTIVE PAGES

Insert latest changed pages and dispose of superseded pages in accordance with applicable orders.

NOTE

The portion of the text affected by the latest change is indicated by a black vertical line in the margin of the page. Changes to illustrations are indicated by miniature pointing hands or black vertical lines.

Dates of issue for original and changed pages are:

Original	0	2004-06-01	Ch	3	
Ch	1		Ch	4	
Ch	2		Ch	5	

Zero in Change No. column indicates an original page. Total number of pages in this publication is 190 consisting of the following:

Page No.	Change No.	Page No.	Change No.
Cover	0	i to iv	0
Title	0	1 to 183	0
A	0		

Contact Officer: D CDTS 3-4-2

© 2004 DND/MDN Canada

FOREWORD

1. This book has been designed as a study manual and exercise book for cadet musicians wishing to take a music qualification.

2. Training centres and units can use this document to distinguish the different standards of music theory for levels Basic, I, II, III, IV, and V.

3. This manual only contains the subject matter required by Technical Standards for Cadet Musicians. The use of certain other publications on music theory would be complementary and could help with the learning process. For worthwhile suggestions consult reference manuals.

4. A cadet who wishes to reach a particular level is strongly encouraged to read the relevant chapter and practise the exercises it contains. However, reading alone cannot entirely replace actual practice or a period of music instruction. Consequently, you are advised to seek the assistance of someone experienced in this field.

5. Even though this publication has been specially designed for cadets, the instructor should use it as a reference guide to prepare music training and to keep track of his cadets' musical development.

6. You are advised to photocopy certain chapters and exercises in order to keep your own copy in good condition and thus be able to use it repeatedly over a long period.

7. If you have any questions concerning the content of this manual, consult D Cdts 3.

TABLE OF CONTENTS

Level Basic

The Staff 3
Treble and Bass Clef 4
Note Values 7
Value of Rests 10
Time Signatures 12
Repeat Signs 15
Dynamics 18
Review Exam 21

Level One

Dotted Notes and Rests 23
Tones and Semitones 25
Understanding Accidentals 27
Simple Time Signatures 29
Strong Beats, Weak Beats 30
Chromatic Semitones and Diatonic Semitones 34
Different Kinds of Scales 36
The Major Scale 37
The Order of Sharps 38
The Major Scale with Sharps 42
The Major Scale with Flats 46
Relative Minor Scales 49
The Arpeggio 54
The Fermata 56
Words that Refer to Tempo 56
Articulations 58
Review Exam 60

Level Two

The Triplet 67
Compound Time Signatures 69
Scale Degrees 72
Finding the Key of a Given Melody 75
Intervals 77
Intervals of Seconds and Thirds 78
Transposing a Melody 80
Review Exam 83

TABLE OF CONTENTS

Level Three

Understanding all Regular Time Signatures 87
Intervals 89
Melodic Minor Scales 94
Three-Note Chords 96
Major Chord or Minor Triads 97
Tempo and Style 99
Transposition 100
Review Exam 105

Level Four

Irregular Time Signatures 111
Finding the Key of a Melody without a Key Signature 113
Intervals 116
Chords 121
Transposing a Melody 127
Tempo and Style 129
Cadences 131
Detecting Errors in a Given Musical Passage 133
Review Exam 138

Level Five

The C Clef 145
Intervals 147
Diminished and Augmented Chords 151
Inverted Triads (Chords) 152
Dominant Seventh Chords 154
Transposing a Melody 158
Cadences 163
Short and Open Score 167
Review Exam 171

Glossary

Glossary 177

1. Take the time to read and understand the theoretical notions of the level.

2. Do all the exercises of each objective and take the time to understand any errors made by consulting the explications.

3. Always review the preceding levels because certain exam questions from these preceding levels may appear in your current level exam. This is most evident in levels 2 and up.

4. Consult other theory books (bibliography) to aquire more knowledge.

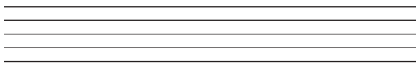
5. Ask for assistance from a qualified instructor if you have any questions.

6. Prepare for your exam a few months in advance in order to successfully achieve your level.

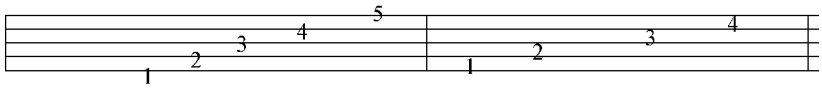
Good Luck!

The Staff

1. A note is a symbol used to represent a sound. The notes are placed on a series of five horizontal lines called a staff.



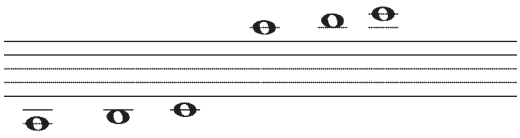
2. The number of lines on a staff should be counted from the bottom upwards. The first line is therefore called the inferior line and the fifth line is called the superior line. The spaces are also counted in the same manner.



lines spaces

3. It can therefore be stated that a staff is composed of five lines and four spaces. The position of each note determines the PITCH of each sound. The higher the note is placed on the staff, the higher the sound. The lower the note is placed on the staff, the lower the sound.

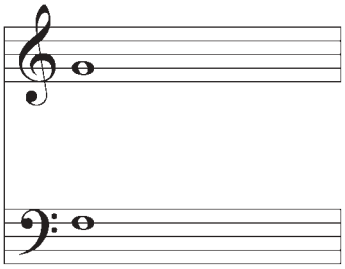
4. Notes that are written above or below the staff are separated, and distinguished by ledger lines.



Treble and Bass Clef

5. A clef is a sign placed at the beginning of a staff to determine the names of the notes. This clef gives the name to the note placed on the same line. From this point on the staff, we can name all the notes above and below. Music notes are named after the first seven letters of the alphabet, from A to G. Based on their position on the staff, they can represent the entire range of musical sound.

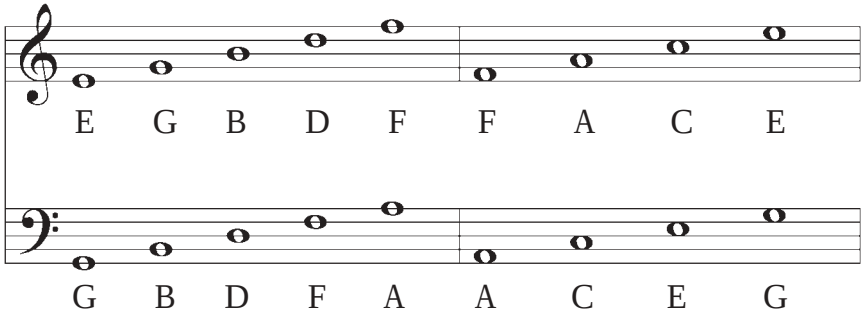
6. The clefs most commonly used are called the TREBLE and BASS clef.



7. As shown in the example above, the treble clef circles the line on which the note G is placed. The two dots of the bass clef surround the line on which the note F is placed.

Note: *It is strongly suggested to learn the sequence of notes by memory in order to find any notes on the staff.*

8. By using these two references, we can then locate the other notes on the staff found on the lines and in the spaces. Below you will find all the notes found on the lines and spaces.



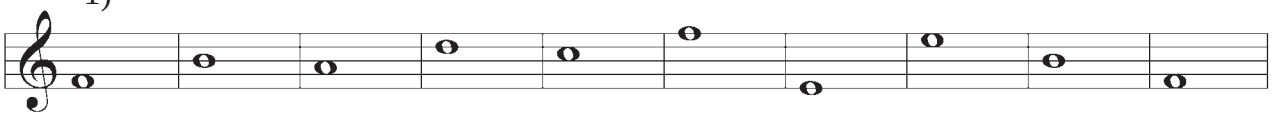
ATTENTION: *The notes can be remembered in many different fashions such as:*

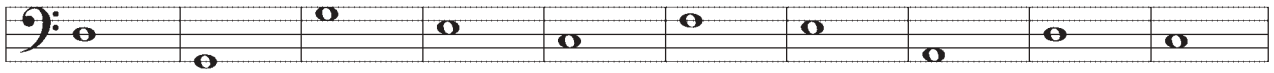
*LINES of Treble Clef: **E**very, **G**ood, **B**oy, **D**eserves, **F**udge*
*SPACES of Treble Clef: spell **FACE***

*LINES of Bass Clef: **G**ood, **B**oys, **D**eserve, **F**udge, **A**lways*
*SPACES of Bass Clef: **A**ll, **C**ars, **E**at, **G**as*

9. To avoid difficulty in reading the notes, do not write the name of the notes under each one.

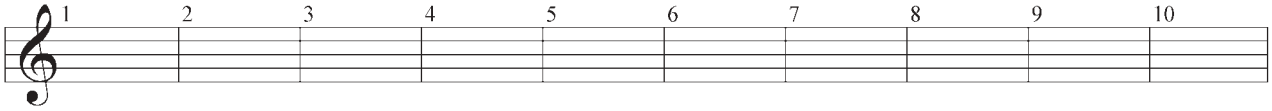
A) Name the following notes found in the treble clef and the bass clef.

1)

2)



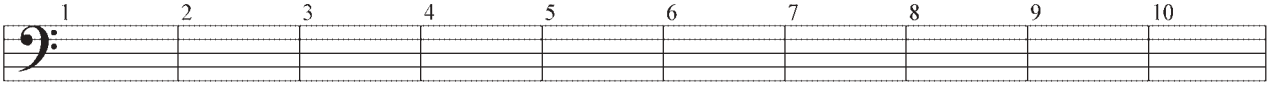
B) Write the following notes found in the treble clef.

1) G on a line
2) F on a line
3) F in a space
4) B on a line
5) G in a space
6) E in a space
7) C in a space
8) E on a line
9) A on a space
10) D on a line



C) Write the following notes found in the bass clef.

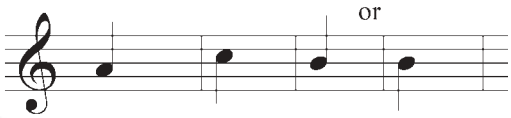
1) D on a line
2) G in a space
3) F on a line
4) B on a line
5) A on a line
6) A in a space
7) G on a line
8) E in a space
9) C in a space
10) B in a space



Note: *To improve on your sight-reading skills (note-reading skills), do similar exercises. Try to read the notes as fast as you can without respecting the rythm. You can also use musical pieces to improve your sight-reading of notes.*

Note Values

10. Each note represents a duration as well as a sound depending on its position on the staff.

11. The notes will always be placed in a line/space sequence in whatever form. If however, we want to add a stem to the notes, it is important to place them correctly. If the note is placed below the third line, the stem is placed on the right side pointing upwards. If the note is placed above the third line, the stem is placed on the left side pointing downwards. If the note is on the third line, the stem can be placed in either position.

12. There are several types of notes. Below are the most commonly used:

whole note

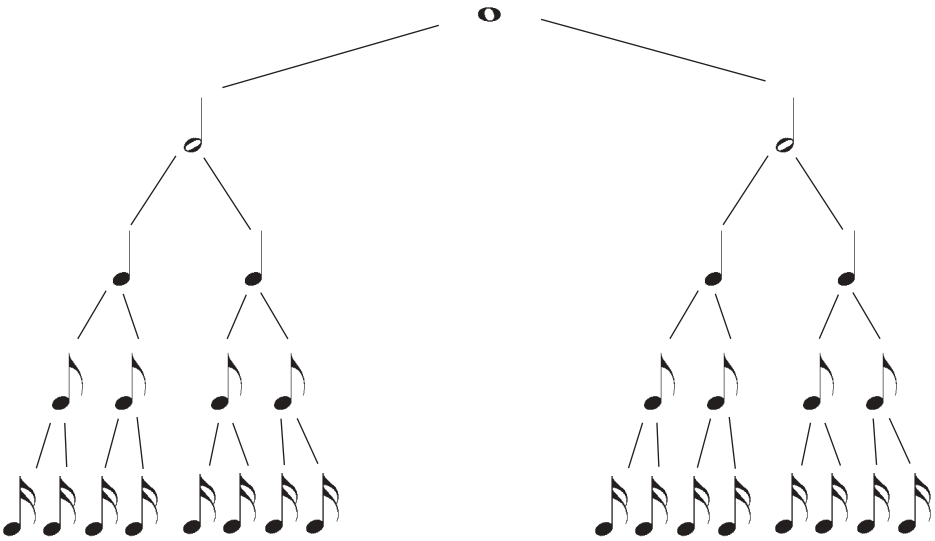
half note

quarter note

eighth note

sixteenth note

13. The structure begins with the WHOLE note for it is the longest of duration of this table.



14. To simplify your musical reading, certain notes group together to complete the duration of time. A beam is used to join these notes together.

A) Indicate by using 1 note, the equivalent to the following group of notes:

1)

2)

3)

4)

5)

6)

7)

B) Write other notes that equal the same value as the notes given.

1) = _____

2) = _____

3) = _____

4) = _____

C) Write the number that correctly completes the sentence.

Remember your note tree:

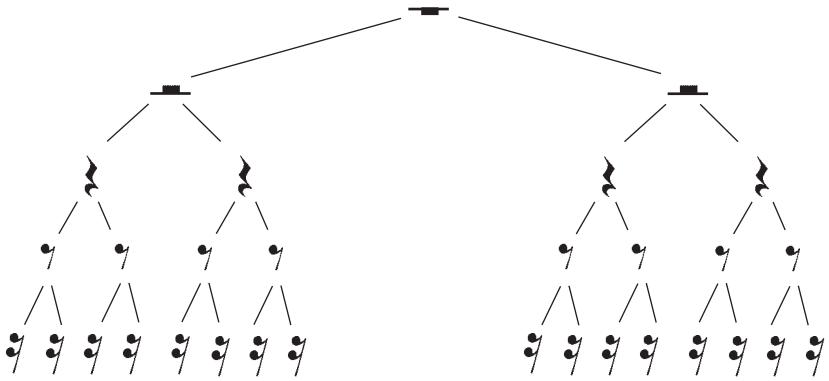
1) There are ____ half notes in a whole note.
2) There are ____ quarters in a whole note.
3) There are ____ quarters in a half note.
4) There are ____ sixteenth notes in a whole note.
5) There are ____ eighth notes in a quarter note.
6) There are ____ eighth notes in a half note.
7) There are ____ eighth notes in a whole note.
8) There are ____ sixteenth notes in a quarter note.

Value of Rests

15. To represent silence, there exist different types of rests. Below are the most used.

𝄻	Whole-rest
𝄼	Half-rest
𝄽	Quarter-rest
𝄾	Eighth-rest
𝄿	Sixteenth-rest

16. Each sign is equivalent to its corresponding note; therefore, it is worth the same value. The whole rest is worth two half rests and so on.

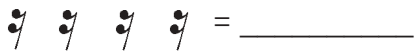


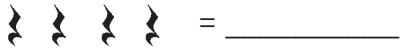
A) Complete the following examples by using a rest.

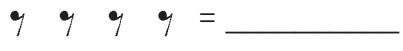
1) = _____

2) = _____

3) = _____

4)  = _____

5)  = _____

6)  = _____

B) Indicate by using 2 rest equivalent to the examples below.

1) = _____

2) = _____

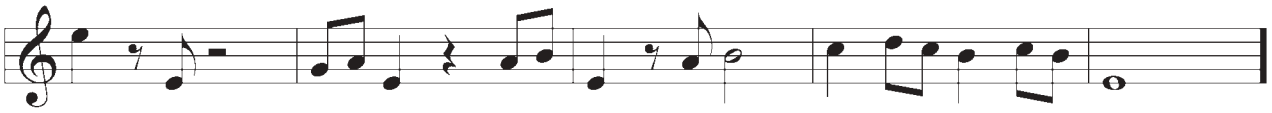
3) = _____

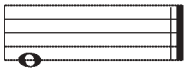
4) = _____

C) Complete the following sentences by adding in the correct number.

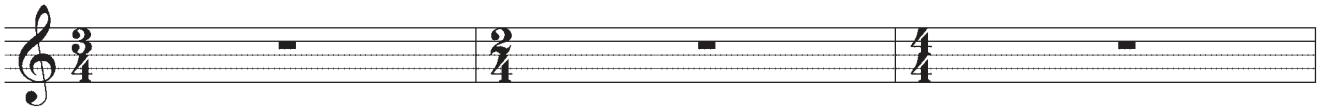
1) There are _____ quarter-rests in a whole-rest.
2) There are _____ half-rests in a whole-rest.
3) There are _____ sixteenth-rests in a quarter-rest.
4) There are _____ eighth-rests in a quarter-rest.
5) There are _____ quarter-rests in a half-rest.
6) There are _____ sixteenth-rests in a half-rest.
7) There are _____ eighth-rests in a half-rest.
8) There are _____ sixteenth-rests in a whole-rest.
9) There are _____ sixteenth-rests in a eighth-rest.

Time Signature

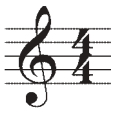
17. Music is divided into equal parts by bar lines. The area between the two bar lines is called a measure or bar. Measures may contain notes, rests or a combination of both.

18. A DOUBLE BAR is written to indicate the end of a piece of music. It is constructed by one thin and one thick line, with the thick line always on the outside.



19. The number of beats in each measure usually remains the same throughout the entire piece. This underlying beat per measure is represented by the TIME SIGNATURE which is composed of two numbers, one on top and the other on the bottom placed at the very beginning of the musical piece immediately after the clef.

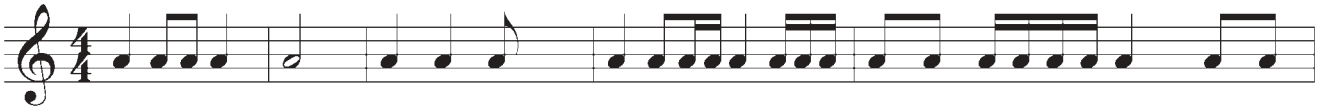
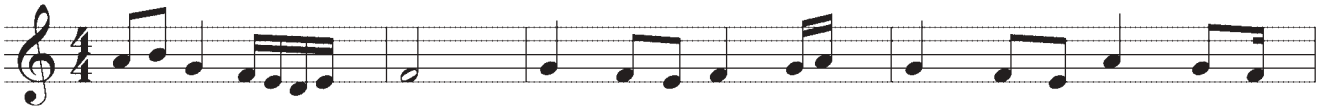
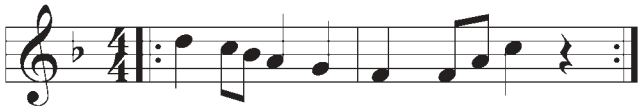
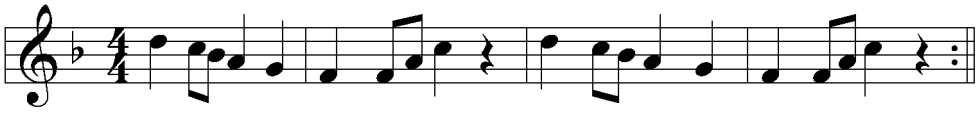


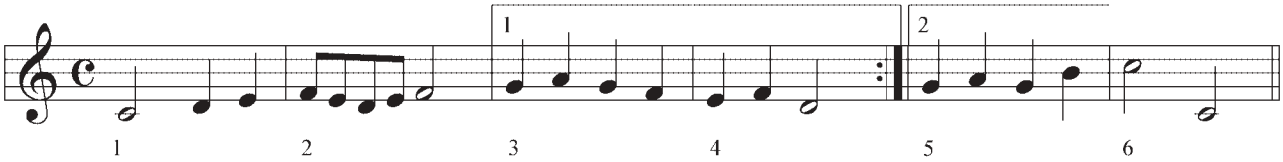
Note: *The key signature will be studied in Level one.*

20. The time signature appears at the beginning of the music after the clef sign. It is made up of two numbers; one on top of the other.

the upper number tells how many beats (or counts) are in each measure. In this example, 4.

the lower number tell what type of note receives the beat (1). In this example, a quarter note.

21. The time signature of 4/4 can be represented by this sign as well. The C is know as COMMON TIME.

A) Complete the following measures by adding one or more notes.

B) Complete the following measures by adding one or more rests.

22. A double bar-line preceded by two dots instructs us to repeat the preceding passage.

23. If, you must repeat the passage at the beginning of the piece, you only place the double bar-line at the end of the musical passage.

24. If, in the repeated passage, you had to replace one or several of the last measures by other measures, you would use endings. 1st or 2nd endings are used. It would be indicated like this:

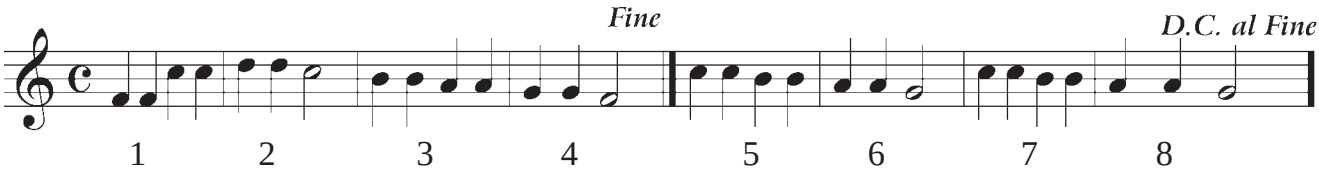


Therefore, you would play this section as follows: measure 1, 2, 3, 4, 1, 2, 5, and 6.

25. If you have to repeat a larger section of a musical piece, there are two other means of repeating sections using the following symbols:

The two letters **D.S.** (dal segno) are used when the repetition is intended from the sign 𝄋 situated at a certain section. The two letters **D.C.** (da capo) are used when the repetition is intended to be from the beginning of the musical piece.

26. The two symbols above are often accompanied with AL FINE or by TO CODA.

a) AL FINE indicates the end of the piece. For example:

This passage would be played in this fashion; measure 1, 2, 3, 4, 5, 6, 7, 8, 1, 2, 3, and 4.

b) TO CODA indicates to play the repeat section until the symbol Dal Segno, 𝄋 which is connected to the CODA section, the ending of the piece. A CODA is a tail section to also indicate where the music will come to an end.

A) What sign would you use to repeat a definite section of a musical piece?

_____

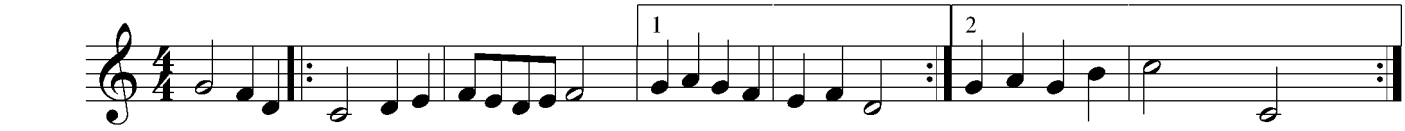
B) What does D.C. mean?

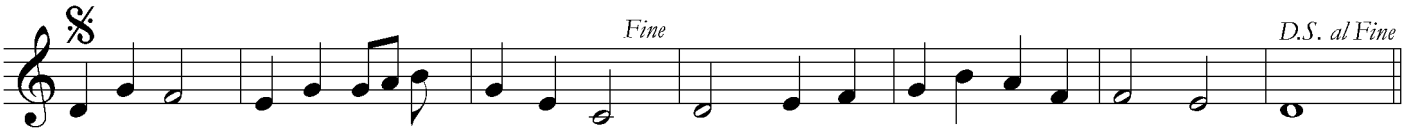
_____

C) What does D.S. al Fine mean?

_____

D) Write the order in which the numbered bars/measures are played?





_____

E) Explain in your own words the purpose of 1st and 2nd endings?

_____

_____

27. A sound can be piano (soft) or forte (loud). However, within this range of opposites there exists other dynamics.

Terms	Symbols	Meaning
pianississimo	***ppp***	very, very, soft
pianissimo	***pp***	very soft
piano	***p***	soft
mezzo piano	***mp***	medium soft
mezzo forte	***mf***	medium loud
forte	***f***	loud
fortissimo	***ff***	very loud
fortissisimo	***fff***	the loudest possible

crescendo *cres.* or gradually increasing in loudness

decrescendo *decres.* or gradually decreasing from loud to soft

A) Indicate by circling the symbol that represents medium soft after defining the following dynamics. (symbol + definition).

1) ***mp*** = _____

2) ***f*** = _____

3) ***mf*** = _____

4) ***ff*** = _____

B) Indicate by circling the symbol that represents loud after defining the following dynamics. (symbol + definition)

1) ***mp*** = _____

2) ***f*** = _____

3) ***p*** = _____

4) ***pp*** = _____

C) Describe the meaning of each symbol?

a) _____

b) _____

D) Arrange the following list of dynamics from loudest to softest:

f
pp
mf
ff
mp
p

_____ _____ _____ _____ _____ _____

E) Using the dynamic signs that you know, add the appropriate signs in the spaces provided.

Reveille !!! sounds the bugle is playing _____ loudly, as the sun rises. “Good Morning” says Sgt. Bloggins” time to fall in for breakfast. All the Band cadets fall in moderately softly_____.
Sgt. Bloggins gives the command “Attention” very loudly _____. The cadets now are absolutely awake as they march off to the mess singing softly_____ as they march. The mess hall is a buzz with moderately loud chatter from the other cadets. Sgt. Bloggins very softly _____ walks up and down supervising the cadets. Off in the distance the very soft _____ sound of thunder can be heard. As it nears, the sounds becomes louder like a great big crescendo _____. The rain softly _____ taps on the roof of the mess. And gradually it gets louder, and soon becomes very loud _____. The cadets are all finished breakfast and await the wet march back to their barracks talking and laughing moderately loud _____. As they form up out side of the mess, their feet make moderately soft _____ noises in the mud. On the march back to barracks the cadets now must sing very loudly _____ to be heard over the driving rain and thunder about them. As they round the corner of the building Sgt. Bloggins dismisses the group. They all run very loudly into the dry and warm barracks where a decrescendo _____ comes over the damp cadets as they now rest very softly_____ on their beds awaiting the very loud _____ booming voice of their Sgt. And the day goes on.

A) How many lines are on a staff? _____

B) How many spaces are on a staff? _____

C) What are the lines called that are used for notes located above or below the staff?

_____

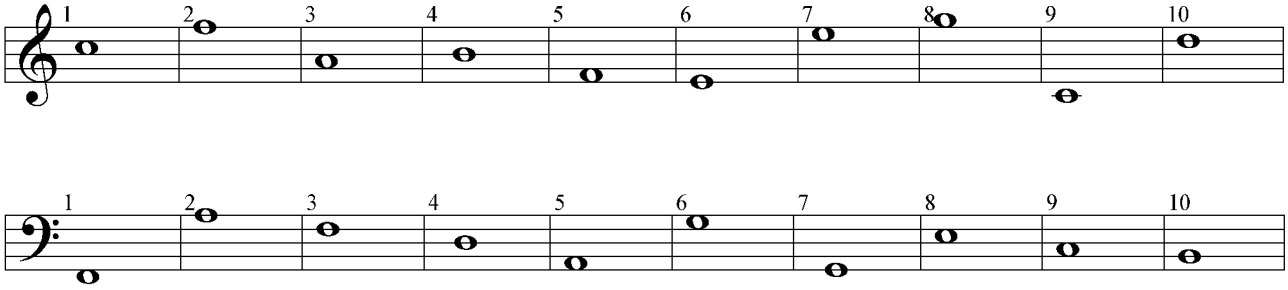
D) Write the abbreviations and the meaning of each dynamic:

Dynamic	Sign	Meaning
mezzo piano		
piano		
fortissimo		
mezzo forte		
pianissimo		
forte		

E) How many :

quarter rests in a half rest _____
eighth rests in a whole note _____
half rests in a whole note _____
quarter notes in a whole rest _____
eighth notes in a half rest _____
eighth rests in a whole note _____
quarter notes in a whole note _____
sixteenth notes in a eighth rest _____
quarter notes in a whole rest _____
eighth notes in a quarter note _____
eighth notes in a half note _____
eighth rests in a half note _____

F) Write the correct note name under each note on the staff:



G) Place the dynamics in order from softest to loudest.

f ***p*** ***mf*** ***pp*** ***ff*** ***mp***

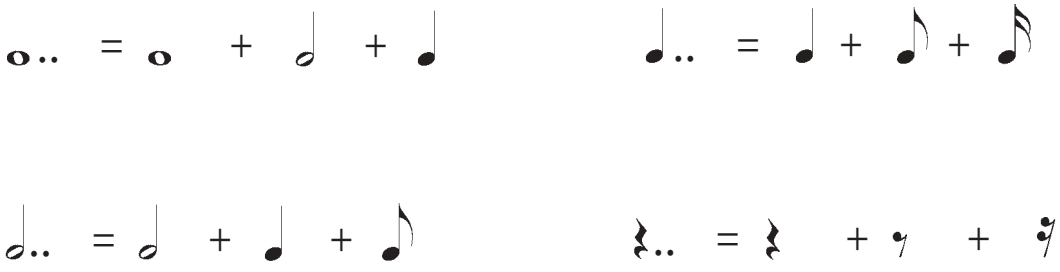
_____

Dotted Notes and Rests

1. In Level Basic you studied the values of notes and rests.

2. There exists another sign of value. It is the dot placed right after the note and adds to the time value. The dot adds one half of the length of the note that it is attached to.

3. A second dot can be added. This second dot will also add to the time value of one half to the length of the first dot. For example:



A) What role does the dot play when it is attached to a note or a rest?

_____

B) Complete the following examples by using notes or rests.

1) = _____

2) = _____

3) = _____

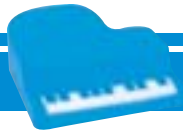
4) = _____

5) = _____

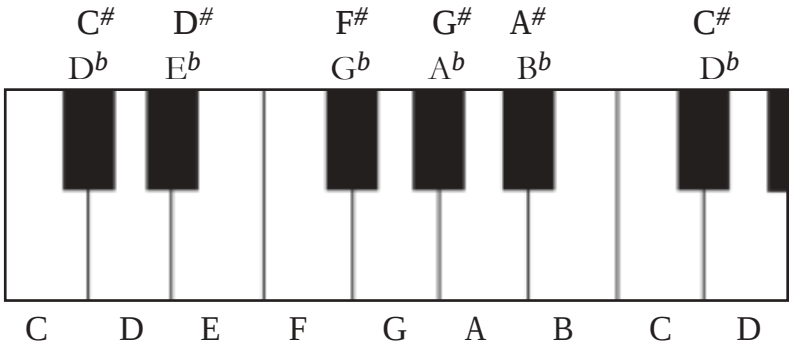
6) = _____

C) Is it true to state that the second dot adds to the time-value of one-half the length of the first dot?

_____



4. To clearly understand certain theory notions, it is important to know all the notes that we find on the keyboard.



5. Always remember that the C is always found on a white key before 2 black keys. This memory aide will help you locate the other notes. The F is always found on a white key before 3 black keys.

6. A SEMITONE or HALF STEP is the smallest distance between any two adjacent keys on the keyboard whether it is black and white or white and white.

e.g. E and F, B and C, D and D#, etc. are all semitones apart

7. A WHOLE TONE or WHOLE STEP is made up of two semitones. On the keyboard, a whole tone is any two keys with one key, white or black, in between.

e.g. There is a tone between C and D, $F^{\#}$ and $G^{\#}$ and $G^{\#}$, E and $F^{\#}$, B^{b} and C

Note: *It is important to note that betweeen the adjacent degrees (i.e., semitones), there are no white or black keys. For example, the distance between C and D is not a semitone because there is a black key that separates the two keys.*

EXERCISES

A) Find all the semitones that we find on the keyboard.

between _____ and _____ between _____ and _____

between _____ and _____ between _____ and _____

between _____ and _____ between _____ and _____

between _____ and _____ between _____ and _____

between _____ and _____ between _____ and _____

between _____ and _____ between _____ and _____

B) Is it true to say that the shortest distance between two adjacent degrees is 1 tone?

_____

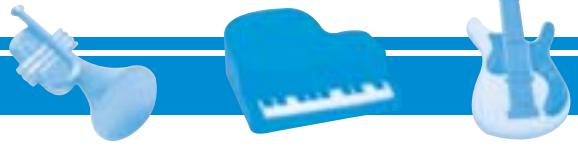
C) How many tones or semitones exist between:

1) E and $F^{\#}$ = _____ 5) G^{b} and A^{b} = _____

2) E and $G^{\#}$ = _____ 6) C and E^{b} = _____

3) B^{b} and C = _____ 7) A and $C^{\#}$ = _____

4) B and $C^{\#}$ = _____ 8) C and G = _____



8. Accidentals are signs or symbols placed to the left side of a note to indicate that the pitch is to be altered.

The sharp (#) raises the pitch of the note by a semitone.

The flat (*b*) lowers the pitch of a note by a semitone.

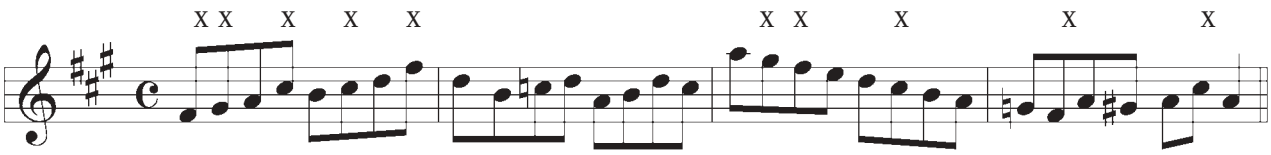
The natural (♮) cancels the effects of either the sharp or the flat.

The double sharp (x) raises a note already sharpened by another semitone.

The double flat (*bb*) lowers a note already flattened by another semitone.

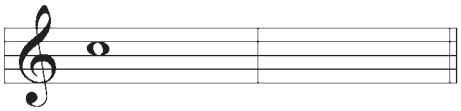
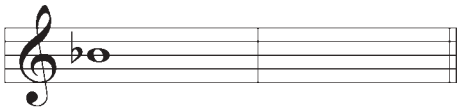
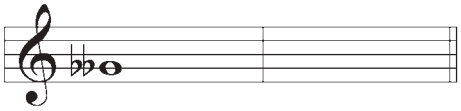
9. The KEY SIGNATURE is composed by the number of sharps or flats placed immediately after the clef, right before the time signature. The key signature can be altered within a musical piece.

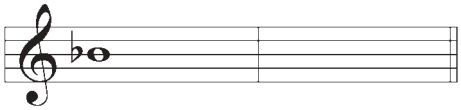
10. The effect of an accidental symbol ceases at the termination of the bar in which it appears. However, within the measure, this symbol affects the note in whichever octave. Once the measure is passed, the accidental is no longer valid, returning the state of the notes in concurrence with the key signature. By observing the example below, the first C in the second measure is natural and so is the second C because they both belong in the same measure.

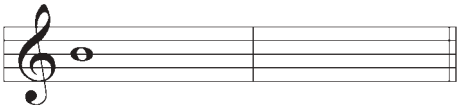
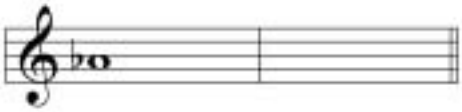
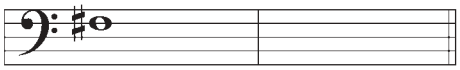


A) Raise the following notes by a semitone: (write your answer in the empty measure)

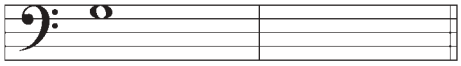
1)

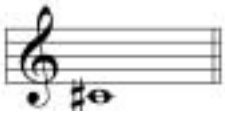
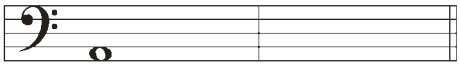
3)

2)

4)

B) Lower the following notes by a semitone:

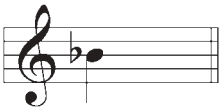
1) 

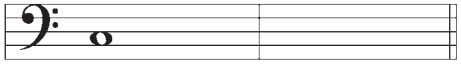
3)

2)

4) 

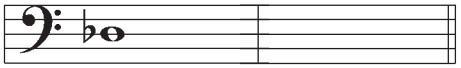
C) Lower the following notes by one tone:

1) 

3)

2) 

4)

D) Raise the following notes by one tone:

1) 

2) 

E) What are the accidental alterations placed on the staff?

_____

F) What does an accidental do to a note?

_____

Simple Time Signatures

11. As mentioned in Level Basic, a measure can be subdivided in two, three, or four beats.

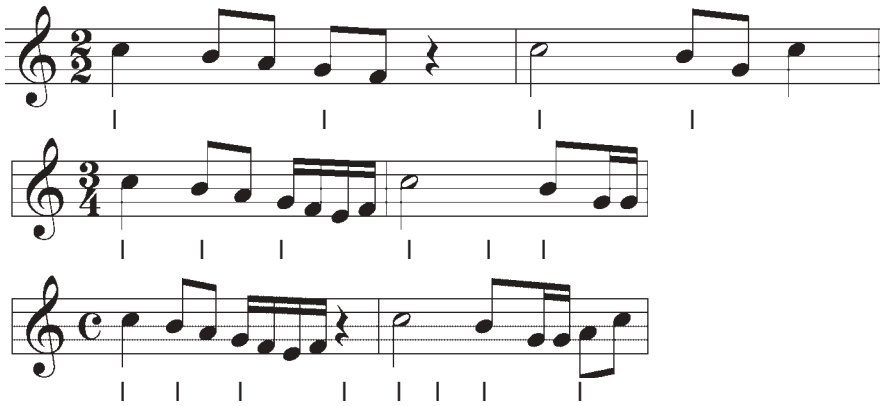
12. The measure of music into beats is called TIME. Therefore a sign called a TIME SIGNATURE is necessary to indicate two things: (1) to indicate the number of beats in a bar, and (2) to indicate the note which is equal to one beat. A time signature is placed at the beginning of a piece of music right after the key signature. You will not see the time for the rest of the piece except if there is a change in time and a new time signature would appear. In Simple time, the upper number tells you how many beats there will be in each bar, and the lower number tells you what kind of note is equal to one beat. For simple time the lower number can be 1, 2, 4, 8 or 16. For example:

1 represents	whole note	rarely used as a lower number
2 represents	half note	most often used
4 represents	quarter note	most commonly used
8 represents	eighth note	commonly used
16 represents	sixteenth note	less commonly used

13. Therefore, if the lower number of the time signature is 4, the quality of the note expressing the beat is the quarter note. If the lower number is 2, the quality of the note expr essing the beat is the half note.

Note: *A simple time can occur in the following forms of meter, however the most common are 2 (duple), 3 (triple) and 4 (quadruple). There are others but these are the most common.*

14. The upper number of the time signature determines the number of beats contained in each bar (generally 2, 3, or 4).

e.g.

15. The lines found under the notes indicate the beats in each measure. One can also see that the number of beats found in each measure is equal to the upper number of the time signature.

Strong Beats, Weak Beats

16. In musical measures, we distinguish between beats accented and those less so. The former are called strong beats and the latter are called weak beats. Beats, like measures, are subdivided into portions called strong parts and weak parts.

17. The first beat is always strong in any time signature, but the other beats vary depending on how many beats there are per measure.

In a measure of 4 beats, the first and third beats are strong while the second and fourth are weak.

1	2	3	4
strong	weak	strong	weak

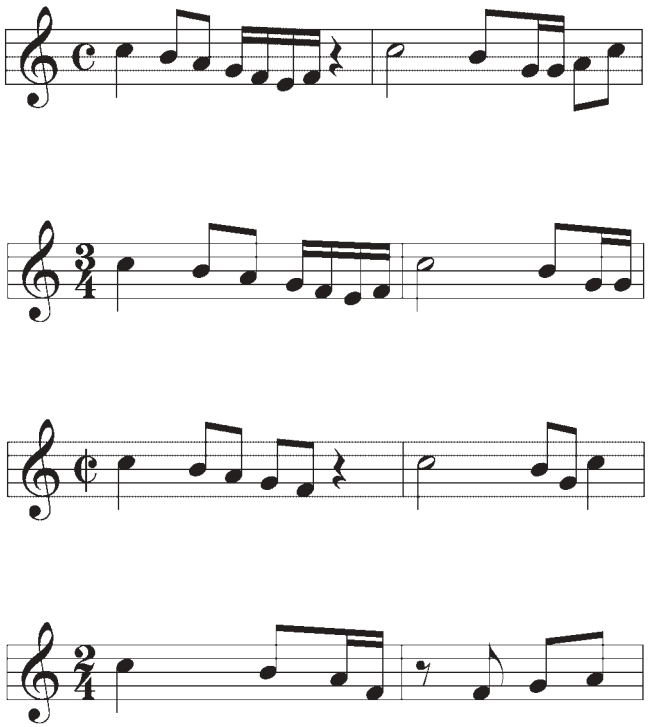
In a measure of 3 beats, the first is strong and the second and third are weak.

1	2	3
strong	weak	weak

In a measure of 2 beats, the first is strong and the second is weak.

1	2
strong	weak

18. At this time, it is important to introduce simple duple time: 2/2. The upper number of the time signature is always 2. This means that there are two beats in each measure. The lower number indicates which note receives the beat and, in this time signature, it is the half note.

Another symbol that represents 2/2 is 𝄵. It is called cut common time or, in Italian, it is known as *alla breve*.

A) Explain the role of the upper number in the time signature.

_____

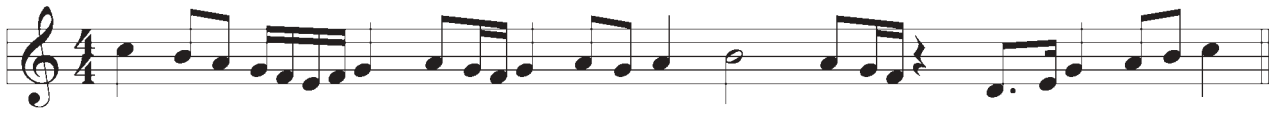
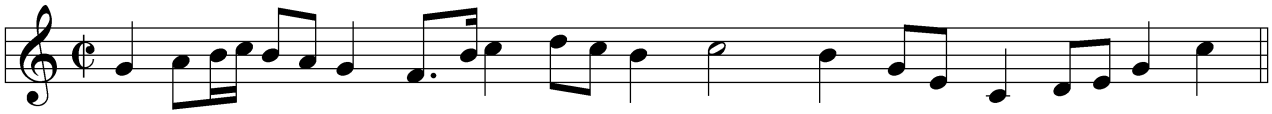
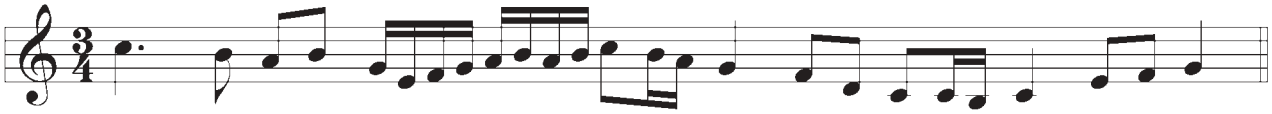
_____

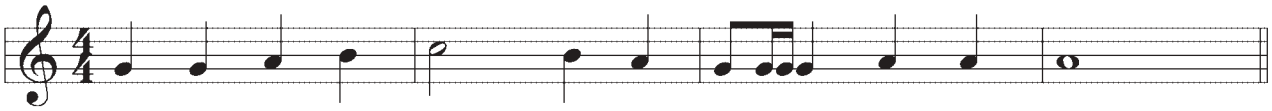
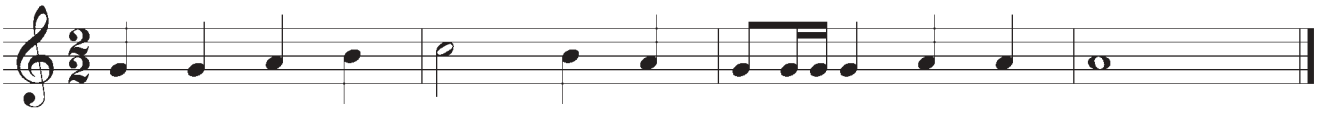
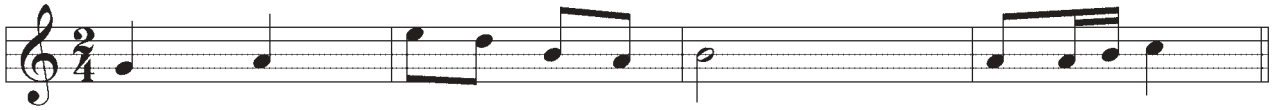
B) Explain the role of the lower number in the time signature.

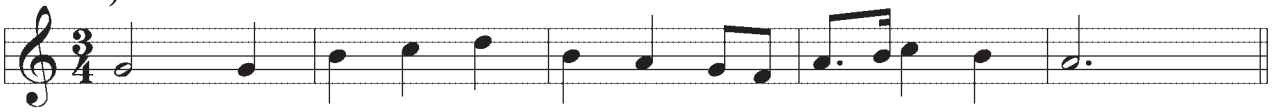
_____

_____

C) Place the bar lines where neccessary according to the time signature.

1)

2)

3)

D) Find and indicate the strong beats and the weak beats. (S=strong, W=weak)

1)

2)

3)

4)



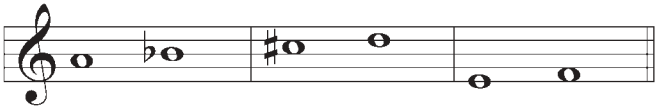
E) Explain why 2/4 is different from 2/2 (number of beats per measure and the quality of the note).

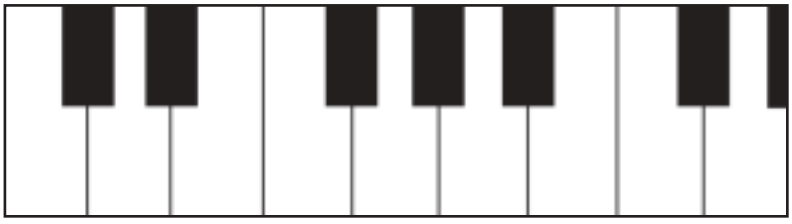
_____

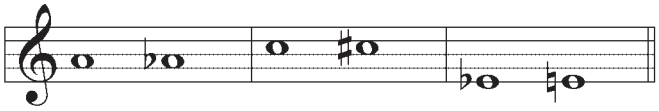
_____

Chromatic Semitones and Diatonic Semitones

19. There are two kinds of semitones: the chromatic and the diatonic semitone.

20. A diatonic semitone is composed of two sounds following each other and not bearing the same name. Example: E to F, C# to D, B to C, etc.

21. A chromatic semitone is composed of two notes with the same letter name with one being altered by an accidental. Example E to E#, B to B^{b}.





A) Identify the different types of semitones (diatonic or chromatic).

1) E - F = _____

2) $G^{\#}$ - A = _____

3) $F^{\#}$ - G = _____

4) A - $A^{\#}$ = _____

5) B - C = _____

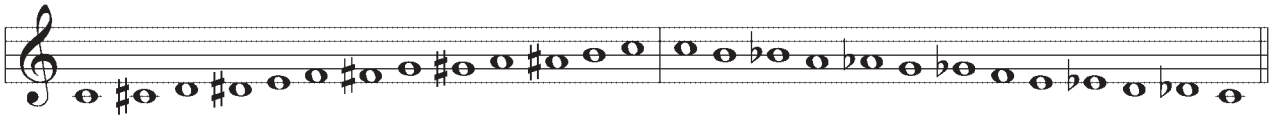
6) B^{b} - B = _____

7) D# - E = _____

8) F - $F^{\#}$ = _____

22. A scale is composed of a series of sounds succeeded by adjoining degrees. The scales most used are the diatonic scale and the chromatic scale.

23. A chromatic scale is composed of 12 notes each having an interval of a semitone starting from any note up to the octave (which is an interval composed of eight degrees, e.g. middle C to high C). The chromatic scale employs sharps as it ascends and flats as it descends.



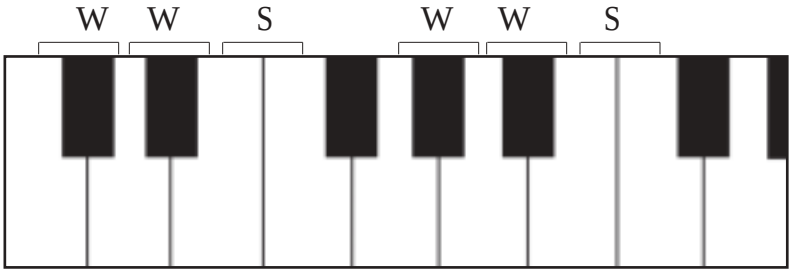
24. When in a chromatic scale, never use the name of a note twice. Example: Ab, A#, and A natural. Do not change the name of the tonic either. Example: if C is the tonic, do not use B#.

25. A diatonic scale is a succession of eight adjacent notes of diatonic tones and semitones. Example: C, D, E, F, G, A, B, C. In this type of scale, each note has a different name. There are two kinds of diatonic scales: major and minor.

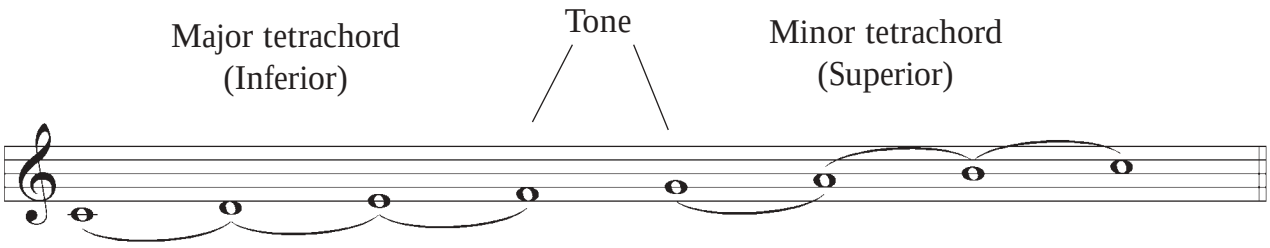
e.g. Major scale
Natural minor scale

26. A major scale consists of eight adjacent notes, the eighth being the octave note, and it must have the requisite number of diatonic tones and semitones. The succession of notes can be divided into two parts, each part called a tetrachord. The word TETRA means four. A tetrachord is a series of four notes having a pattern of:

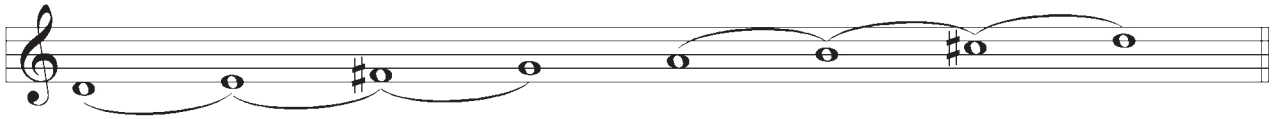
Tetrachord		
Whole Tone	Whole Tone	Semitone



27. The four notes of a tetrachord must be in alphabetical order. The example below is based on the major scale of C. It is visually clear that the two major tetrachords are separated by one tone.



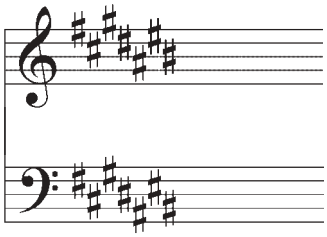
Note: *In all major scales, the semitones occur between the 3rd and 4th notes and the 7th and 8th.*

28. The major scale of C is used as a model for all the other major scales. Therefore, to always obtain a distance of a whole tone or semitone, a sharp or flat may have to be added. For example, in the major scale of D, we will find F# and C# so that it respects the model. (inferior tetrachord + tone + superior tetrachord).

The Order of Sharps and Flats and their Placement on the Staff

29. Sharps

F#, C#, G#, D#, A#, E#, B#
(**F**ather **C**harles **G**oes **D**own **A**nd **E**nds **B**attle)

Placement on the staff:



The sharps follow the pattern of:

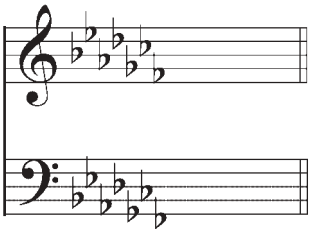
UP ↑ DOWN ↓ UP ↑ DOWN ↓ DOWN ↓ UP ↑ DOWN ↓

When a sharp sign is attached to a line note, the sharp is centred on the line as in the example above. When a sharp sign is to be placed on a space, the sharp is centred in the space as in the example above.

30. Flats

B^{b}, E^{b}, A^{b}, D^{b}, G^{b}, C^{b}, F^{b}
(**B**attle **E**nds **A**nd **D**own **G**oes **C**harles' **F**ather)

Placement on the staff:



The flats follow the pattern of:

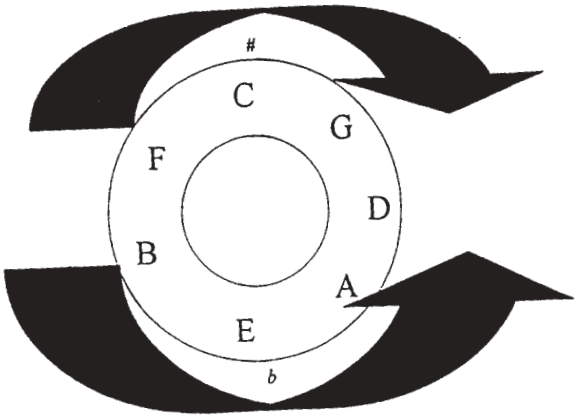
DOWN ↓ UP ↑ DOWN ↓ UP ↑ DOWN ↓ UP ↑ DOWN ↓

When a flat sign is to be placed on a line note, the flat is centred on the line as in the example above. When a flat sign is to be placed on a space, the flat is centred in the space as in the example above.

31. Circle of Fifths

The circle of fifths is useful in understanding scales and key signatures. It shows the relationship of one key to another by the number of sharps or flats in the key signature and the order in which they occur.

Let's start with a circle divided in twelve sections, i.e., like a clock.



Sharp Keys: start with C and move to the right in a clockwise direction.

Flat Keys: start with C and move to the left in a counter-clockwise direction.

Sharp Scales: the sharp keys ascend by 5ths

Flat Scales: the flat keys descend by 5ths

32. **Enharmonic** notes are two notes that sound the same but are written differently. Three pairs of keys share the same space on the circle:

D^{b}/C#, G^{b}/F#, C^{b}/B

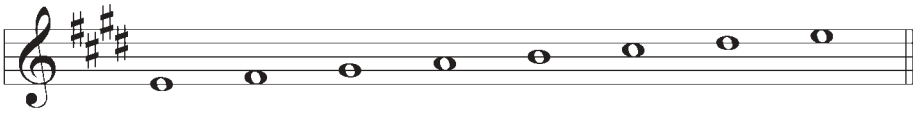
These pairs of keys are enharmonics – they all have the same pitch but the notes are named differently.

A) How is a major tetrachord formed? _____

B) How many tetrachords are there in a major scale? _____

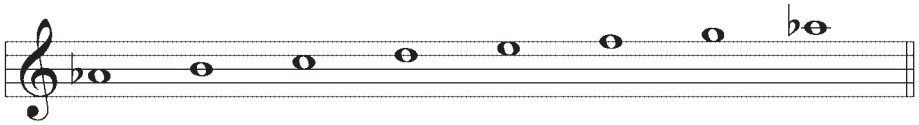
C) Place where the tetrachords are found by indicating the intervals between each note (tones and semitones).

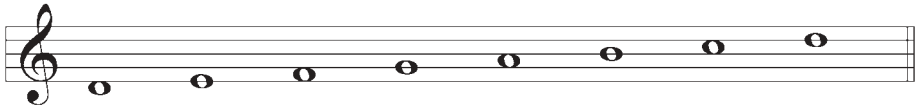
E Major



D) Find the alterations of this major scale by indicating the tones and semitones.

1)

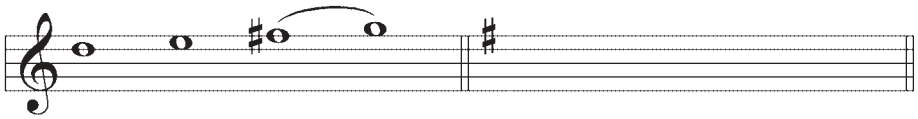


2)

E) Identify the composition for each scale (flats and sharps).

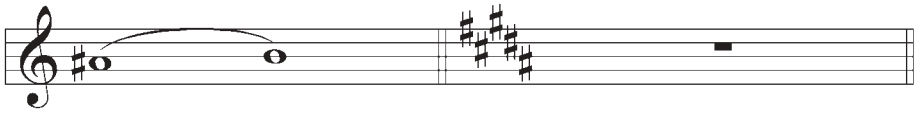
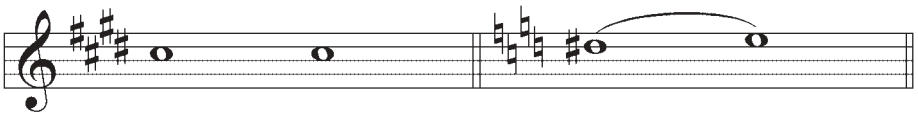
1) D major = _____
2) E^{b} major = _____
3) F# major = _____
4) F major = _____
5) B^{b} major = _____
6) A major = _____
7) E major = _____
8) G major = _____
9) C^{b} major = _____
10) C major = _____

33. The tonic of the major scale with sharps in the key signature is always found a diatonic semitone above the 7th note of the major scale in the last sharp.

34. Therefore, if you are looking for the number of sharps in the G major scale, just move one semitone lower from G, i.e. move down to F#, and count the number of sharps.

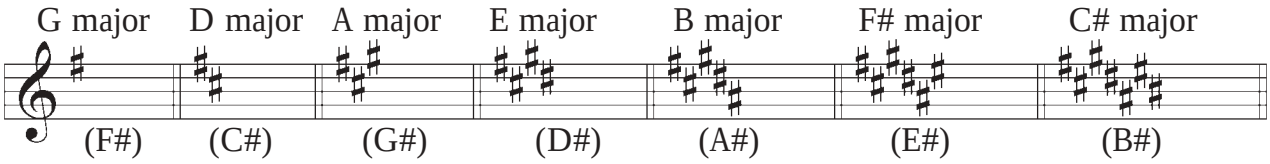


Note: *Do not forget the order of the sharps: F#, C#, G#, D#, A#, E#, B#*
*(**F**ather **C**harles **G**oes **D**own **A**nd **E**nds **B**attle)*

35. For a better understanding, here is another example – scale of B major. If you lower one diatonic semitone from B, you get A# as the answer, therefore, making it the last sharp. By following the order of sharps, the scale of B major consists of 5 sharps.

36. Now, if you have the order of sharps but are missing the key of the major scale, you will proceed backwards. Take the last sharp and raise it by one semitone therefore finding the key of the scale. For example, you have these sharps: F#, C#, G#, D#. By raising the D# by one semitone, we find the note of E; therefore, the key is E major.

(Notes of the scale of E major: E, F#, G#, A, B, C#, D#, E)

37. You can now find all the key signatures of the major scales by using this method. You have to remember that the last sharp at the key signature is always the 7th degree of the scale, which is a diatonic semitone lower than the tonic.

38. Below is a listing of all the major scales with their sharps (with the last sharp in brackets).



EXERCISES

A) Once you know the number of sharps of a major scale, how do we find its tonic?

_____

_____

B) Find the name of the following major scales as well as the names of the sharps found.

	Name of the scale	Name of the sharps
1) 4 sharps =	_____	_____
2) 2 sharps =	_____	_____
3) 1 sharp =	_____	_____
4) 5 sharps =	_____	_____
5) 7 sharps =	_____	_____

Note: *Do not forget to place the sharps in their proper order.*

C) If you know the key of the major scale with sharps, how do you find its key signature?

_____

_____

D) Find the number and the name of the sharps found at the key signature of the following major scales.

1) G major = _____ _____

2) $F^{\#}$ major = _____ _____

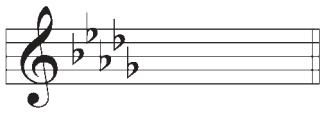
3) A major = _____ _____

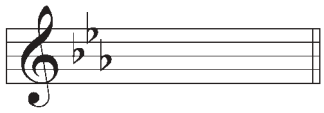
4) E major = _____ _____

5) B major = _____ _____

The Major Scale with Flats

39. To find the number of flats at the key signature from the tonic of the scale, or to find the key of the scale from the number of flats, there is one simple rule to follow: The name of the tonic of the major flat scale is always the second to last flat at the key signature.

40. Therefore, if you are looking for the number of flats in the major scale of D^{b}, you would, for example, consult your circle of fifths and find all the flats leading to D^{b} which is the tonic and adding the next flat to follow. All these flats belong to the major scale of D^{b}.

D^{b} major scale: B^{b}, E^{b}, A^{b}, D^{b}, G^{b}

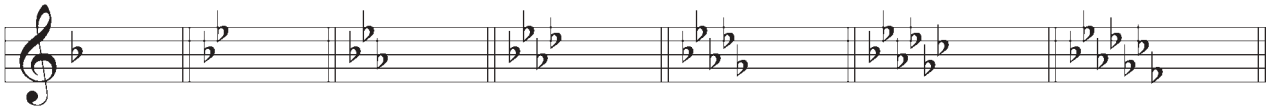
41. If you have a number of flats and you are looking for the tonic, you proceed in the complete opposite direction. For example, you have three flats at the key signature

B^{b}, E^{b}, A^{b}

Note: *Do not forget the order of the flats: B^{b}, E^{b}, A^{b}, D^{b}, G^{b}, C^{b}, F^{b}*
*(**B**attle **E**nds **A**nd **D**own **G**oes **C**harles' **F**ather)*

42. In remembering that the tonic is always the second to last flat, the tonic therefore would be E^{b} major. (Notes of the scale: E^{b}, F, G, A^{b}, B^{b}, C, D^{b}, E^{b})

43. To find the composition of all the other major scales with flats, you always use the same model.

44. However, you have already mentioned that the scale of F major is the exception. Its key signature has only one flat, so how can you use the model? You cannot use the model for this scale, you just have to know that the scale of F major has only one flat, B♭.

F major B♭ major E♭ major A♭ major D♭ major G♭ major C♭ major

Note: *You are encouraged to learn the key signature for the flat keys by memory. However, if you have any difficulty just refer to the method described above.*

A) Write the flats in proper order.

_____ _____ _____ _____ _____ _____ _____

B) Which flat do you use to find the tonic of a major scale with flats?

_____

C) List the flats found in the following major scales.

1) G^{b} major = _____

2) D^{b} major = _____

3) B^{b} major = _____

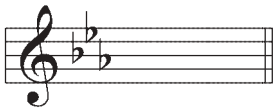
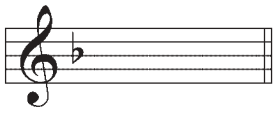
4) F major = _____

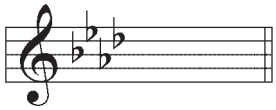
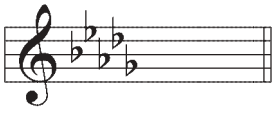
5) A^{b} major = _____

6) C^{b} major = _____

Note: *Do not forget to place the flats in their proper order.*

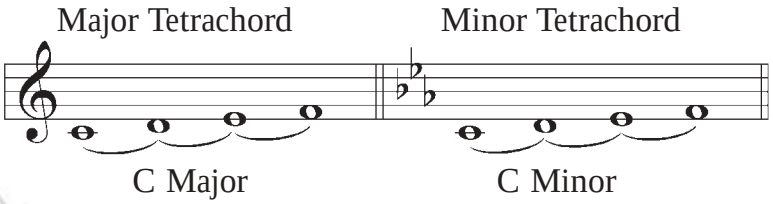
D) Name the key of the following major scales with flats.

1)

2) 

3)

4)

Relative Minor Scales

45. The minor scale has three forms: natural minor, harmonic minor, and melodic minor. In this level, the first two will be studied. You will study the melodic minor in level three.

46. Minor scales are not formed in the same way as the major scale. Rather than having a major inferior tetrachord and a major superior tetrachord, minor scales have a major inferior tetrachord and a minor inferior tetrachord. For example:

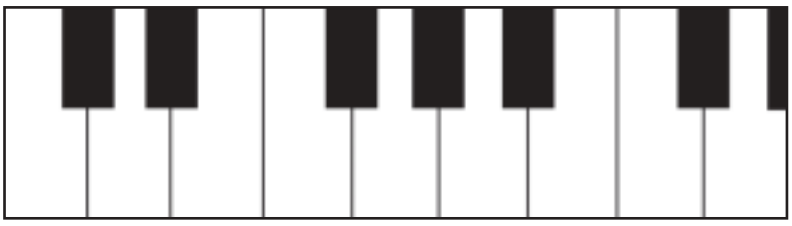


47. The difference in the superior tetrachord enables you to distinguish the three forms of the minor scale.

48. All minor scales are named relative minor scales because they are formed from a major scale. In other words, each major scale has its three relative minor scales. These two scales are connected because they share **the same key signature**, that is, the minor scale uses the key signature of its relative major.

49. To find the relative minor of any major key, you must take the tonic of the major scale, and move backwards three semitones.

Example: C major (A, B^{b}, B, C)



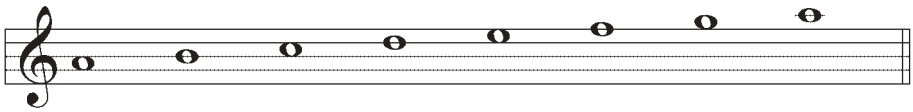
50. Each scale degree of a scale (major or minor) is associated with a roman numeral.

e.g.

C major	C	D	E	F	G	A	B	C
	I	II	III	IV	V	VI	VII	VIII/or I
D harmonic minor	D	E	F	G	A	Bb	C#	D
	I	II	III	IV	V	VI	VII	VIII/or I

Note: *You may also use the sixth degree of the major scale to find the new tonic of the minor scale.*

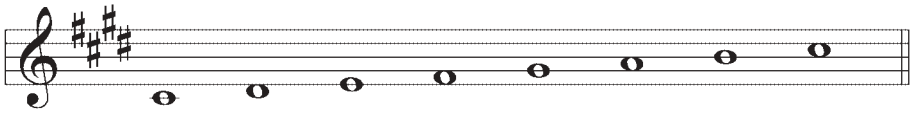
51. By taking this new note as the tonic, you create another scale (a series of 8 notes in scale pattern) keeping the same signature as the relative major scale.



e.g. A minor is a relative minor of C major.

52. The **natural minor** is one which uses the same key signature as its major relative scale with no changes. Therefore, the natural minor scale of A borrows the key signature of its relative major scale of C.

Here is an example using the major scale of E.

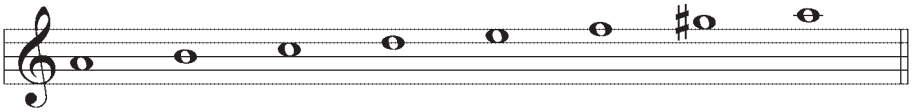


To find the relative minor you must use the tonic and move backwards three semitones. You may also use the sixth degree of the major scale. Both will give you the new tonic of the minor scale.

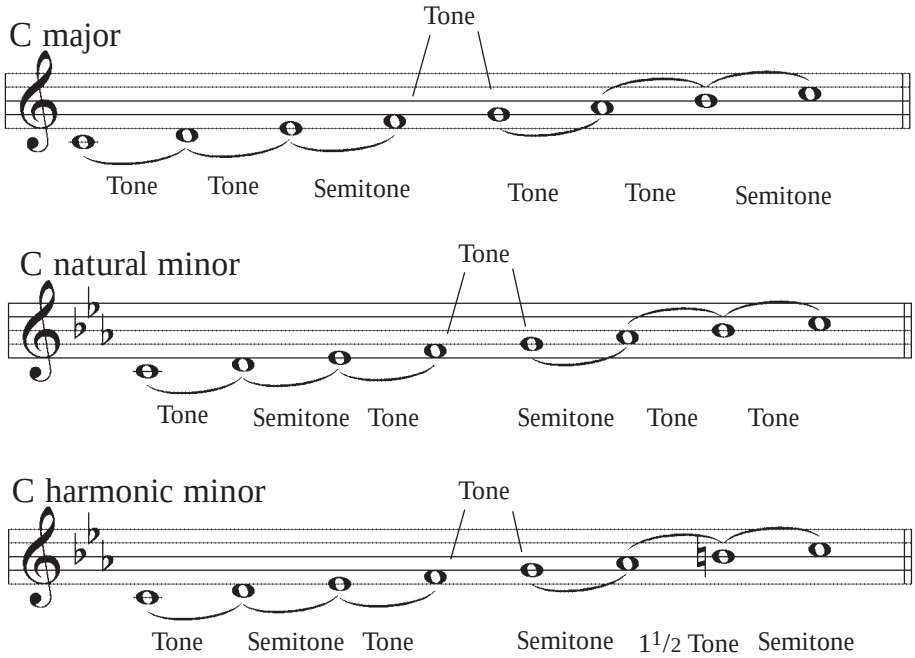
You have now found the relative minor scale of E major.

53. To find the relative harmonic minor, you proceed in the same manner as for the natural minor scale. However, certain changes are needed to distinguish between the two minor scales. In the relative **harmonic minor**, you have to raise the seventh (VII) degree of the scale by a semitone.

54. As in a previous example, the relative minor of C major is A minor. To have an A harmonic minor scale, you raise the seventh (VII) degree by one semitone.

A harmonic minor:

Note: *If the seventh degree is already flat, you have to cancel the alteration so the distance remains a semitone apart. If, on the other hand, the seventh degree is sharpened, you have to alter the alteration with a double sharp to maintain the distance of the semitone.*

55. In summary, here is a comparison of the three scales that you have studied. All the scales have C as their tonic.

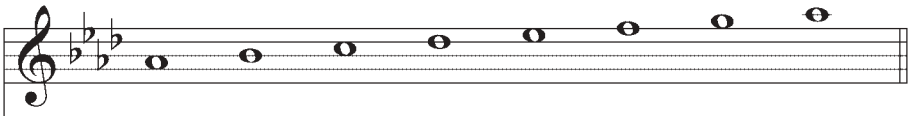


A) What degree of the major scale do you use to find its relative minor?

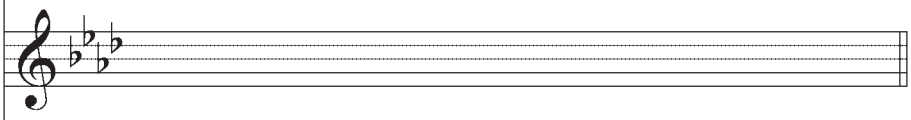
_____

B) Find the relative minor scale of the following major scales.

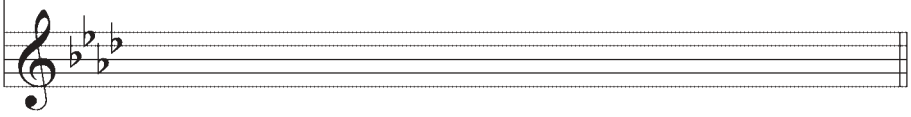
1) major scale



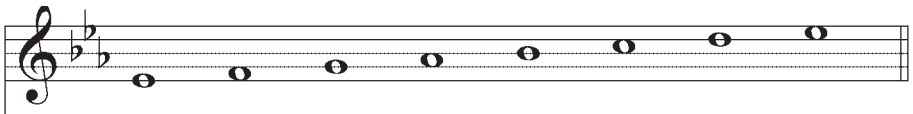
natural minor scale



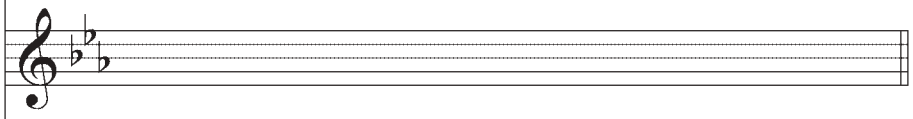
harmonic scale



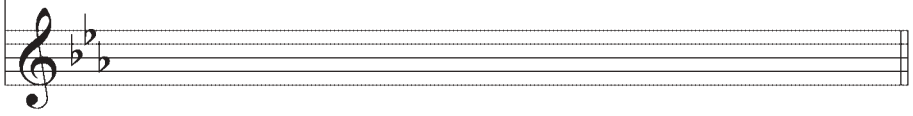
2) major scale



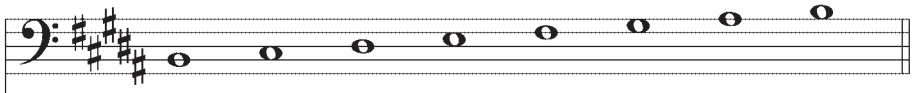
natural minor scale



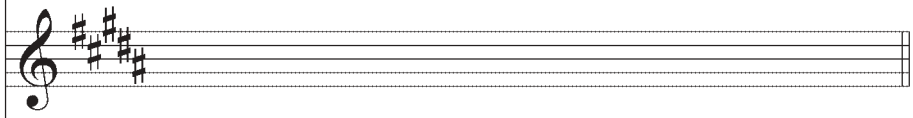
harmonic scale



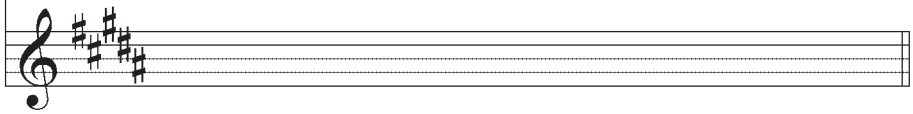
3) major scale



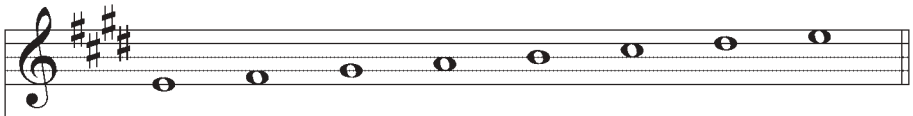
natural minor scale



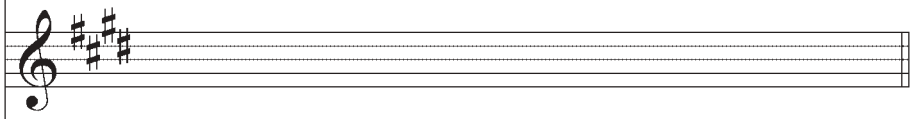
harmonic scale



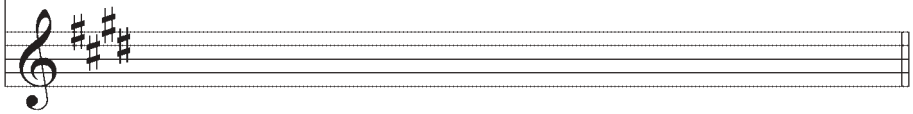
4) major scale



natural minor scale

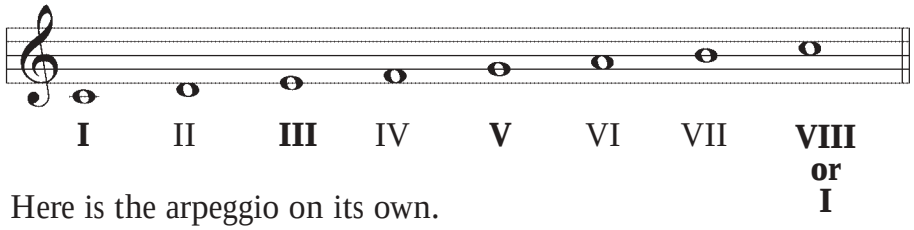


harmonic scale

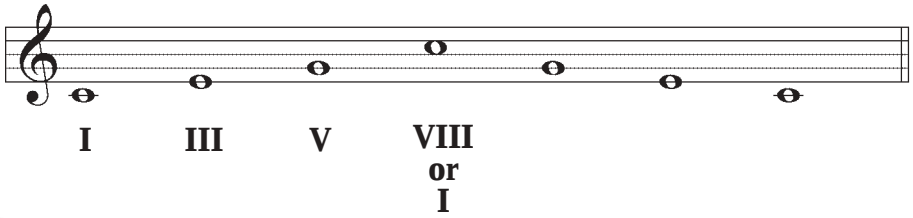


56. An arpeggio is always composed with three degrees from the scale: I, III, V, and adding the VIII or I at the octave.

Here are the degrees associated with an arpeggio of a scale (C Major)



Here is the arpeggio on its own.



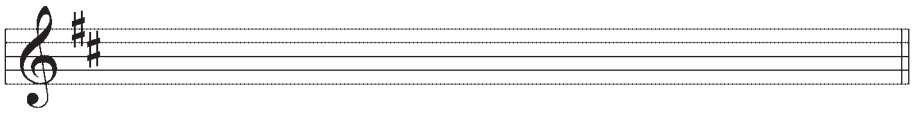
57. You can do the same thing to find the arpeggios of all the major and minor scales.

A) What degrees do you use to build an arpeggio?

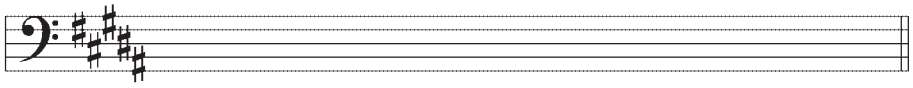
_____ _____ _____ _____

B) Place the notes of the arpeggio on the staff that belong to the following scales:

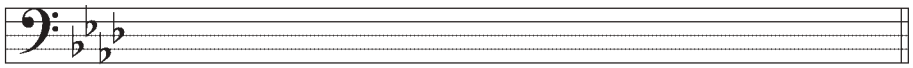
1) D Major



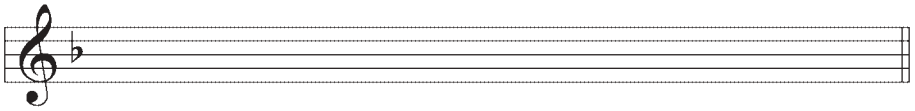
2) B Major



3) A^{b} Major



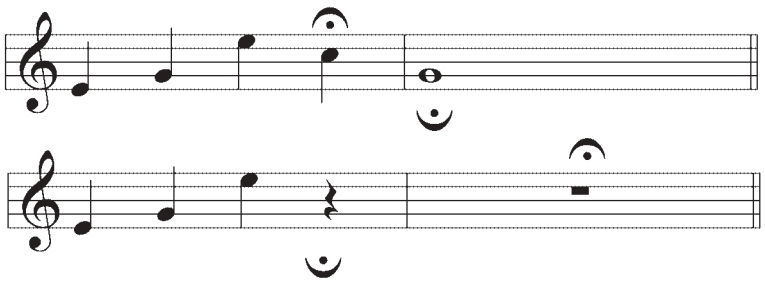
4) D Minor



The Fermata

58. The **fermata** indicates a pause. The **note** or **rest** is to be held longer than its normal value. The symbol is placed above or below the note or rest. The pause is at the discretion of the conductor as long as it suits the style and period of the music. The pause is illustrated by the following sign:

THE FERMATA



Words that Refer to Tempo and Variation in Tempo

59. Throughout your musical training, you will have to recognize and understand Italian terms that you will frequently find in your musical pieces. These terms are the composer's way of expressing the interpretation of the musical piece. Certain words correspond to tempo, variations in tempo, dynamics, direction, etc.

60. Tempo is an Italian word meaning "rate of speed". Tempo marks let us know how fast or slow a piece should be played. Tempo marks are written in Italian.

Italian	English
Largo	very slow
Lento	slow
Adagio	at ease (not as slow as largo, but slower than andante)
Andante	moving along, flowing
Moderato	moderately
Allegro	lively, cheerfully
Vivace	fast, quickly
Presto	quick

61. Moderato may be combined with other words:

Allegro moderato – slightly slower than allegro, but quicker than moderato

A gradual change in Tempo

Italian	Term	English
ritardando	rit. or ritard.	gradually getting slower, holding back of tempo
accelerando	accel.	accelerating, getting quicker
a tempo	a tempo	resume original speed/tempo

62. To reduce the amount of music required for a piece of music, several Italian terms and symbols are used to give direction to the players. Much like repeat signs or first and second endings, these are alternate ways to indicate repeats.

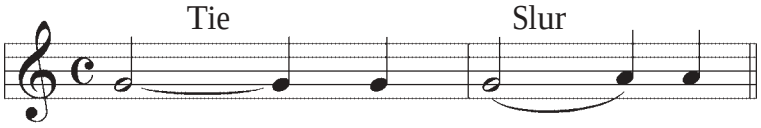
Italian	Sign	English
Da capo	D.C.	repeat from the beginning
Dal Segno	D.S.	repeat from the sign 𝄋
Fine	fine	the end
Coda*	P	an added ending

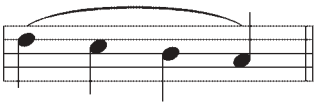
* *When the coda sign appears in music, it means to skip directly to the coda, which is an added ending usually marked with the same word.*

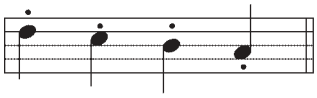
63. There are various ways to articulate the notes you find in a musical piece. It is very important to understand and know each articulation because through them, the composer's thoughts are expressed. Below are the articulations you should be familiar with:

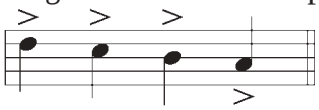
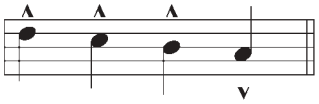
Tie — joins two notes of the same pitch

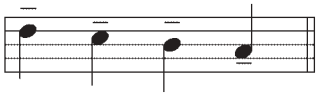
Slur — joins two or more notes of different pitch. The notes within the slur all belong to one phrase and are played in legato style. Only the first note is articulated.



Legato — the notes are played smoothly; usually a slur joins the notes so there is no pause between notes.

Staccato — short, detached, method of playing a note. Indicated by a dot over a note, so that it is shortened and thus detached from the previous notes by being held for less than its full value.



Accent — to give notes more emphasis, held for its full value

Marcato — a strong accent but short; each note is emphasized

Tenuto — the note is sustained with a light accent to its full value.

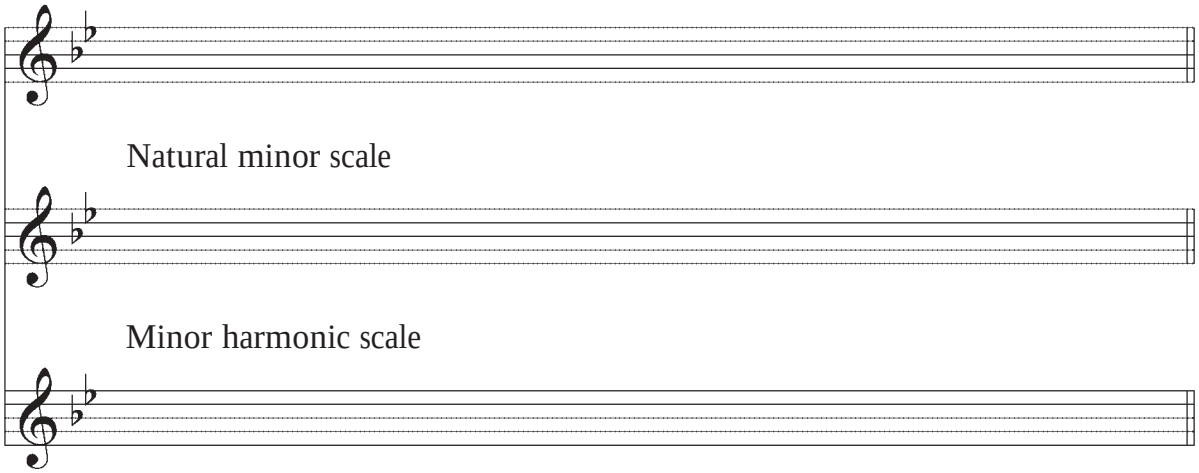


A) Match the word to the meaning.

Tie	Joins two or more notes of different pitch. The notes within the slur all belong to one phrase and are played in legato style. The first note of the slur is the only one articulated
Tenuto	A strong accent but short.
Marcato	Begins with a stong accent and diminishes. It is held for its full time value.
Legato	The note is sustained with a light accent. The same intensity applies for the full value of the note.
Staccato	Short, detatched. The note is usually held for about half its value.
Accent	Joins two notes of the same pitch and prolongs it.

A. Write the major scale, the natural minor scale and the minor harmonic scale with the following key signatures. Circle the notes of the arpeggio for each scale.

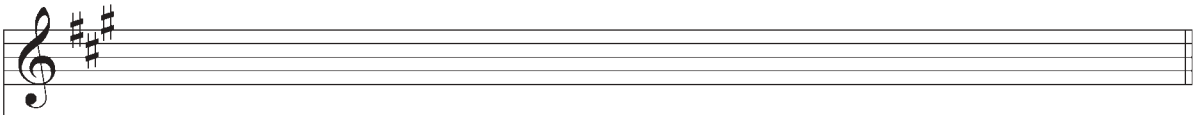
1) Major scale



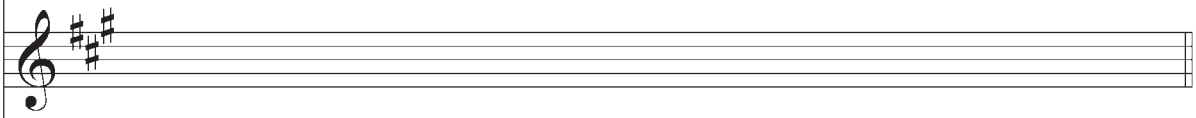
Natural minor scale

Minor harmonic scale

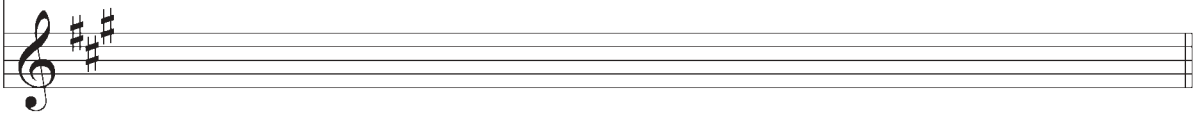
2) Major scale



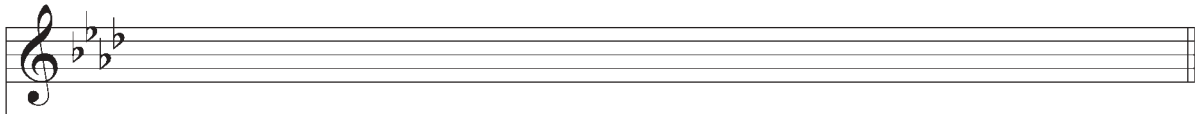
Natural minor scale



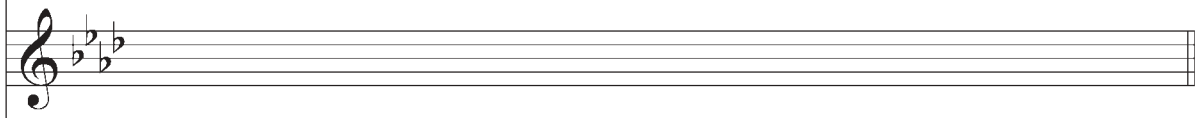
Minor harmonic scale



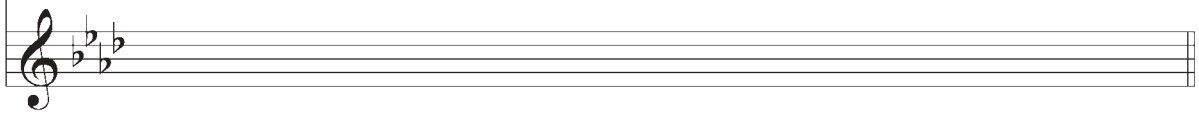
3) Major scale



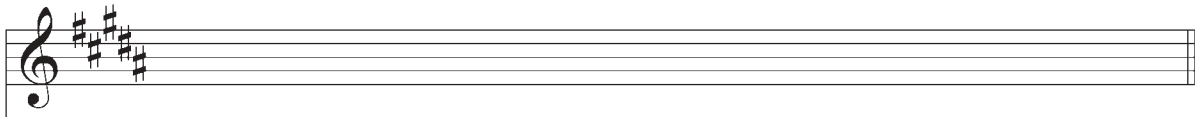
Natural minor scale



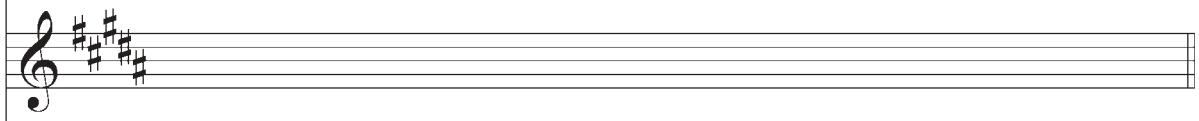
Minor harmonic scale



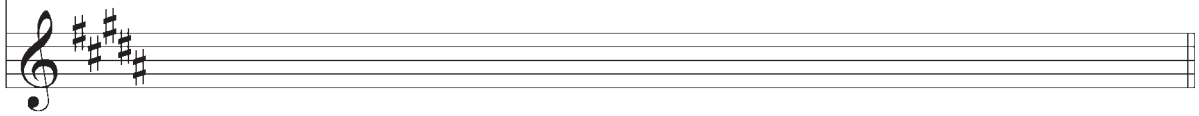
4) Major scale



Natural minor scale

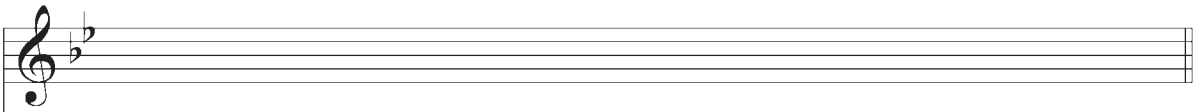


Minor harmonic scale

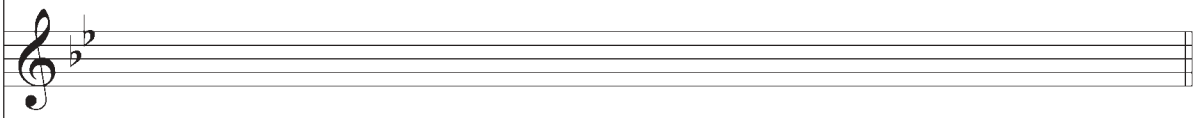


Note: *Do not forget to place the alterations in the proper order.*

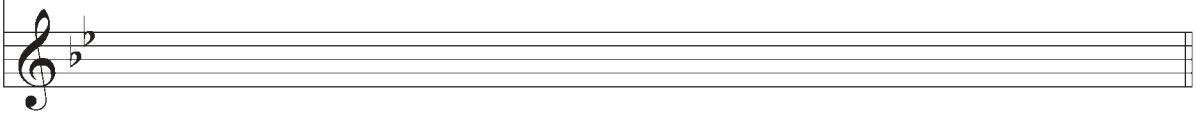
4) Major scale



Natural minor scale



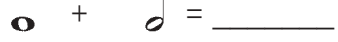
Minor harmonic scale

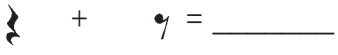


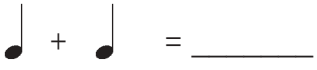
B) Explain the function of the dot added to a note or rest?

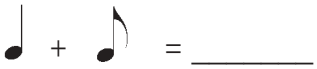
_____

C) Complete the following examples by using one note or rest:

1)  = _____

2)  = _____

3)  = _____

4)  = _____

D) What you call the smallest distance between two notes? _____

E) How does a sharp modify a note? _____

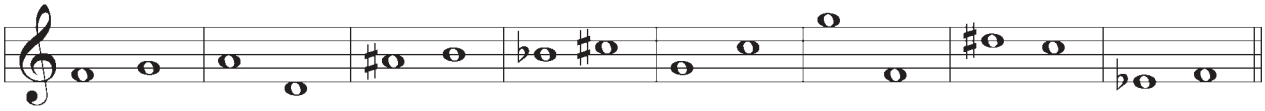
F) What is the natural sign (♮) used for?

_____

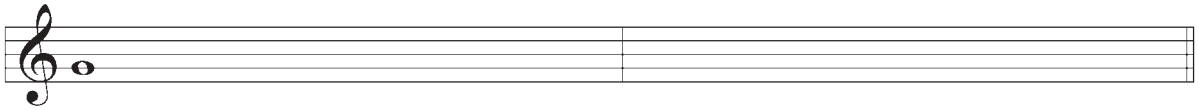
G) How does a flat modify a note? _____

H) Which alteration raises a note by one tone? _____

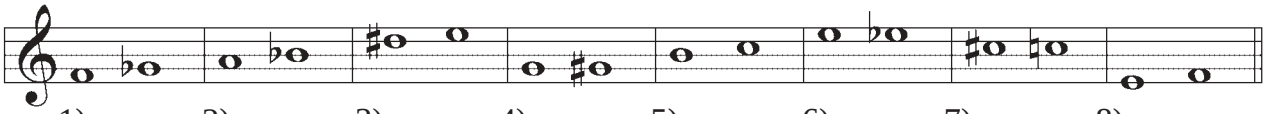
I) What do you call the alteration that appears in the musical piece? _____

J) Identify the different kinds of movements (scale or leap) in the following examples: (s = scale, l = leap)

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

K) Write the chromatic scale of G (ascending and descending):

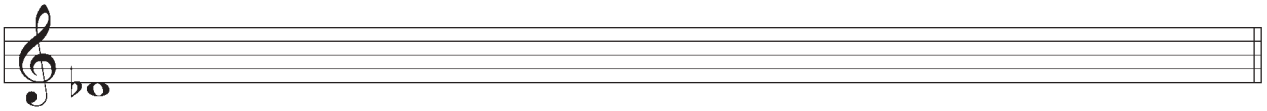


L) Identify the following semitones (diatonic or chromatic):



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

M) Write the major scale of D^{b} and indicate the tones and semitones (refer to the tetrachords):



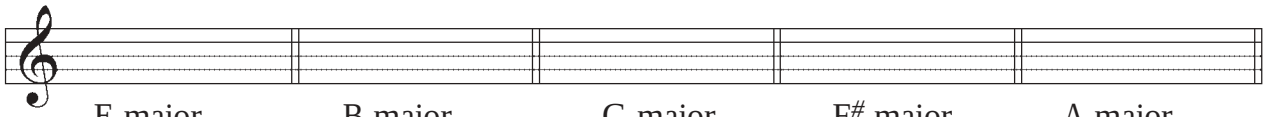
N) What is the order of sharps?

____ ____ _____ _____ _____ _____ ____

O) What is the order of flats?

_____ _____ _____ _____ _____ _____ ____

P) Write the correct key signature of the following major scales:



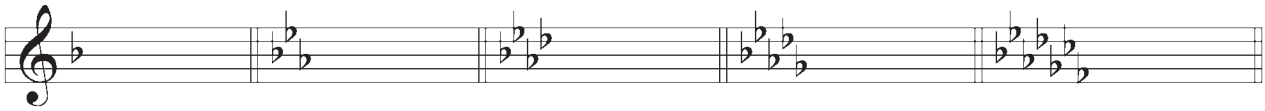
E major B major G major F# major A major

Q) What do you do to find the number of flats that belong to a major scale? (Use the circle of fifths.)

_____

_____

R) Find the major key that belong to the following key signatures:



1) _____ 2) _____ 3) _____ 4) _____ 5) _____

S) Explain the use of the fermata?

_____

_____

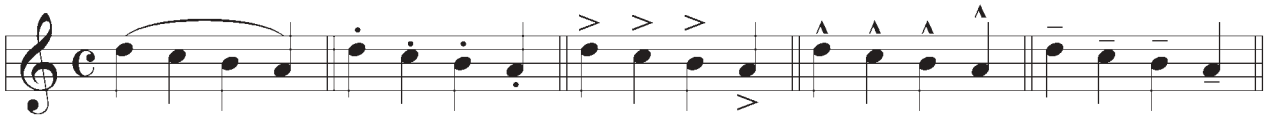
_____

T) Write the meaning of the following terms:

A tempo _____ Allegro _____

Vivace _____ Lento _____

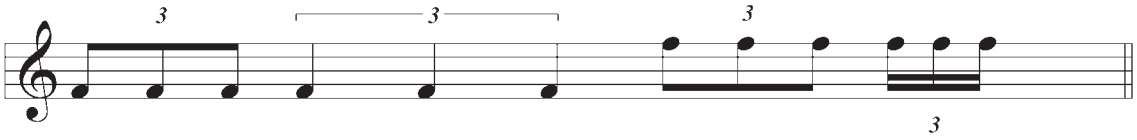
Moderato _____ Ritardando _____

U) Write the correct term that describes the following articulations:

1) _____ 2) _____ 3) _____ 4) _____ 5) _____

Notes

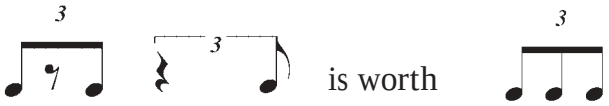
The Triplet

1. When three notes are grouped together with a figure "3" above or below the notes, the group is called a triplet. A triplet is meant to be played in the time of two notes of the same value. They are most frequently found in simple time.



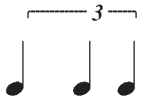
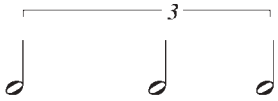
Note: *The most common triplets are those that consist of quarter, eighth, and sixteenth notes.*

2. Rests can also be part of a triplet. Its value represents the note it is replacing.

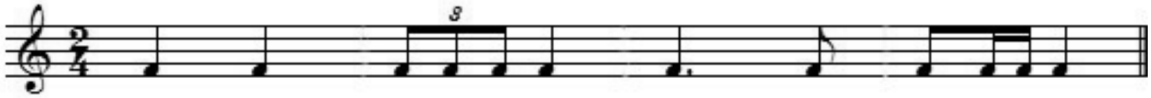
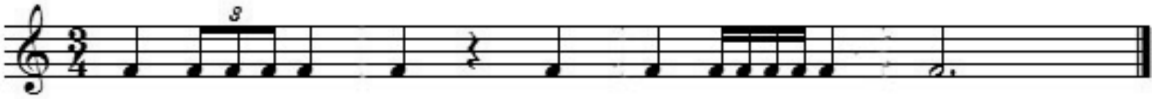
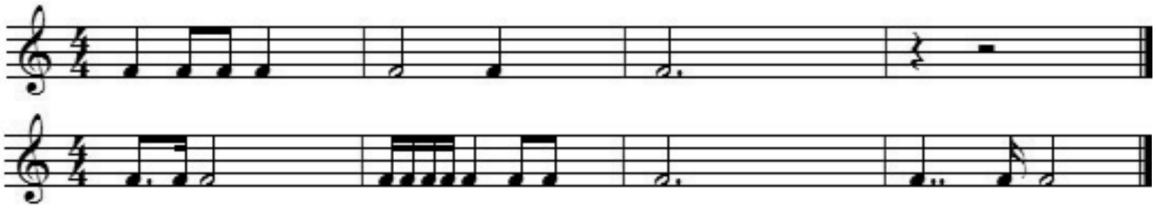


A) Indicate with one note the equivalent of the following triplets:

1) = _____

2) = _____

3)  = _____

B) Add bar lines to make complete measures according to time signature indicated.

1)

2)

C) Add triplets to complete each bar.

Compound Time Signatures

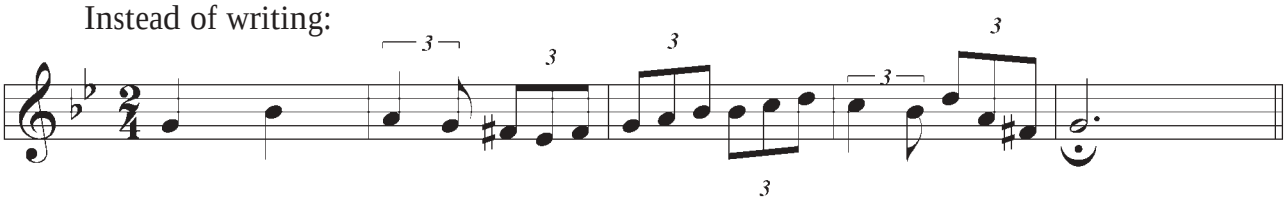
3. There are two categories of time signatures – SIMPLE and COMPOUND. Compound time is divided into the same three groups as simple time, called COMPOUND DOUBLE (meaning two), COMPOUND TRIPLE (meaning three), and COMPOUND QUADRUPLE (meaning four).

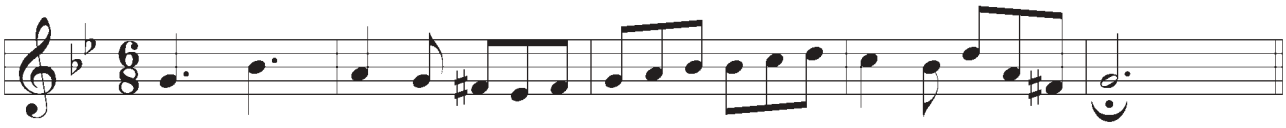
4. In compound time, notes are grouped in a three beat pattern called pulses.

Note: *While the term pulse is normally used to refer to a beat, for the purpose of explaining compound time clearly, the word "pulse" here refers to a DIVISION of the beat and not the beat itself. (For example in 6/8 time, each eighth note is a pulse).*

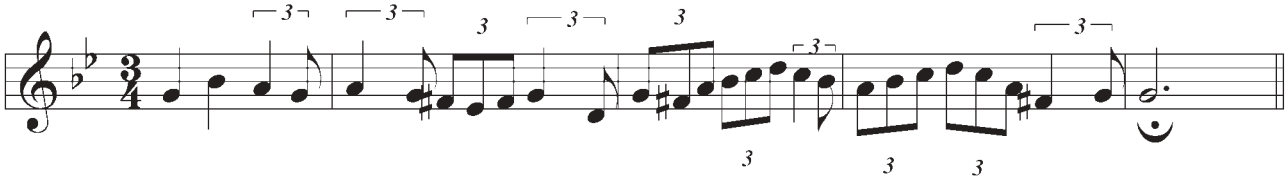
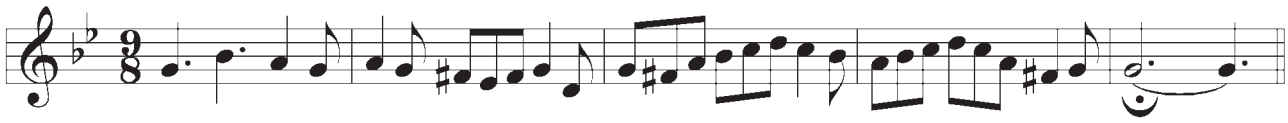
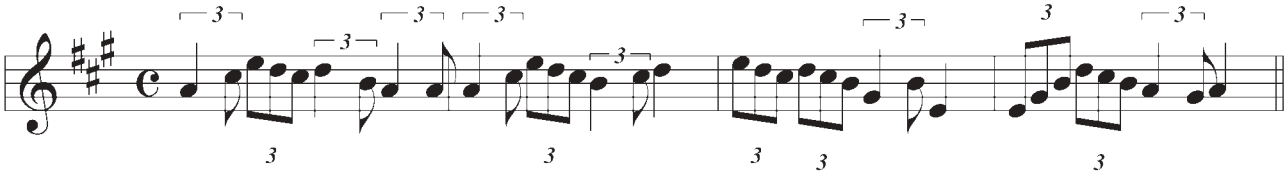
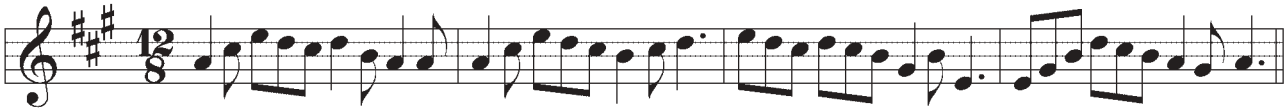
5. In 2/4 time, there are two beats or pulses in a bar, and in 6/8 time, there are six beats or pulses (that is, two groups of three beats) in a bar. As in simple time, notes and rests in compound time are grouped so as to make the divisions of the beats as clear as possible. All the notes belonging to one beat are grouped together. Notes in compound time are usually in the form of dotted notes.

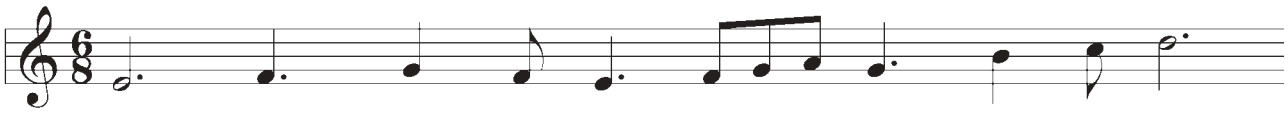
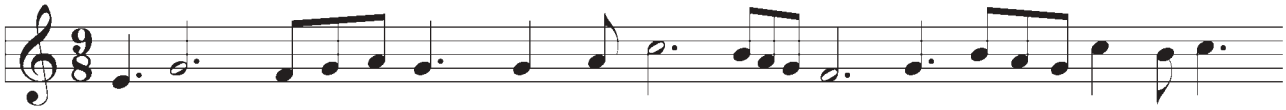
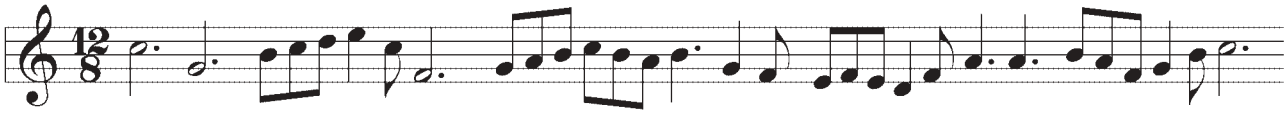
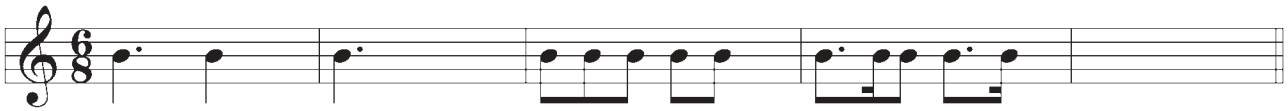
Instead of writing:



We write:

In referring to the previous examples, you can see that the complicated rhythms found in the simple time are simplified in the compound time.

6. The following are examples comparing simple to compound time:

Three beat time

Replaced by:

Four beat time

Replaced by:

A) Indicate the bar lines in reference to the time signature:

1)

2)

3)

B) Complete the following measures with a note or a rest.

7. In Level One, you studied that a scale is an alphabetical arrangement of eight notes beginning and ending with the same note; e.g C-C, D-D, etc. Each note has a function, "a degree", in a scale and can be given its own technical name regardless of where it is written or played.

Degree	Function
I	Tonic
II	Supertonic
III	Mediant
IV	Subdominant
V	Dominant
VI	Submediant
VII	Leading note
VIII	Octave or tonic

8. The notes or degrees of a scale are numbered in Roman Numerals based on their particular function.

9. Of all the degrees in a scale, some have more important functions than others:

a) **Tonic** (I). The most important note of any scale is the tonic because it gives its name to the key. It is both the lowest and highest tone of the scale.

b) **Dominant** (V). The dominant is also an important degree. The word comes from the Latin "dominus" meaning master. The chord built on the dominant is so strong that it masters the key.

c) **Mediant** (III). The mediant is also an important degree. It is the middle note between the tonic and the dominant and it determines whether or not the scale is major or minor.

d) **Leading Note** (VII). The seventh degree, otherwise known as the leading note, is also necessary in order to identify the key. It is always a semitone below the tonic and leads directly to it. (The seventh scale degree is referred to as **subtonic only** when the distance between it and the tonic is a tone apart).

e) The names of the other degrees are based on where they are placed in the scale and are secondary to the primary degrees mentioned above.

EXERCISES

A) Match each degree with its technical name:

I	Mediant
II	Subdominant
III	Supertonic
IV	Tonic
V	Leading note
VI	Octave or tonic
VII	Superdominant
VIII	Dominant

B) Why is the seventh degree (VII) called the leading note?

_____

_____

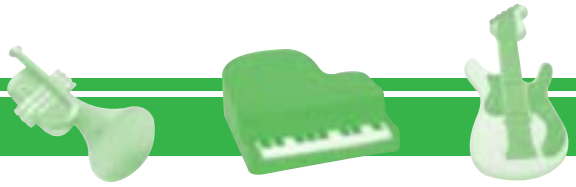
_____

C) Why is the mediant's role important in a scale?

_____

_____

_____



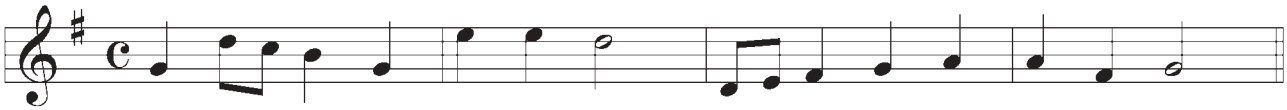
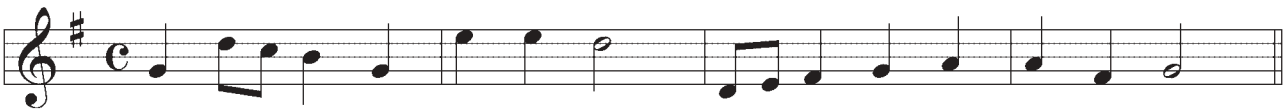
To Find the Key of a Given Melody

10. Each musical piece is written in a key. This key is determined by what is found in the key signature. Each key is determined by a grouping of sharps or flats written at the beginning of the musical piece. This key signature makes it unnecessary to write repeated accidentals throughout the music.

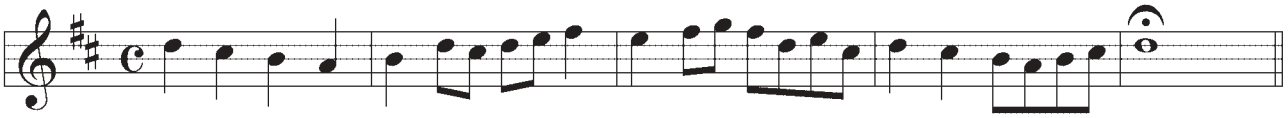
11. Given the key signature and a melody, the music may be written in either the major or minor key.

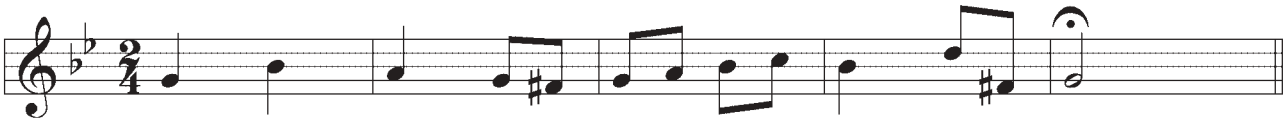
12. Apart from the key signature, there are other reference points that could help in determining the key of a musical piece. Firstly, the last note of the piece is usually the tonic of the key used. Secondly, a melody in a minor key will usually contain an accidental beside the raised seventh.

ATTENTION: *Do not forget that this note is altered a semitone higher than what is normally found in the major scale.*

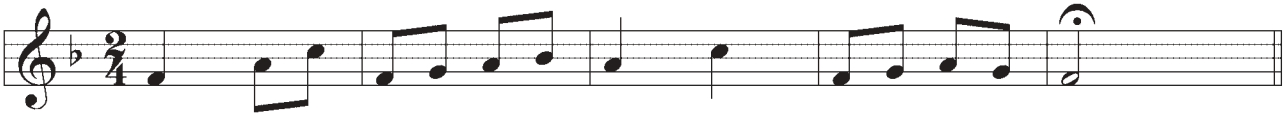
Let's observe the following excerpts:

The first melody has no accidentals except those which belong to the diatonic major scale of G. It also ends on the tonic.

In the second melody, not only do we find the key signature of one sharp, but we find a D# which is the leading note of E minor. This melody also ends on the tonic.

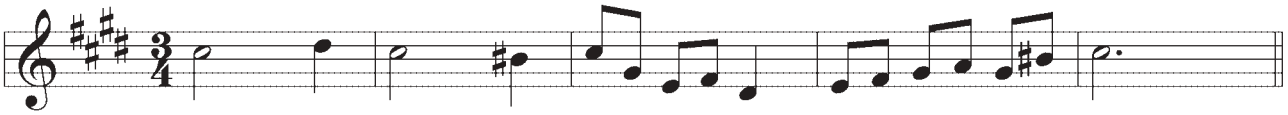
A) State the key of each melody:

1)

2)



3)



4)

13. An interval in music is the distance in pitch between two notes.

14. The size of an interval is measured by the number of letter names contained in the interval including both the bottom and top notes. Accidentals are not included when counting the numerical distance between the notes. The accidentals will only determine the nature of the interval which will be discussed in the coming levels.

Note: *An interval is always calculated from bottom to top with the lower note counted as 1. An interval that passes an octave is considered compound.*

Two notes or more of the same sound is called **unison**.

A **second** (2nd) is an interval composed of two degrees

A **third** (3rd) is an interval composed of three degrees

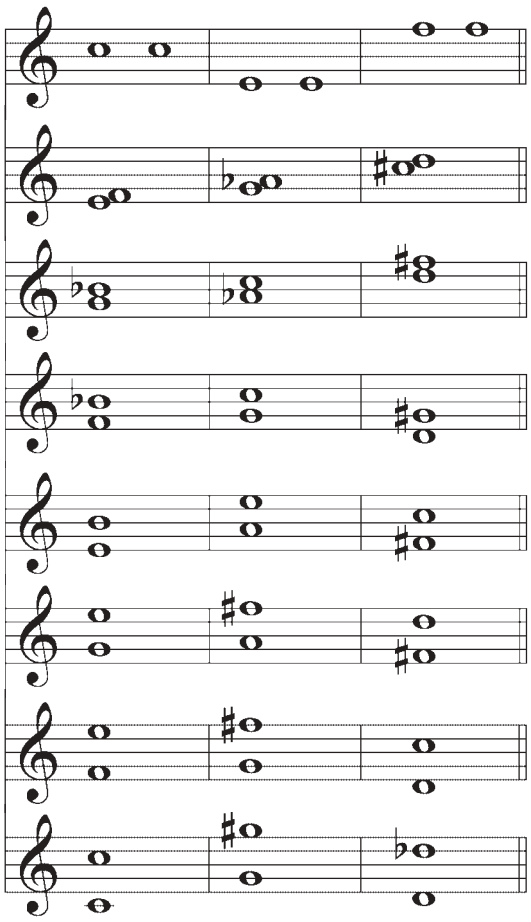
A **fourth** (4th) is an interval composed of four degrees

A **fifth** (5th) is an interval composed of five degrees

A **sixth** (6th) is an interval composed of six degrees

A **seventh** (7th) is an interval composed of seven degrees

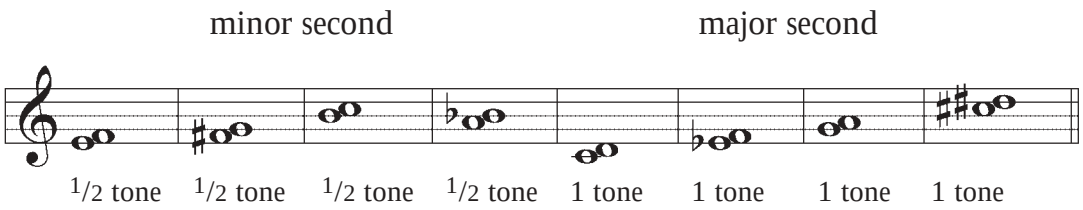
An **octave** (8ve) is an interval composed of eight degrees



14. It is obvious that as well as finding the SIZE of the interval, you must also find the QUALITY of the interval whether it be major, minor, perfect, augmented, or diminished.

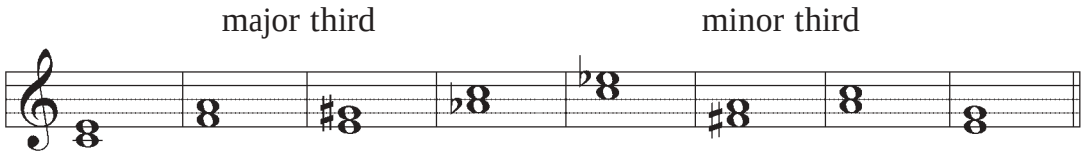
Intervals of Seconds and Thirds

15. A second can generally be major or minor. A second is rarely diminished or augmented. A major second is always composed of a distance of one tone between two notes. On the other hand, the distance of a minor second is composed of only one diatonic semitone.



Note: *Consider all intervals as if the lowest note is the tonic of the major scale*

16. A third can generally be major or minor. For it to be major the distance is one tome and a half. For easier calculation, refer to the lower note of the interval as your tonic. If the highest note is the mediant of the major scale, then the interval is a major third. The same procedure applies if it is a minor third.

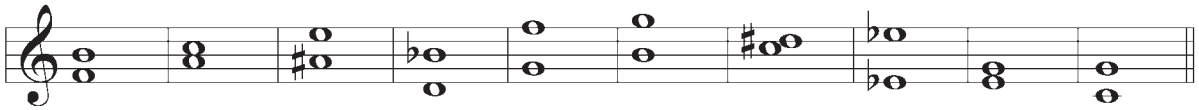


Corresponds to the key of:

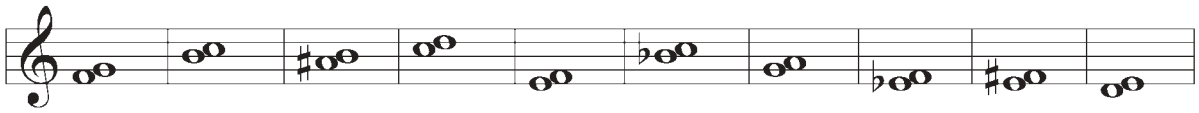
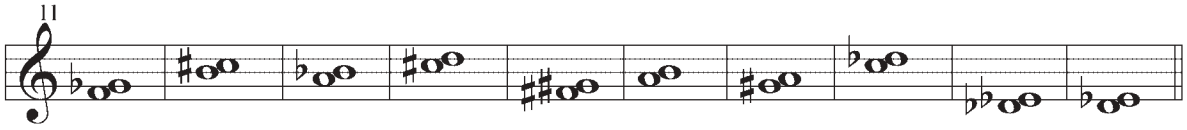
C major | F major | E major | A^{b} major | C minor | $F^{\#}$ minor | A minor | E minor

Note: *As previously mentioned, the quality of the third determines the major or minor mode.*

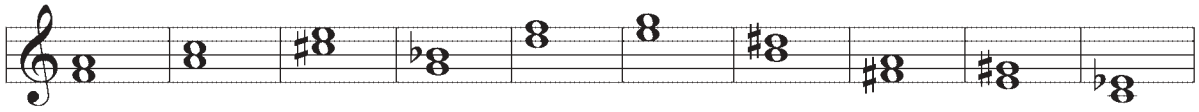
A) Name the following intervals (2nd, 3rd, etc.)

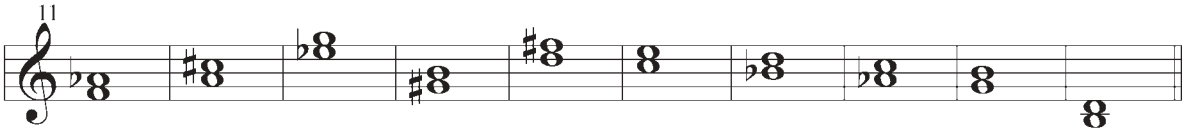


1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____ 9 ____ 10 ____

B) Name the following intervals (M - major, m - minor)

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

11 ____ 12 ____ 13 ____ 14 ____ 15 ____ 16 ____ 17 ____ 18 ____ 19 ____ 20 ____

C) Name the following thirds (M - major, m - minor)



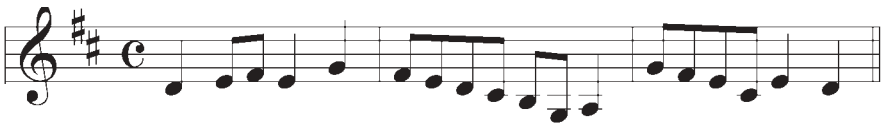
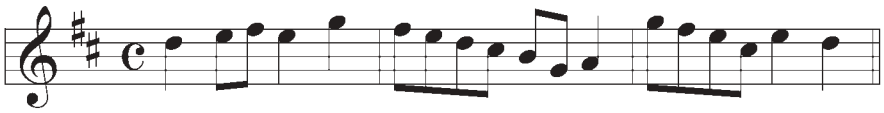
1 ____ 2 ____ 3 ____ 4 ____ 5 ____ 6 ____ 7 ____ 8 ____ 9 ____ 10 ____

11 ____ 12 ____ 13 ____ 14 ____ 15 ____ 16 ____ 17 ____ 18 ____ 19 ____ 20 ____

Transposing a Melody

17. Transposition generally means a change of key. It is often used in songs to accommodate the range of a singers's voice or an instruments's range. The word can also mean a change of clef without necessarily meaning a change of key.

18. At this stage, you will only transpose melodies an octave higher or an octave lower.

19. To transpose an octave higher, you must rewrite the melody where each note is raised by and octave – eighth notes.

Original Melody

Transposed an octave higher

20. When transposing up or down, the following steps should be followed:

1) The clef, key signature, and time signature must always be written correctly.

2) The stems of the notes must be placed in the proper direction.

Note: *The names of the notes must remain identical in the transposition.*

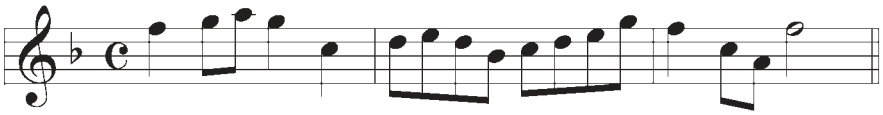
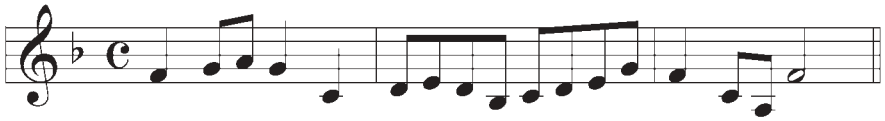
3) The notes of the melody must always be exactly an octave apart.

4) All accidentals and alterations must be written in.

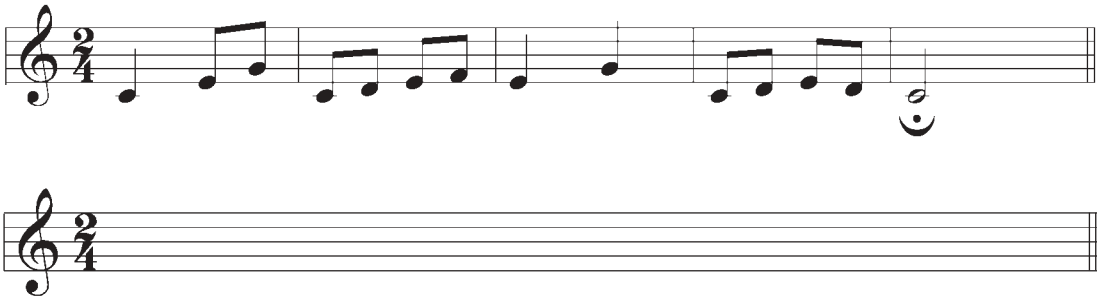
5) The melody remains in the same key.

21. When transposing an octave lower the same procedure follows but each note is lowered by an octave.

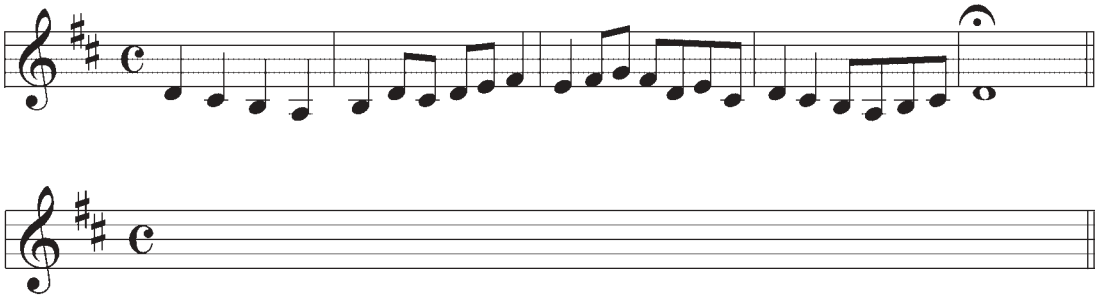
e.g.

Original melody

Transposed an octave lower

A) Transpose the following two melodies an octave higher.

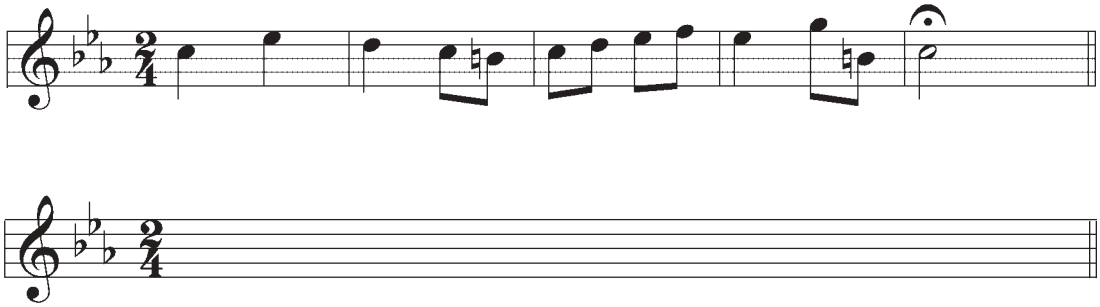
1)



2)



B) Transpose the following melody an octave lower.



A) Write the triplet that corresponds with the note indicated below:

1) 𝅝 = _____ 3) 𝅘𝅥𝅯 = _____

2) 𝅗𝅥 = _____ 4) ♩ = _____

B) What is the technical term of each scale degree:

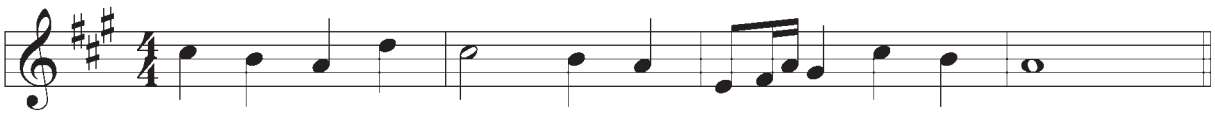
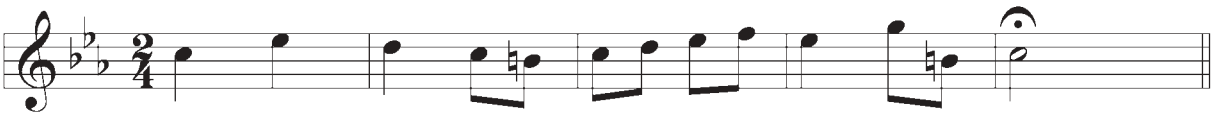
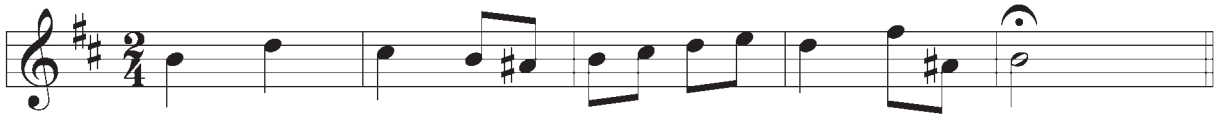
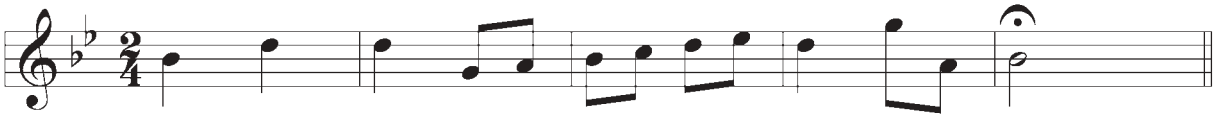
1) VI = _____ 3) III = _____

2) IV = _____ 4) VII = _____

3) I = _____ 6) V = _____

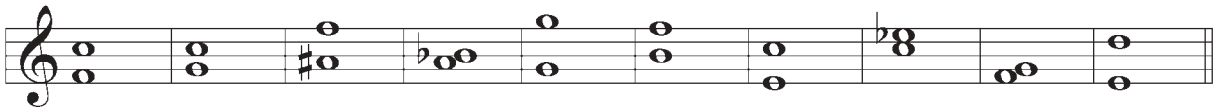
C) Which degree of the scale plays an important role? _____

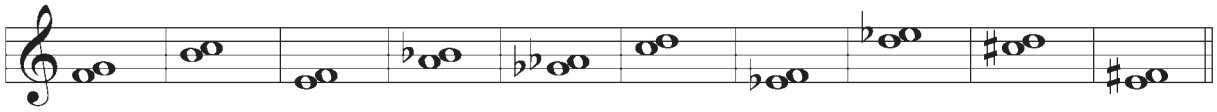
D) Find the two possible keys in the following excerpts. Identify and explain your responses:

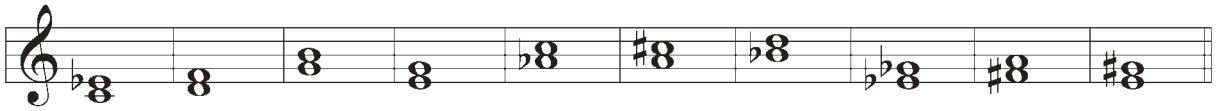
1)

2)

3)

4)

E) Place the number in order (slowest to fastest) the following words of tempo.

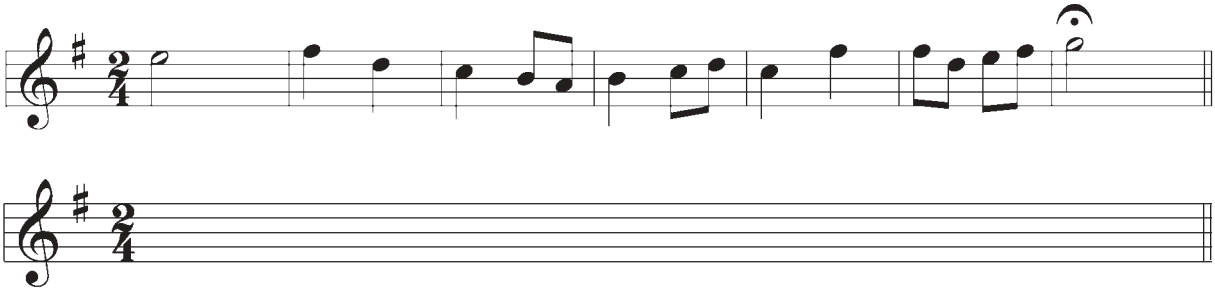
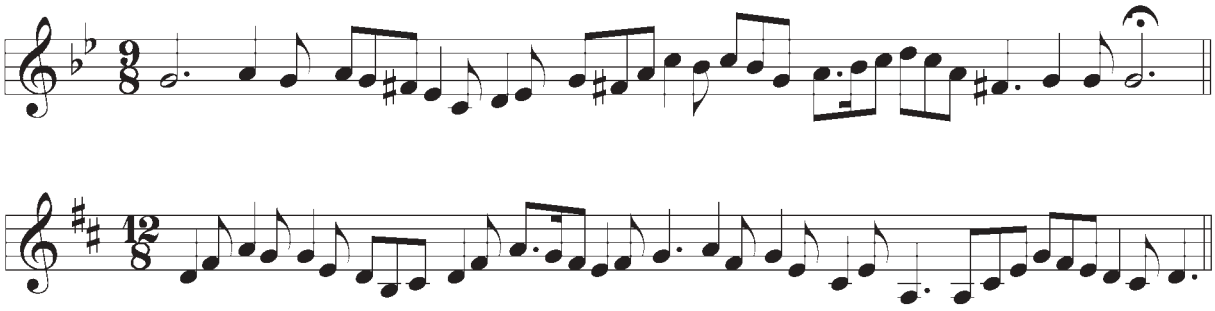
1) presto	6) allegretto
2) allegro	7) adagio
3) lento	8) largo
4) larghetto	9) andante
5) prestissimo	

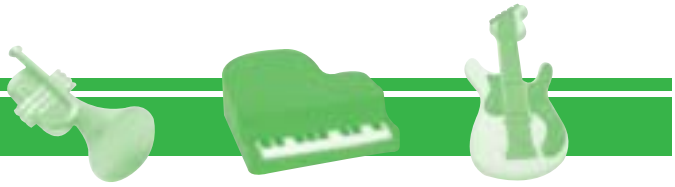
_____ _____ _____ _____ _____ _____ _____ _____ _____

F) Name the following intervals (2nd, 3rd, 4th, etc)

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

G) Identify the following seconds (M - major, or m - minor)

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

H) Identify the following thirds (M - major, or m - minor)

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

I) Transpose the following melody one octave lower:

J) Write the bar lines at the appropriate place:

Notes



Understanding all the Regular Time Signatures

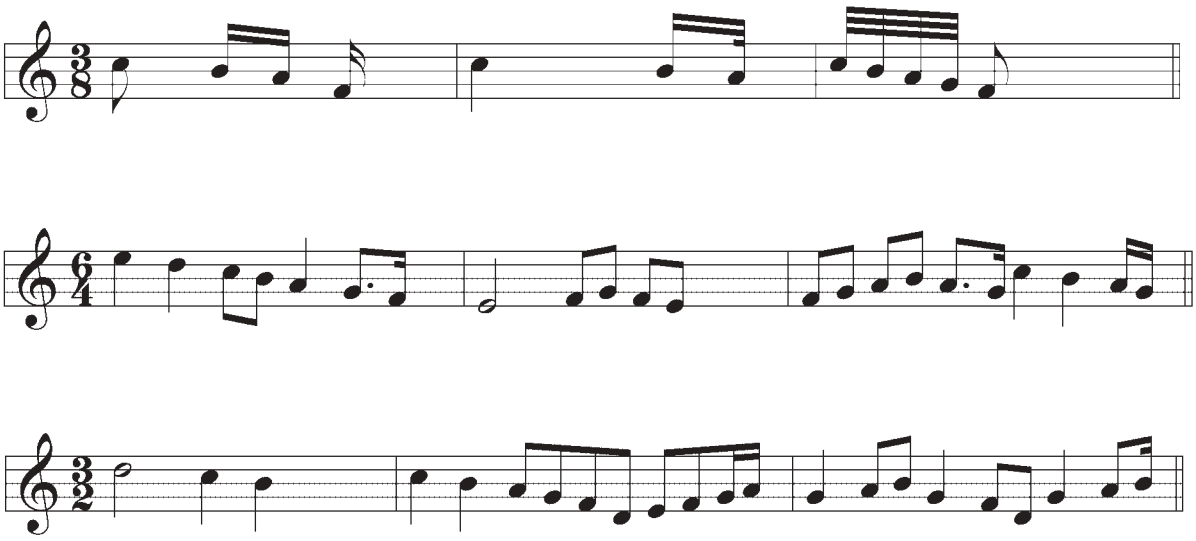
1. In Levels One and Two, you studied time signatures most commonly used. The following chart compares simple and compound time signature.

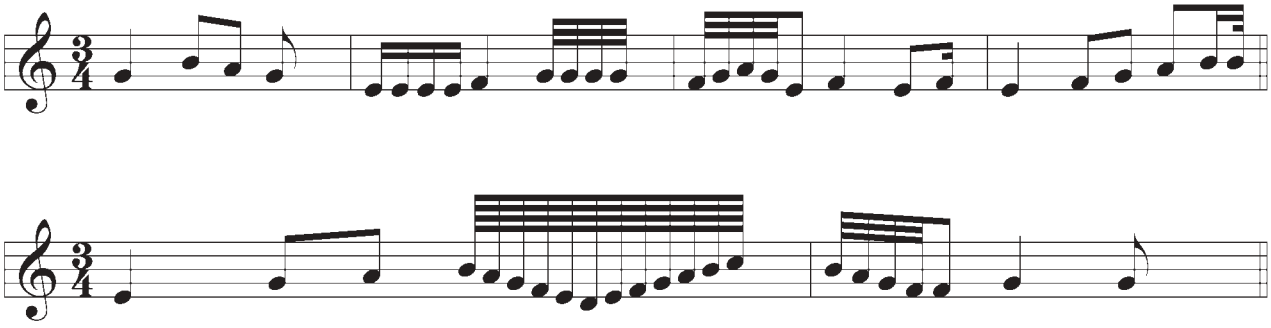
	SIMPLE TIME	COMPOUND TIME
DUPLE (2 beats)	$\frac{2}{2}$ $\frac{2}{4}$ $\frac{2}{8}$	$\frac{6}{4}$ $\frac{6}{8}$ $\frac{6}{16}$
TRIPLE (3 beats)	$\frac{3}{2}$ $\frac{3}{4}$ $\frac{3}{8}$	$\frac{9}{4}$ $\frac{9}{8}$ $\frac{9}{16}$
QUADRUPLE (4 beats)	$\frac{4}{2}$ $\frac{4}{4}$ $\frac{4}{8}$	$\frac{12}{4}$ $\frac{12}{8}$ $\frac{12}{16}$

2. It is very important to understand that in simple measures, the beats are divisible by two, and in compound time, the beats are divisible by three.

3. Observe attentively the time signatures that are less common, for you will surely find them in your musical pieces.

Note: *As in simple time, notes and rests in compound time are grouped so as to make the divisions of the beats as clear as possible. All the notes belonging to one beat are grouped together.*

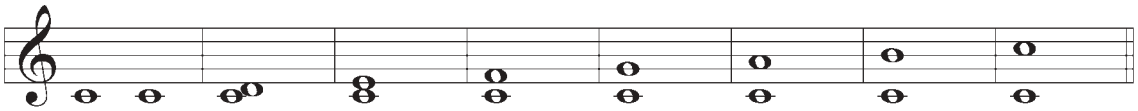
A) Complete the following measures by adding a note or a rest.

B) Complete the following measures by using either the thirty-second note or the sixty-fourth note.



4. As you studied in Level Two, an interval is the distance of pitch between two notes. We also studied the specific names for the size (2nd, 3rd, 4th, etc.) and quality (major, minor) of each interval.

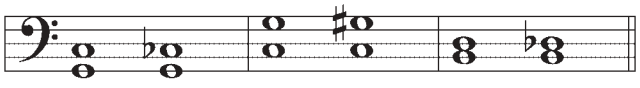
5. Notice that the unison, fourth, fifth, and octave are called PERFECT, but the second, third, sixth, and seventh, can be called MAJOR or MINOR. All intervals are named, as the lower note is, for the moment, the TONIC.

Perfect	Major or Minor
unison	second (2nd)
fourth (4th)	third (3rd)
fifth (5th)	sixth (6th)
octave (8ve)	seventh (7th)

6. To determine the nature of each interval, we can use the major scale as a reference point, because all intervals are perfect or major depending on the type of interval.

Perfect unison | Major second | Major third | Perfect fourth | Perfect fifth | Major sixth | Major seventh | Perfect octave

7. The word AUGMENTED means “made larger”. When a perfect or major interval is made larger by a half step or semitone, it becomes an Augmented Interval.

8. The word DIMINISHED means “made smaller”. When a perfect or minor interval is made smaller by a half step, it becomes a Diminished Interval.

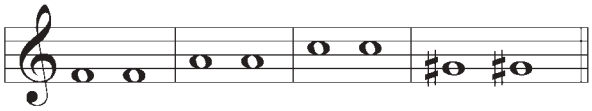


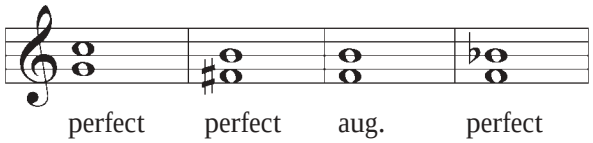
Diminished | Augmented | Diminished

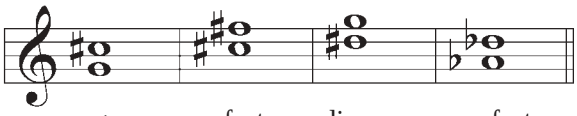
9. To simplify the terms minor, augmented, etc., they can be written as outlined in the chart below. Either method is acceptable but remember to stick to one or you may become confused.

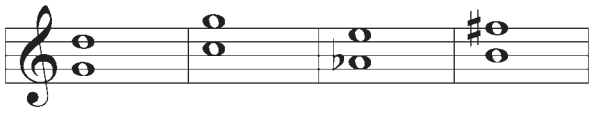
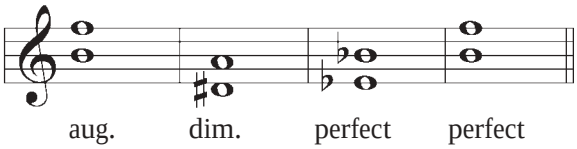
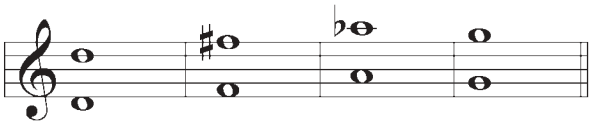
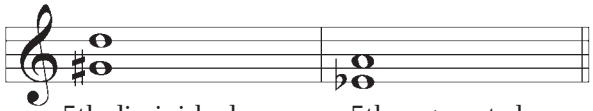
Major	M	+
Minor	m	-
Augmented	aug	x
Diminished	dim	o

10. After having been able to qualify the second and the third intervals in Level Two, you will now learn how each perfect interval is composed (unison, 4th, 5th, 8ve).

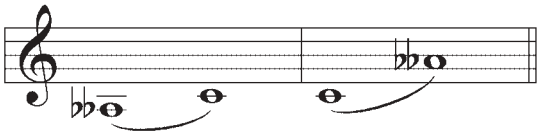
Unison: Two notes or more of the same sound is a Unison.

Fourth: All notes that have the same accidentals (♯ to ♯) are perfect except F and B and their derivatives (F♯ and B♯, etc). To obtain a perfect fourth between these two notes, the interval has to have a F♯ and a B or an F and a B♭. As mentioned above, if the interval is a semitone larger, it becomes augmented. If the interval is a semitone smaller, it becomes diminished (4th = 2½ tones)





Fifth: The same rule applies with this interval as the fourth (5th = 3½ tones)

Octave: If the two notes have the same name and the same accidental, the interval is considered perfect. If the interval is a semitone larger, then it is augmented. If the interval is a semitone smaller, it is diminished.

11. Do not take for granted that once a note is sharp the interval automatically is augmented or if the note is flat, it is automatically diminished. The important factor here is the distance between both notes. Always remember that the bottom note is considered the TONIC. (even without a key signature present). You **must** take into consideration the **key** when calculating your interval.

When an interval is turned upside down, it becomes inverted. You can invert an interval two ways:

1) write the lower note above the upper one, and
2) visa versa.

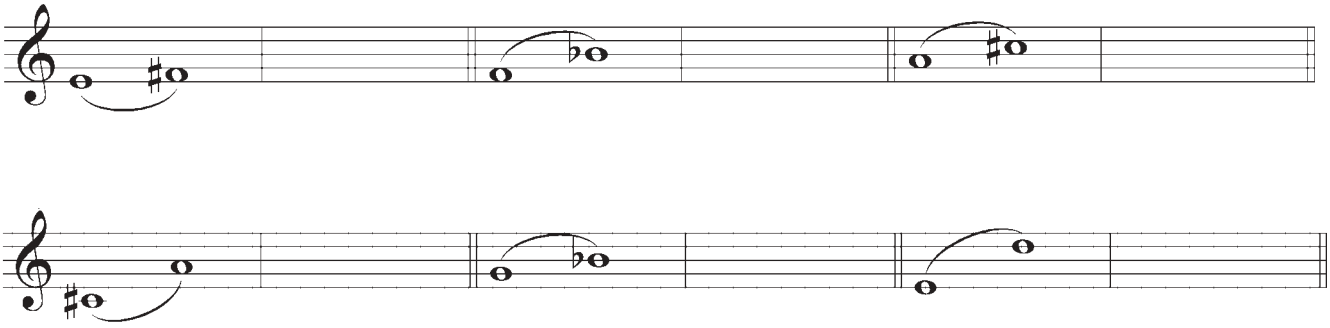


When an interval is inverted:

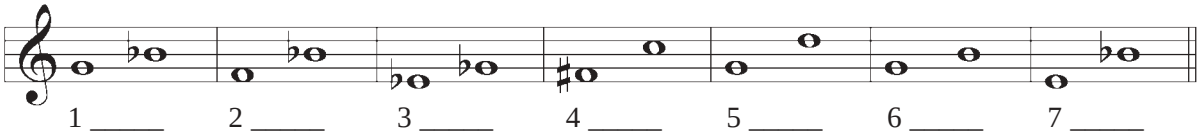
- a major interval becomes minor
- a minor interval becomes major
- an augmented interval becomes diminished
- a diminished interval becomes augmented
- a perfect intervals remain perfect

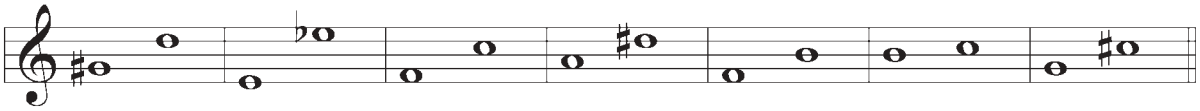
Note: *The number of the interval plus the number of the inversion always add to nine.*

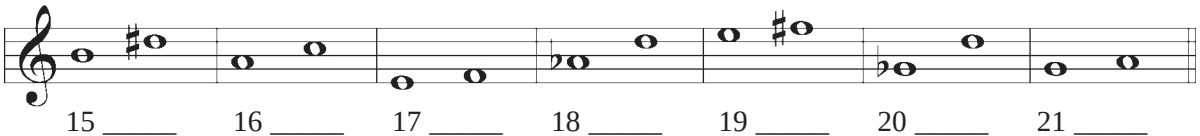
A) Find the complementary interval to complete the octave:



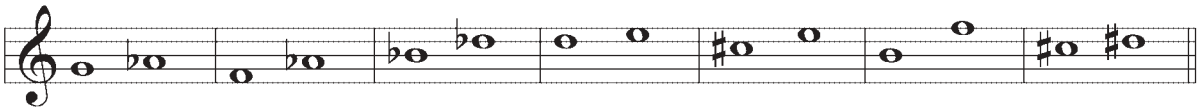
B) Identify and name the following intervals:



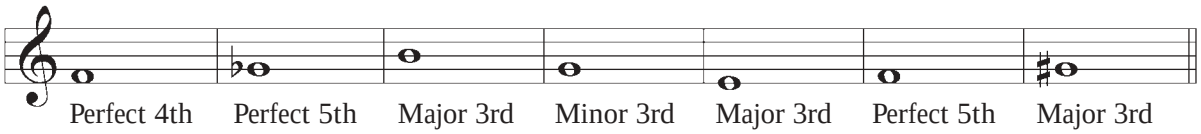
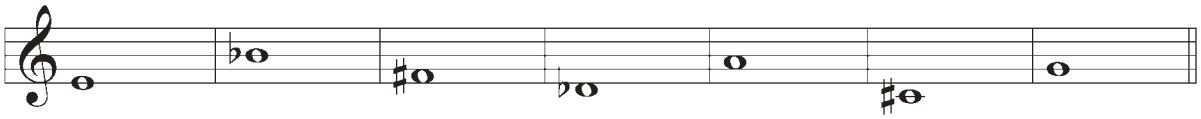
1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

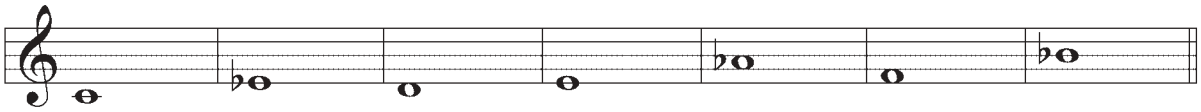


15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____



22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

C) Complete the following intervals:

Perfect 4th Perfect 5th Major 3rd Minor 3rd Major 3rd Perfect 5th Major 3rd

Perfect 8ve Major 3rd Major 2nd Major 3rd Dim. 5th Major 3rd Perfect 8ve

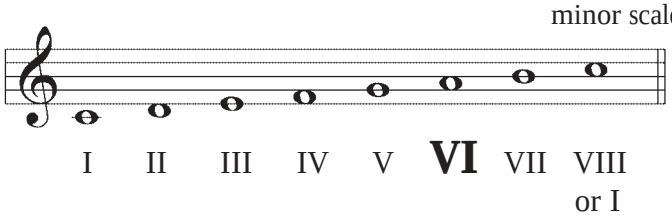


Aug. 4th Major 3rd Minor 3rd Major 2nd Minor 3rd Minor 2nd Perfect 5th

12. In Level One, you learned that the minor scales come in three forms: the natural minor, the harmonic minor, and the melodic minor scales. We have seen the first two scales, now it is time to study the third - the MELODIC MINOR SCALE.

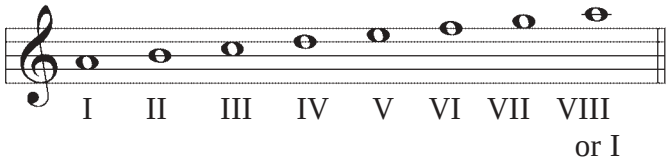
13. You remember that to find the tonic of the relative minor scale, you either take the sixth scale degree of the major scale or take the tonic and move backwards three semitones.

C Major



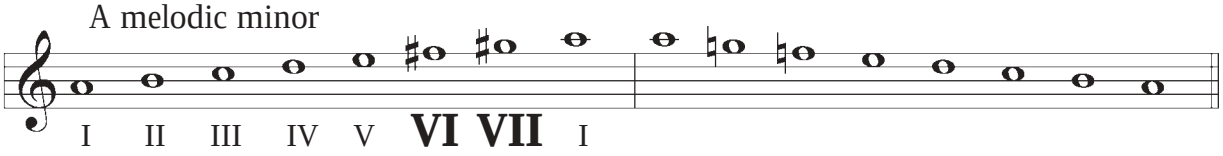
14. Taking this new note as tonic, you create another scale (a series of 8 adjacent notes) and you keep the key signature of the major scale.

A minor



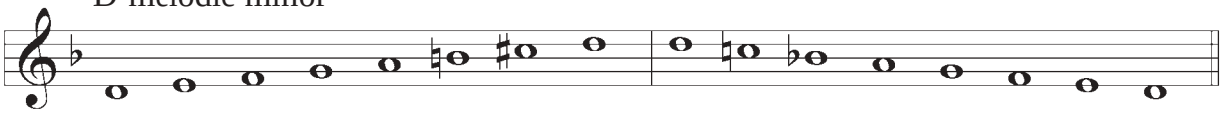
15. To find a melodic minor scale from the natural minor, you have to raise the VI and VII scale degrees a semitone higher when ascending and then lower them a semitone when descending returning them to their natural state according to the key signature.

A melodic minor



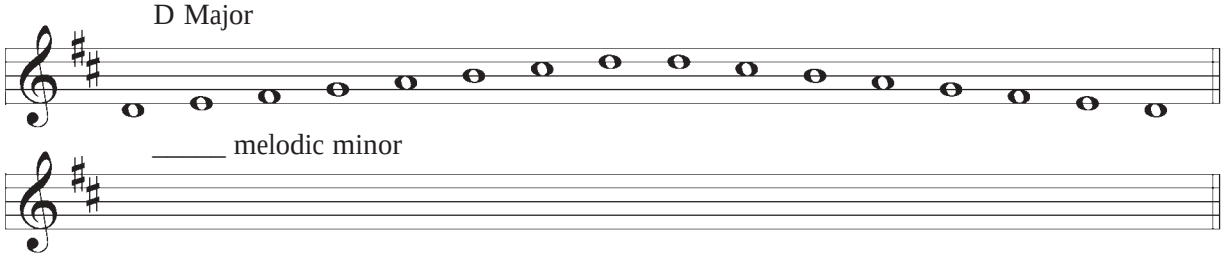
In another key **Relative minor scale of F Major**

D melodic minor



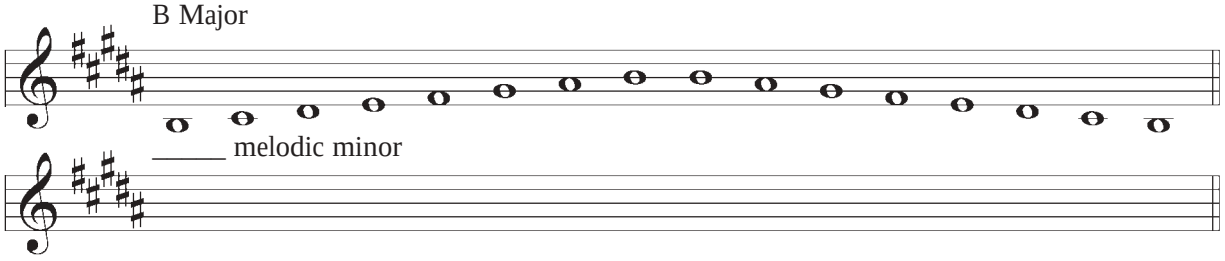
A) Construct the melodic minor scale of the following major scales (ascending and descending).

D Major



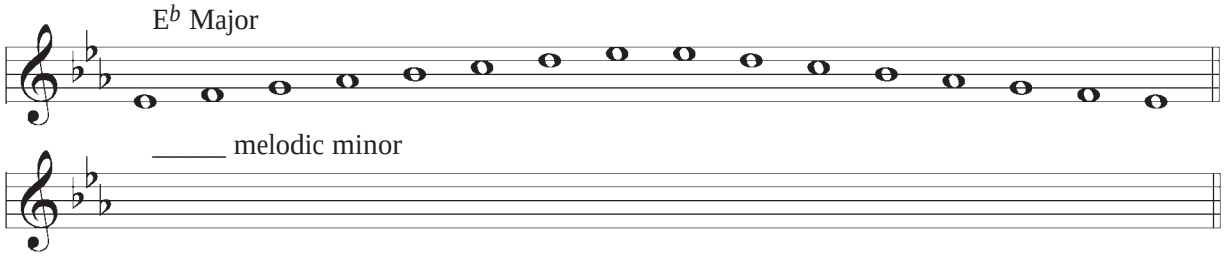
_____ melodic minor

B Major



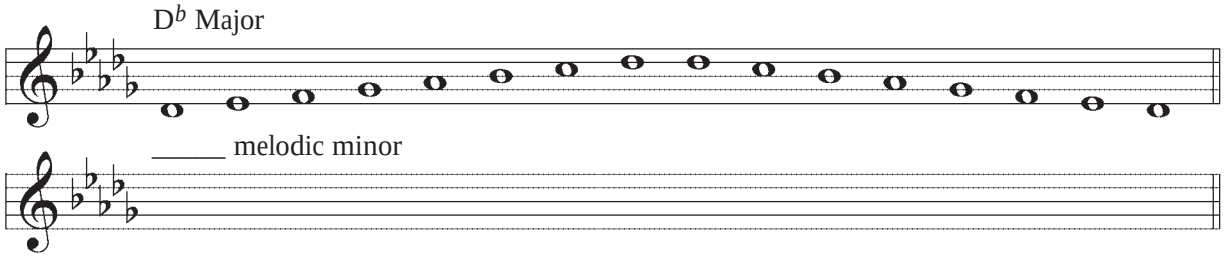
_____ melodic minor

E^{b} Major



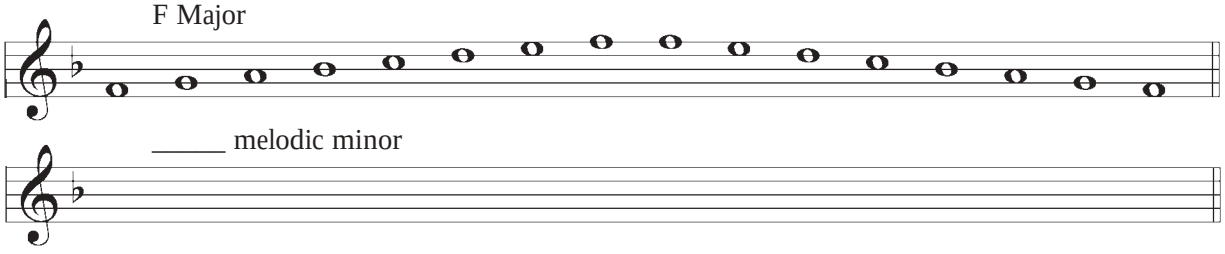
_____ melodic minor

D^{b} Major

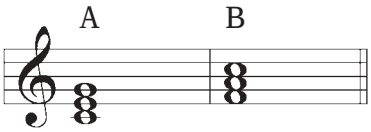


_____ melodic minor

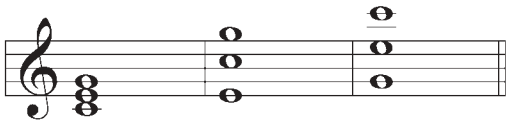
F Major



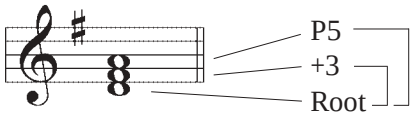
_____ melodic minor

16. A chord is the name given to any three or more notes sounded simultaneously. The most basic chord is a TRIAD, that is, three sounds built up in thirds.

17. These triads may be built on each degree of major and minor scales. The note that they are built on, that is, the lowest note, is called the ROOT (C – of the C major scale) of the triad. The next note is a diatonic third above the root and it is named the THIRD (E), and the third sound is a diatonic fifth above the same root called the FIFTH (G).

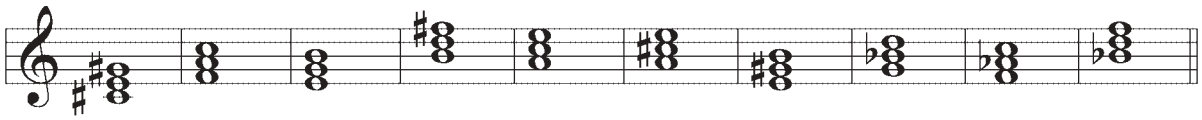
18. No matter how the notes are placed on the staff, the chord remains the same. For example, these three chords (below) all belong to the chord of C major.

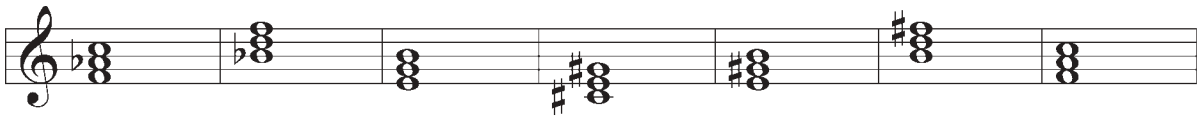
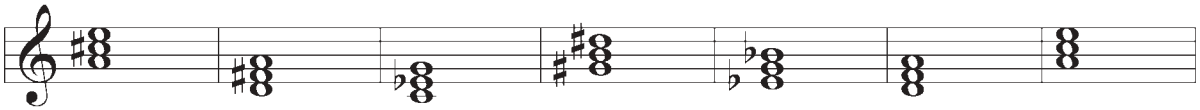
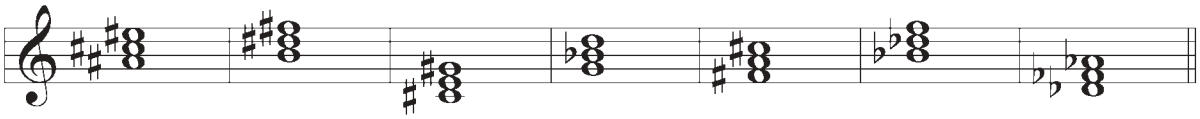


19. A major perfect chord is composed of a root, a major third, and a perfect fifth. A minor chord is composed of a root, a minor third, and a perfect fifth.

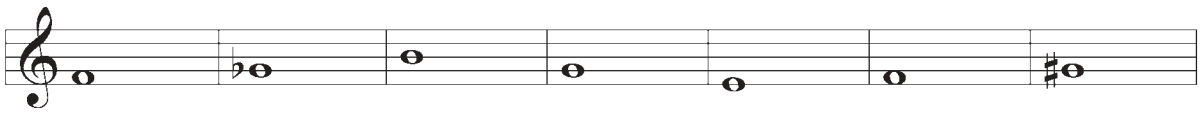


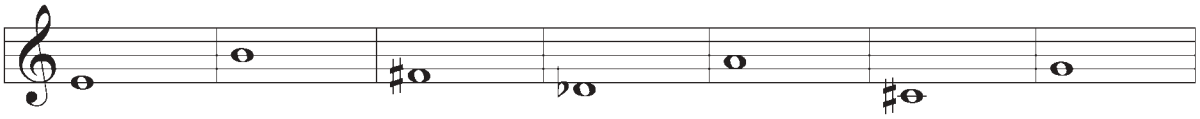
20. You can therefore state that it is the nature of the third that will determine if the chord is major or minor. On the other hand, the perfect fifth belongs to both chords. Examine the following examples of the major and minor chords.

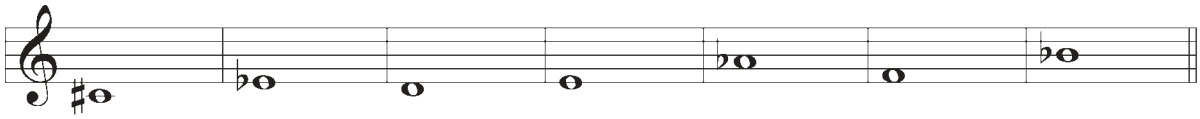


A) Name the following chords (major or minor)

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

B) Compose the following chords



major major minor minor major minor major

minor major minor major minor major minor



minor major minor minor major major minor

21. Throughout your musical training, you will have to recognize and understand new Italian words that you will frequently find in musical pieces. These terms are the composer's way of expressing the interpretation of the musical piece. Certain words correspond to tempo, variation of tempo, and style, et

22. The following are words that you might find in a musical piece at your level.

Variation in Tempo

Italian	English
piu mosso	more movement, quicker
meno mosso	less movement, slower

Style

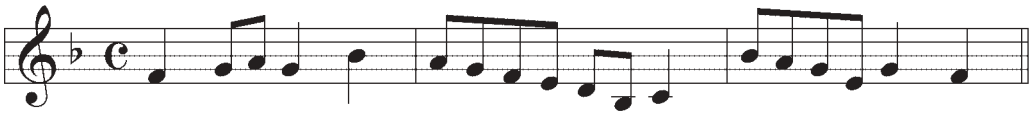
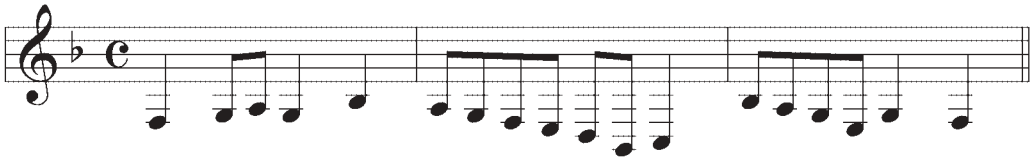
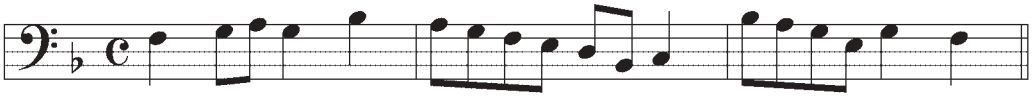
Italian	English
animato	animated
con moto	with motion
espressivo	exspressively
leggiero	light and graceful
maestoso	majestically, dignified
tranquillo	tranquil

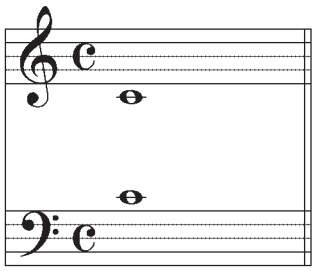
Adverbs used in conjunction with other words

Italian	English
non troppo	not too much
troppo	too much
molto	very much
simile	the same

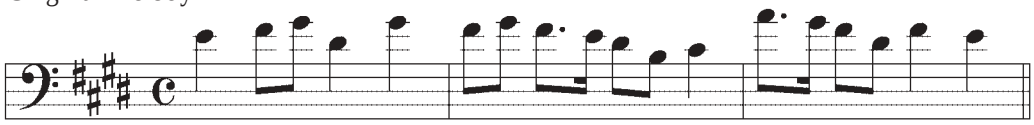
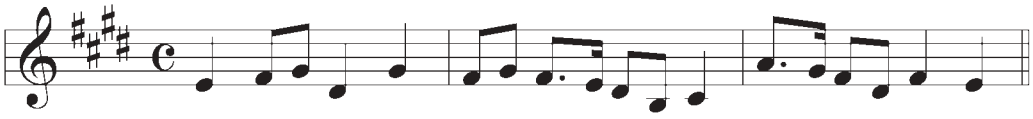
23. When a melody is rewritten with the exact same sequence of notes and intervals into another key, it is called **transposition**. This raises or lowers the notes to make a melody easier to sing or play, or so an instrument can play it in another key.

24. In Level Two, you also studied transposition by an octave higher or an octave lower. At times it is necessary to change clef due to too many ledger lines. The following melody was transposed an octave lower. In the original clef, it is difficult to read, but in the new clef it is much clearer.

Original melody

Transposed melody an octave lower

Rewritten in the bass clef

25. Knowing that the middle C can belong to both clefs, all that is left to find is the other notes from this reference point.



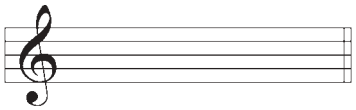
26. Whatever the transposition, if the melody is written too high or too low, you can always change the clef. Look at the following example. In the bass clef, the melody is written too high, therefore, it was necessary to transpose it in the treble clef.

Original melody

Transposed melody an octave lower

Transposing by Changing the Key

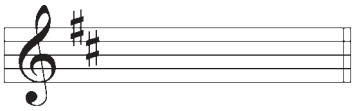
27. It will happen that the key of a musical piece is not suited for a voice or an instrument. When this is the case, the melody can be transposed in another key.

28. To transpose the melody, you must know the key of the original melody and the new key. For example, the melody is written in C major and you want to transpose it to a major second higher. The new key has to be a major second higher from C. Once the key is found, the new key signature is written down.

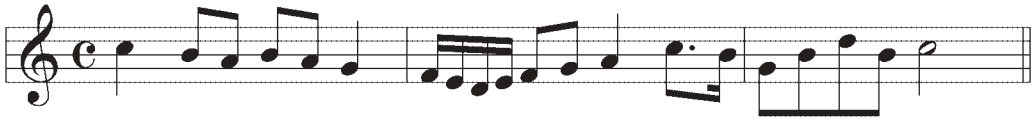
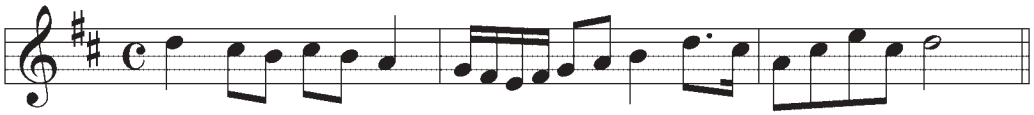
C major

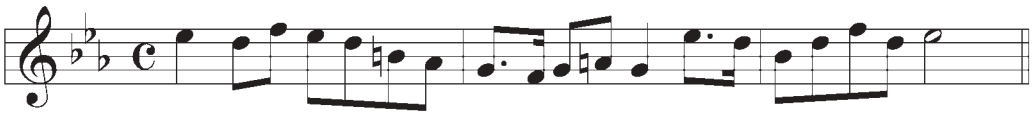
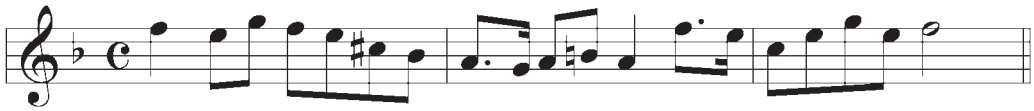


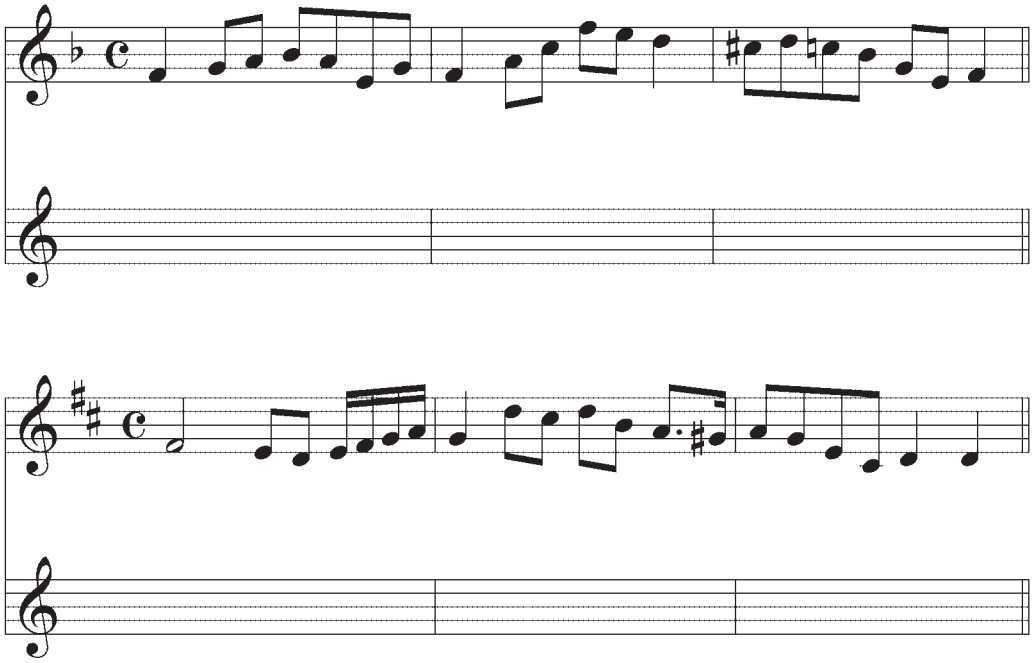
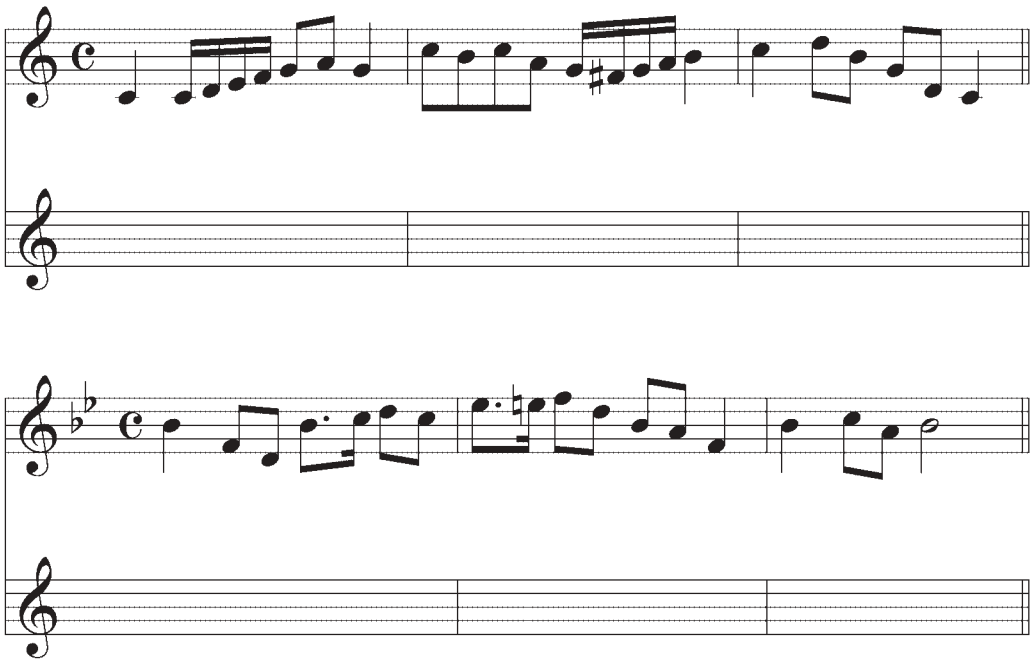
D major



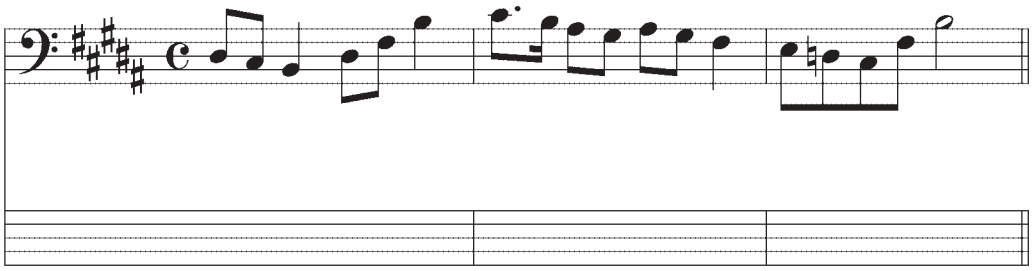
29. Once the new key is found, each note of the original melody is transposed a major second higher. Only the name of the notes change. Everything else remains the same.

C major

D major (major 2nd higher)

30. As for the alterations, they have already been placed at the key signature. If however, while transposing, there are accidentals, you must take them into consideration when finding the new note at the desired interval.

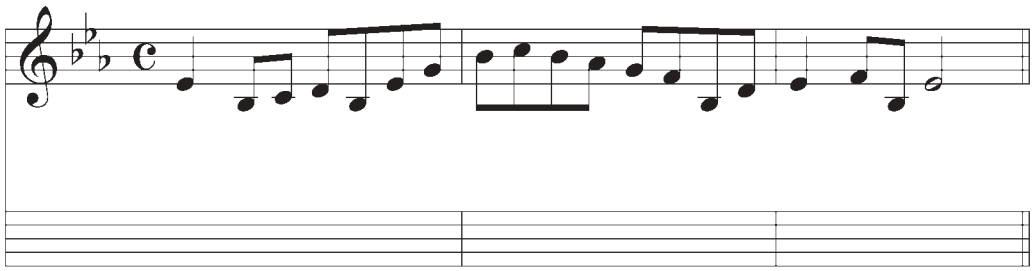
E♭ major

F major (major 2nd higher)

31. If you want to transpose the melody a major 2nd lower, for example, you proceed in the same manner.

A) Transpose the following melodies a major 2nd higher.

B) Transpose the following melodies a major 2nd lower.

C) Transpose the following melodies by an octave using different clefs.

1) an octave higher



2) an octave lower

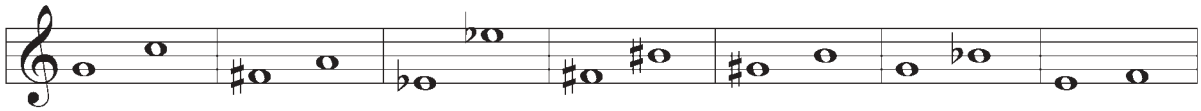
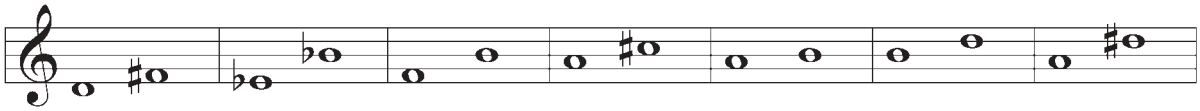
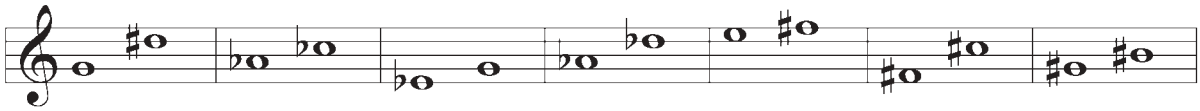


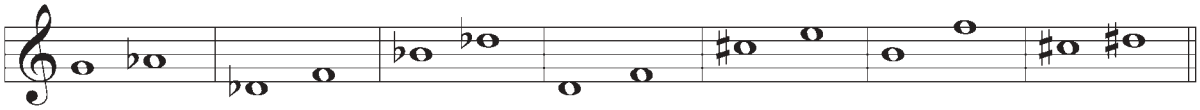
A) Which intervals belong to the category of minor and major?

_____

B) Which intervals belong to the category of perfect?

_____

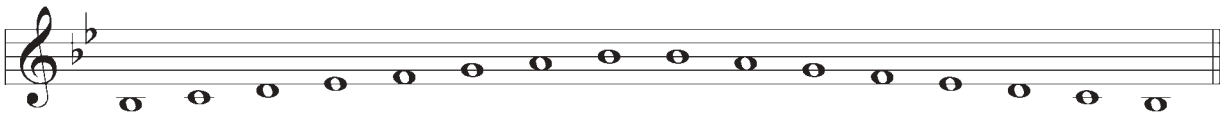
C) Name the following intervals:

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____



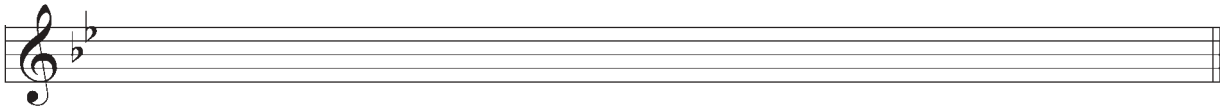
22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

D) Construct a melodic minor scale from its relative major (ascending and descending)

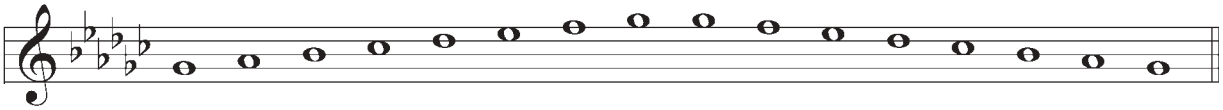
B♭ major



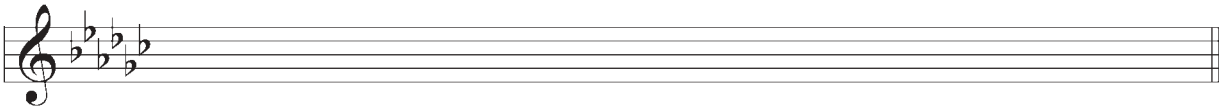
_____ harmonic minor

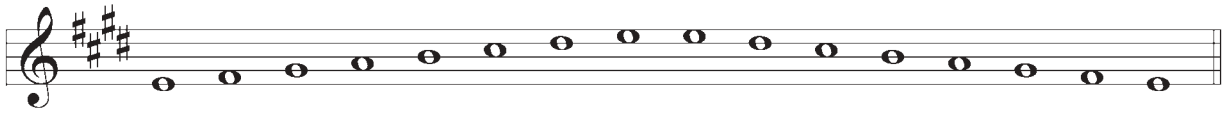


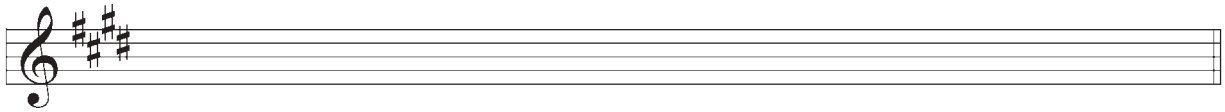
G♭ major



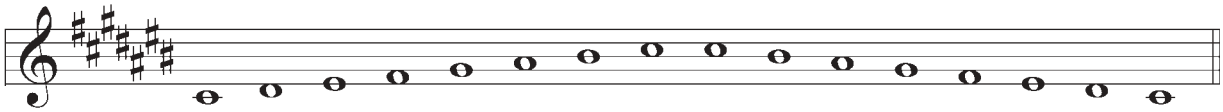
_____ melodic minor



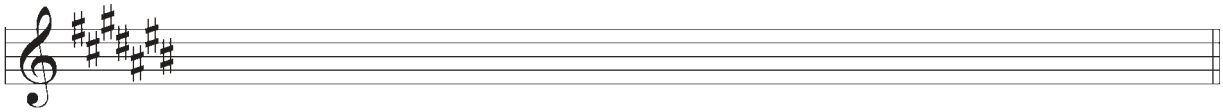
E major

_____ melodic minor



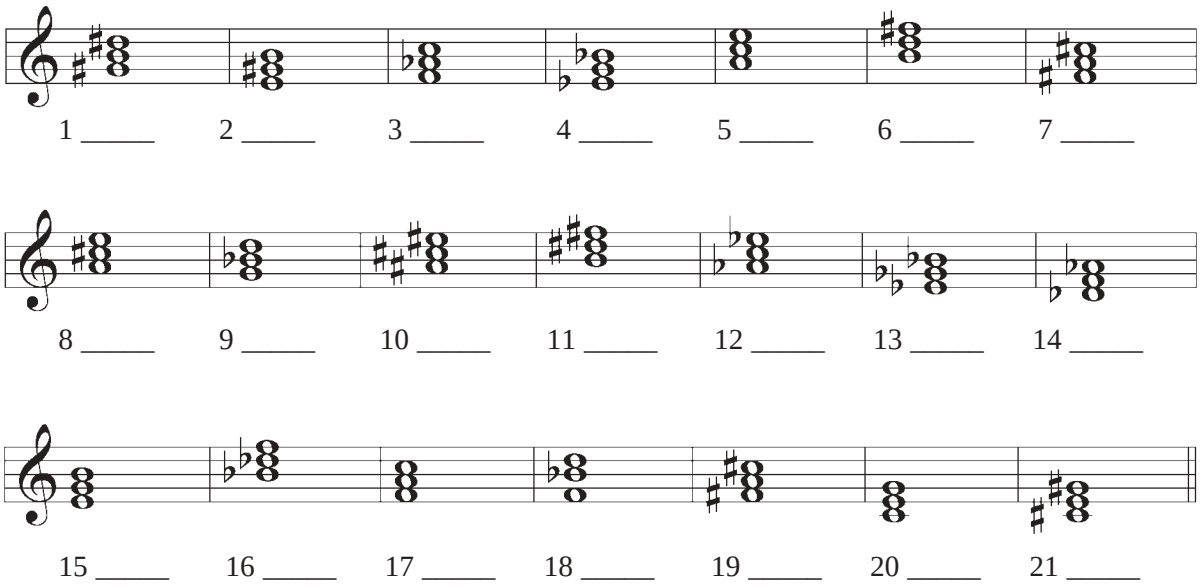
C♯ major



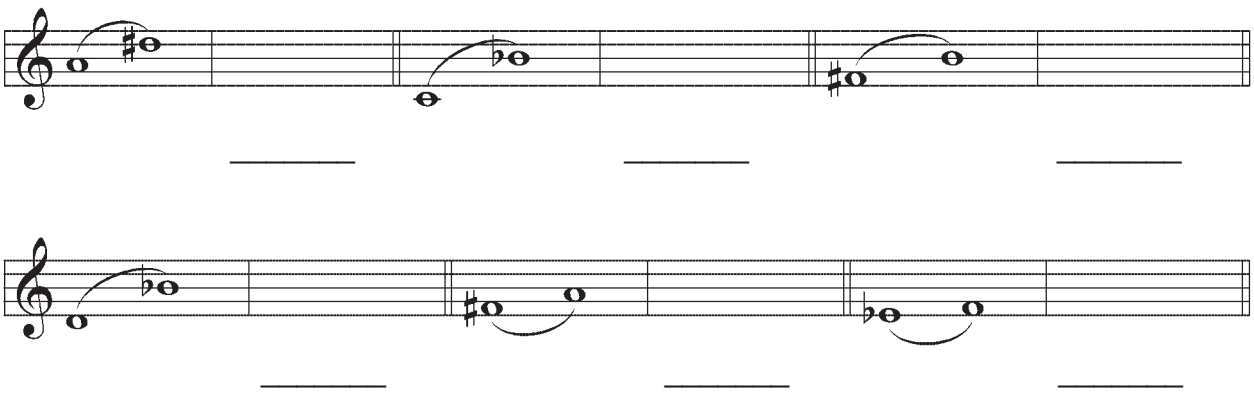
_____ melodic minor



E) Name and identify the following chords:

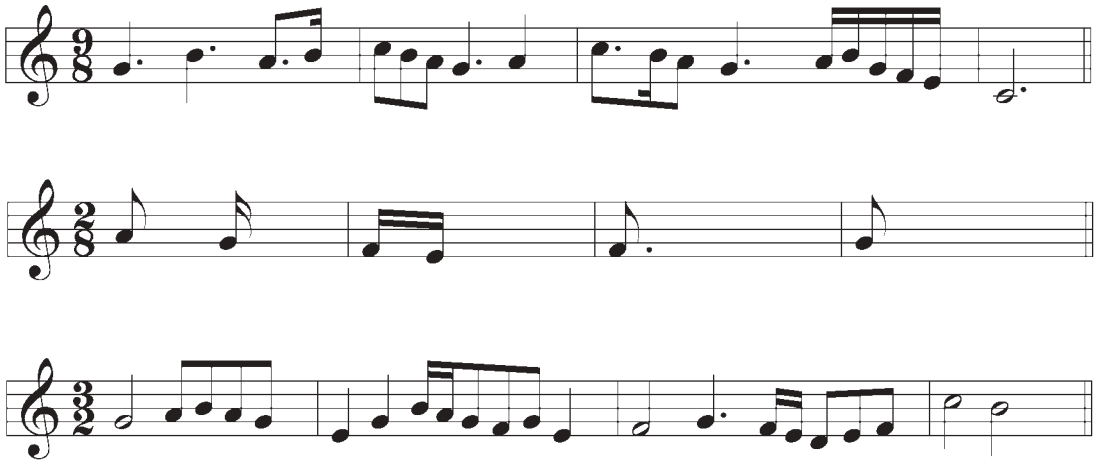


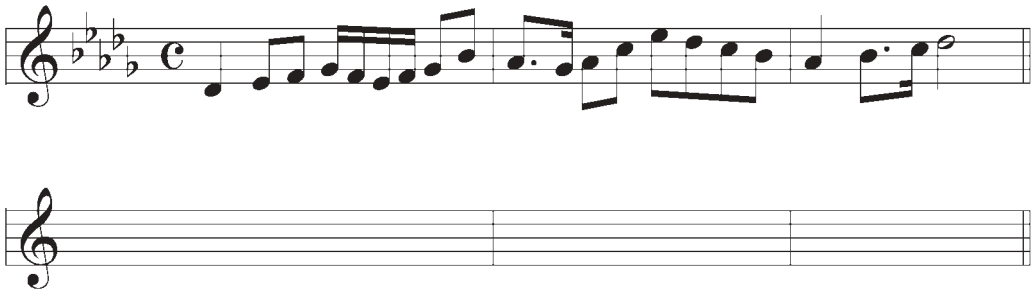
F) Name the following complementary or inversed intervals. Identify them as well (maj., min., dim., aug.).



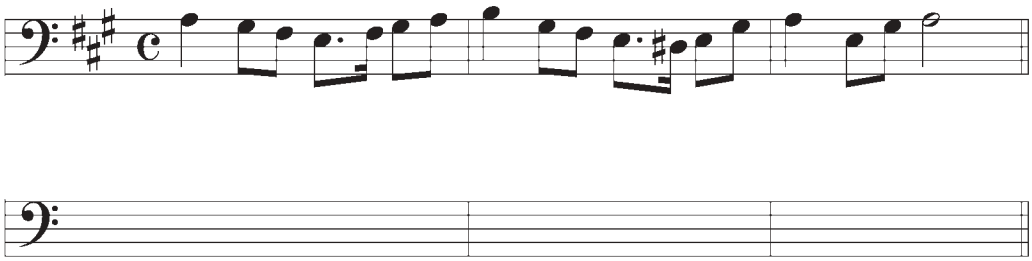
G) Match the word with its definition:

Animato	expressively
Simile	not too much
Maestoso	with spirit
Non troppo	same
Tranquillo	less movement
Piu mosso	very much
Meno mosso	more movement
Molto	with motion
Con moto	tranquil
Espressivo	too much
Leggiero	light and graceful
Troppo	majestically

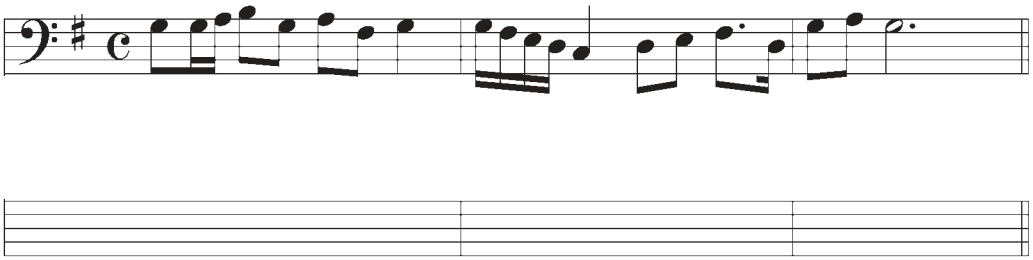
H) Complete the following measures by using one note or rest.

I) Transpose this melody a major 2nd higher.



J) Transpose this melody a major 2nd lower.



K) Transpose this melody an octave higher. Use the appropriate clef.

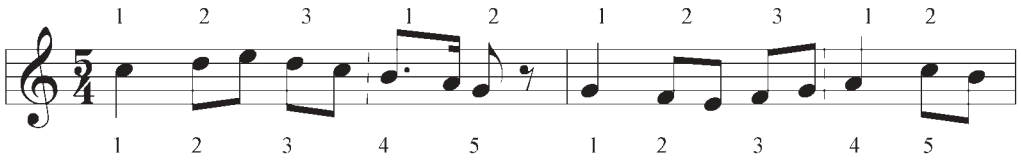


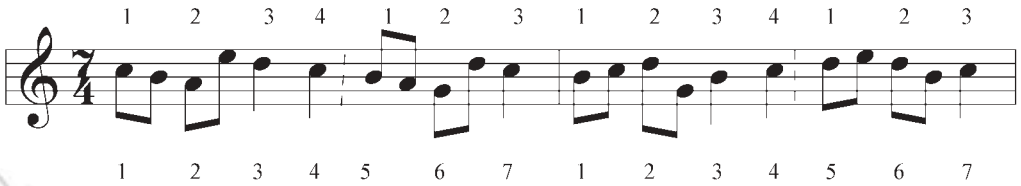
Notes

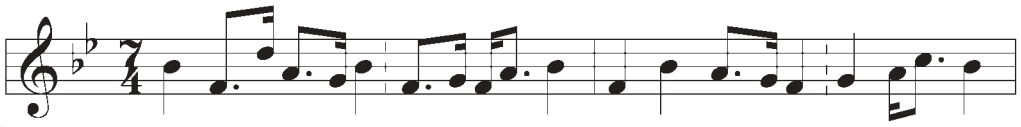
Irregular Time Signatures

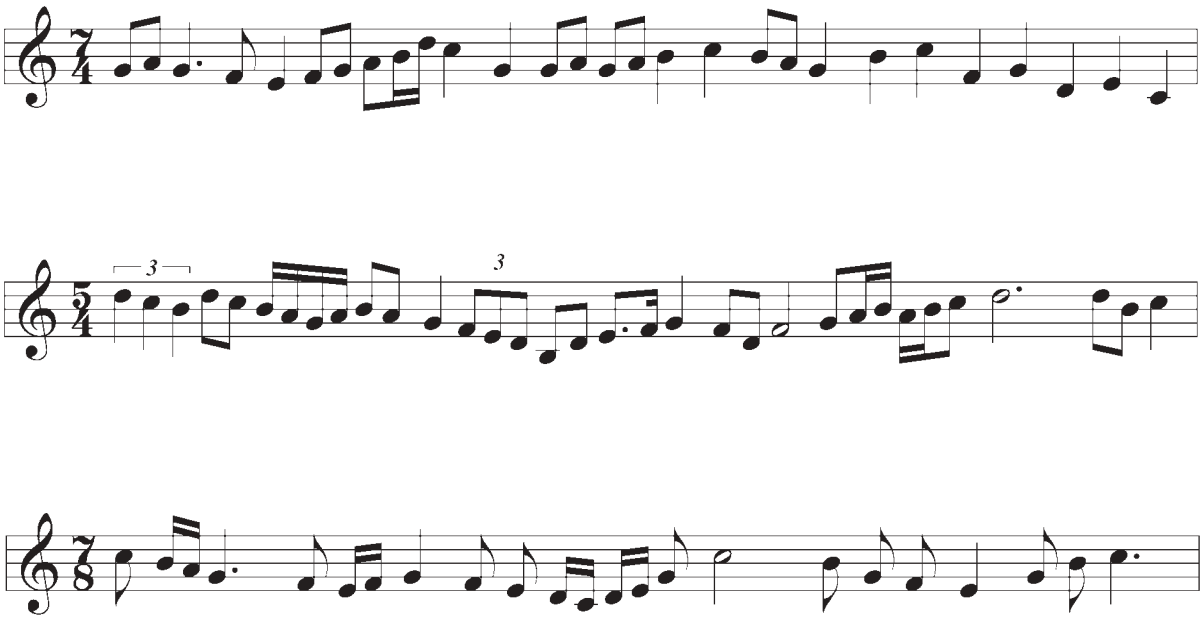
1. Irregular time signatures are time signatures with five or seven beats within a bar. These time signatures are mostly used in twentieth century music.

2. Often these two kinds of measures are alternates to the regular time signatures.

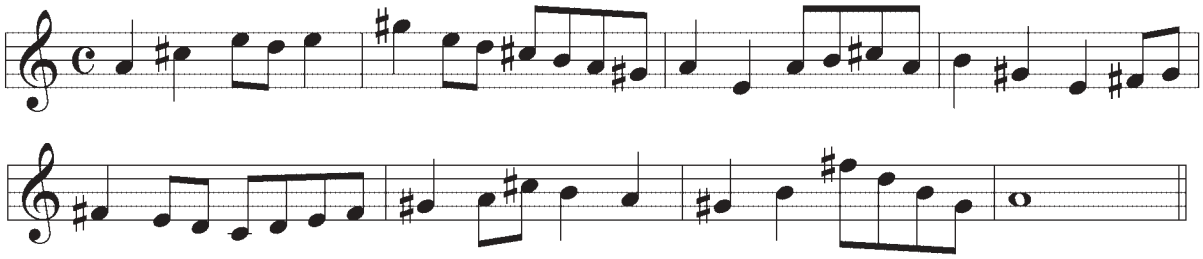
A measure of 5 beats can be considered an alternate to a measure of 3 beats and a measure of 2 beats or vice versa.

A measure of 7 beats can be considered an alternate to a measure of 4 beats, and a measure of 3 beats.



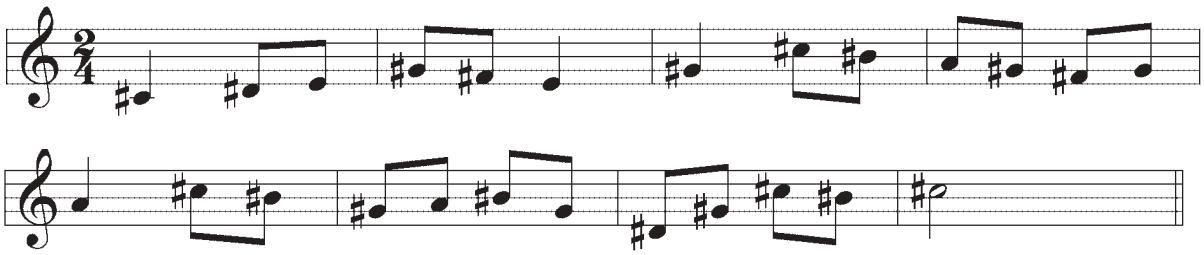
3. We will often see a perpendicular line of dots separating both sub-measures to clearly indicate the strong beats.

4. In the preceding measures, it is possible to indicate the irregular measures as simple measures: the upper figure indicates the number of beats or pulses in each measure. The lower figure indicates the kind of note that represents one beat. The lower figure can be a 1, 2, 4, 8, 16. The most common used are the 8 to represent the eighth-note and the 4, the quarter note.

A) Place the bar lines at the right place:

5. You learned to find the key of a melody by using the key signature as a reference in Level Two. Now you will find the key of a melody that does not have a key signature but accidentals throughout.

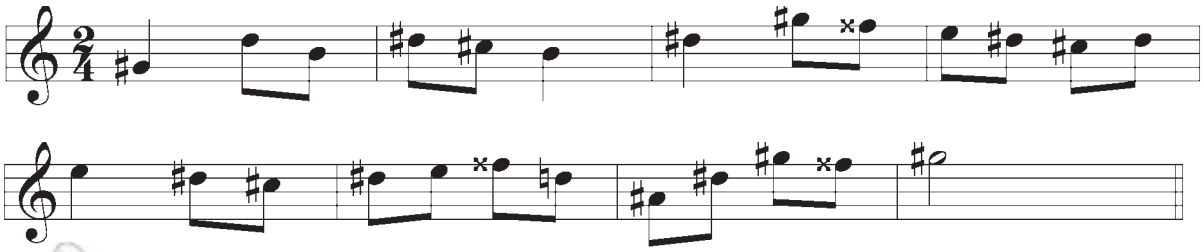
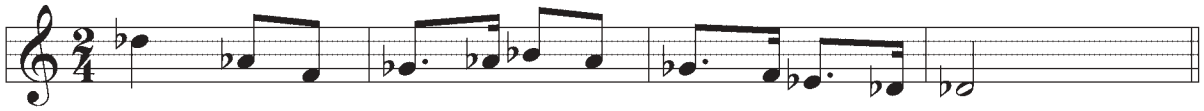
6. IF ALL THE ACCIDENTALS ARE SHARPS, note down all the sharps found throughout the melody and then place them in their order. In this way, the key signature can be found.

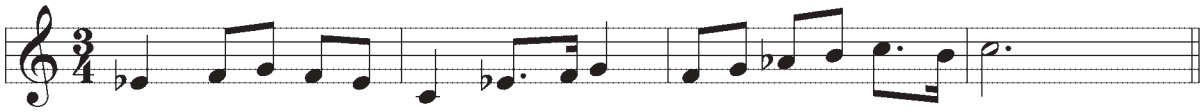


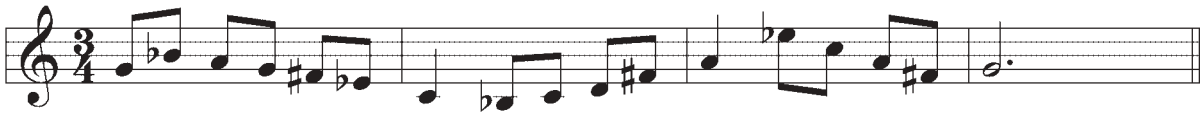
Since this melody has three sharps (F♯, C♯, G♯) it is written in A major.

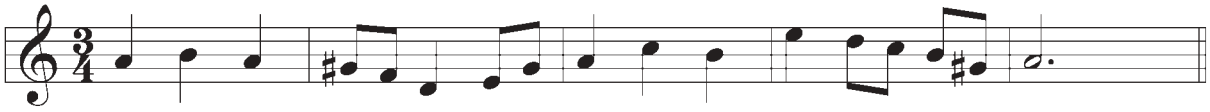
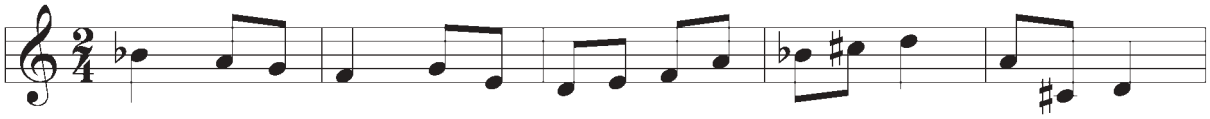
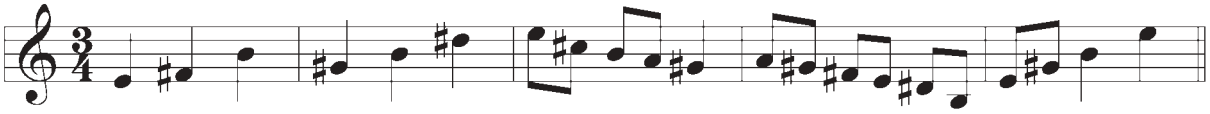
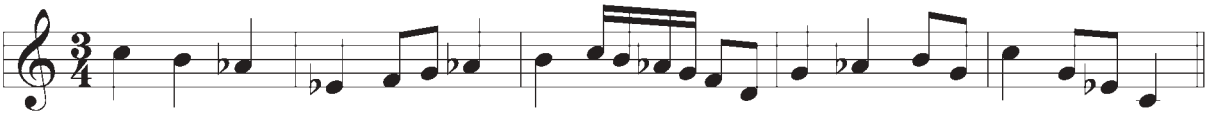
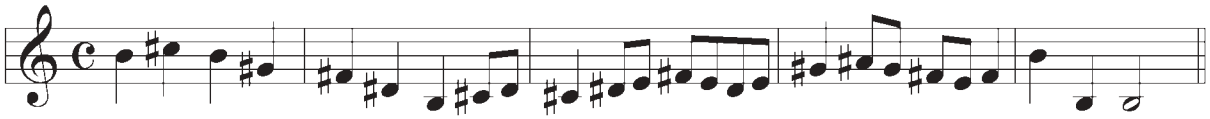
7. If after you have placed the sharps in order as in the example below you find B# does not belong. For example:

The sharps are F♯, C♯, G♯, D♯, B♯. B sharp does not belong in the order of sharps; therefore, B♯ must be an accidental. If you raise B by a semitone to B♯, you will find that you are in the key of C♯ minor.

Note: *The last note of the musical piece can also be used to find the key.*

8. In this example, the sharps seem to be in good order. However, the F♯ is raised by a semitone to a F double sharp (𝄪). Therefore, it is the F double sharp that is the leading note that we find in the G♯ minor scale with 5 sharps at the key signature.

9. IF ALL THE ACCIDENTALS ARE FLATS, note down all the flats found throughout the melody and then place then in their order so that you may find the key signature.

With B♭, E♭, A♭, and D♭, the melody is written in A♭ Major.

10. If the flats can be organized to form a key signature, the melody is written in a major key. If one of these flats is natural, then the melody is written in the relative minor key.

With the B natural, E♭, and A♭, the melody is written in C minor for B is the leading note of this scale.

11. IF THE ALTERATIONS ARE SHARP AND FLATS, try a key signature of flats and raise the leading note by a semitone to a sharp.

Two flats at the key signature indicate that the melody is in B♭ or G minor.

A) Indicate the keys of the following melodies:

_____

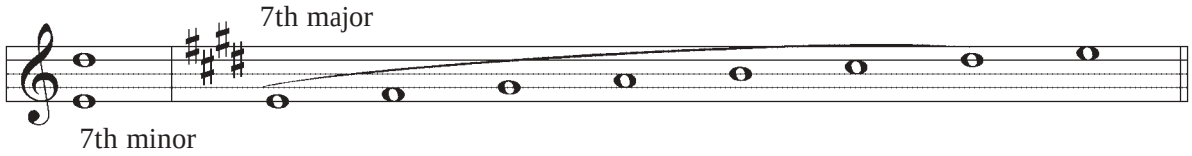
_____

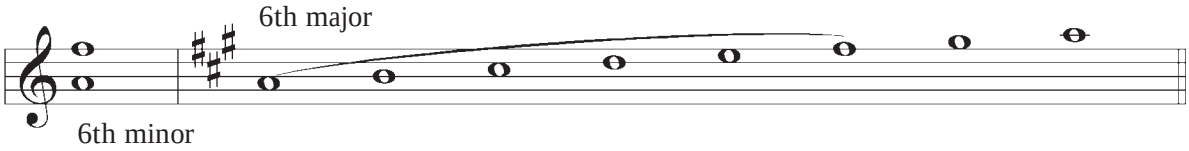
_____

_____

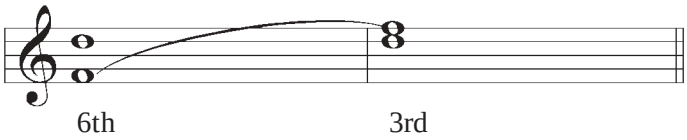
_____

12. As already mentioned, in a major scale, the sixth or seventh intervals are always major. In a minor scale, these same intervals are minor because the interval is a semitone smaller.





13. To find the quality of the 6th or 7th, refer to the major scale. Construct a major scale from the lower note. If your second note is exactly the same as in the major scale, your 6th or 7th is major.

14. However, at times, it is difficult to determine the nature of the interval by using the major scale as a reference. There is, however, a memory aid that can be useful. Find the complementary or inverted interval and you will be able to find the nature of the first interval. To find the complementary or inverted interval, all you have to do is invert the interval like so:

15. In Level Three you studied inverted or complementary intervals. Let's review.

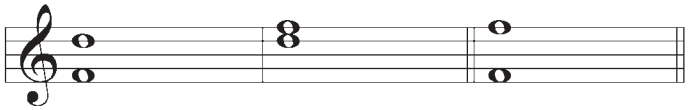
16. Here is a table to illustrate the nature of the intervals.

Interval Equivalent Table

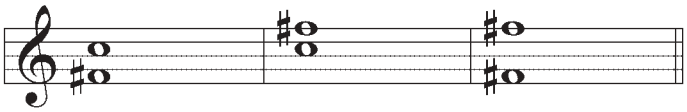
Complementary

INTERVAL	+	INTERVAL
Perfect		Perfect
Major		Minor
Minor		Major
Augmented		Diminished
Diminished		Augmented

16. For a better understanding, let's analyze the following example. If you have a third, its complementary interval is a sixth. If the third is minor, then the sixth will be major.



Major 6th + Minor 3rd = Perfect Octave

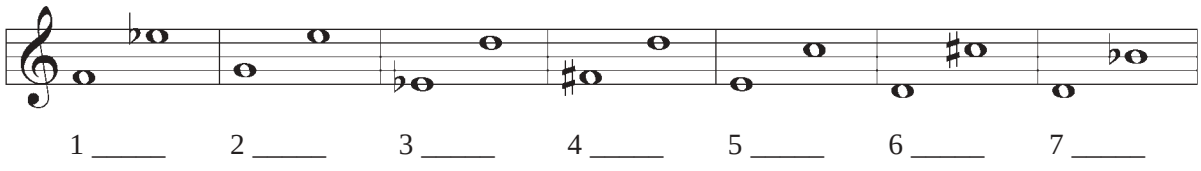
17. If we have a perfect 4th, then its complementary interval will be a perfect 5th. However, if the 4th is raised by as semitone, the interval becomes an augmented 4th and its complementary interval becomes a diminished 5th.

Dim. 5th + Aug. 4th = Perfect Octave

Note: *This table works for all simple intervals that result to an octave.*

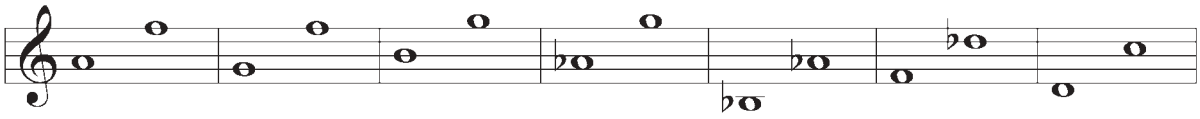
A) Find and indicate the complementary or inverted interval of the following intervals:

1) Major second = _____
2) Minor second = _____
3) Major third = _____
4) Minor third = _____
5) Perfect fourth = _____
6) Diminished 4th = _____
7) Diminished 5th = _____
8) Major sixth = _____
9) Minor sixth = _____
10) Major seventh = _____

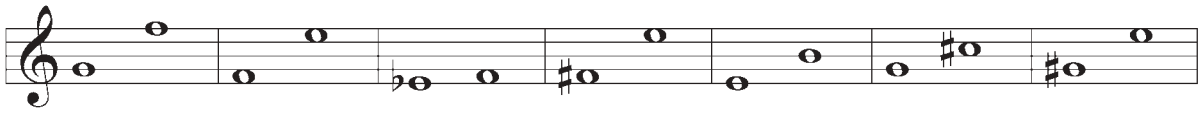
B) Indicate whether each interval is a sixth or seventh:

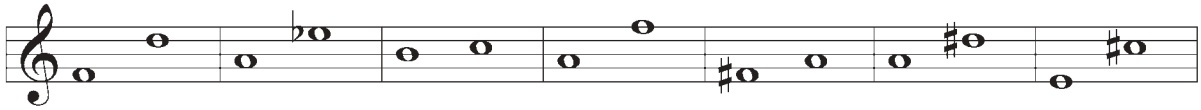


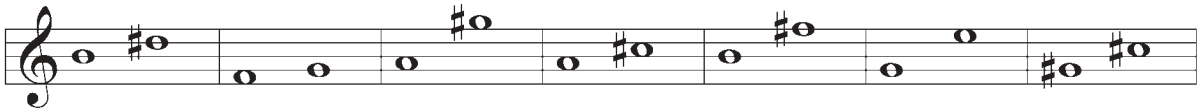
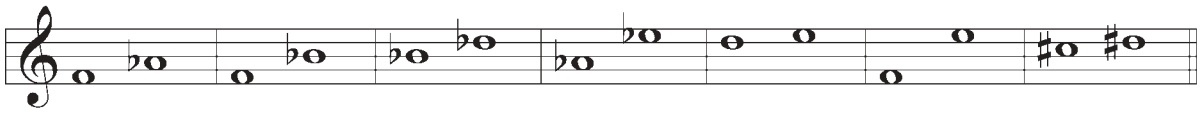
1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____



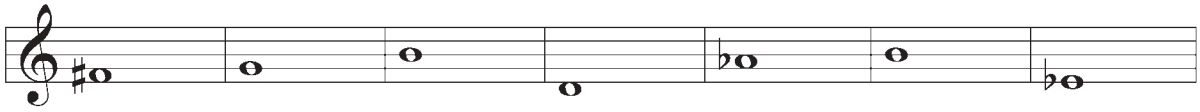
8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

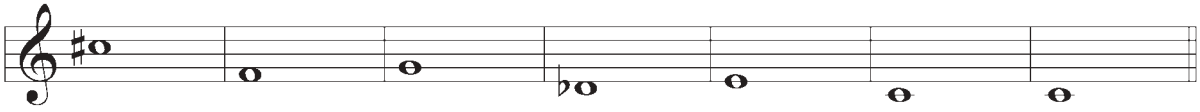
C) Name the following intervals:

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____



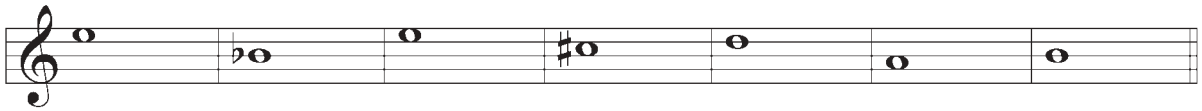
8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

D) Find the upper note needed to create the following intervals:

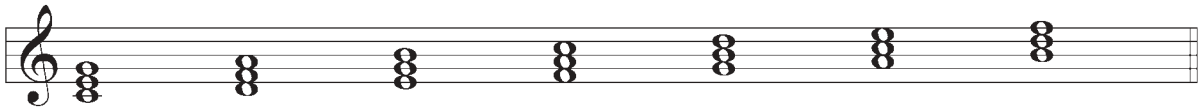


Perfect 5th Mnor 6th Major 3rd Major 7th Minor 2nd Perfect 4th Minor 7th

Major 2nd Major 6th Aug. 4th Minor 3rd Dim. 5th Minor 7th Minor 6th

E) Find the lower note needed to create the following intervals:

Minor 6th Minor 2nd Perfect 5th Minor 7th Perfect 4th Minor 3rd Dim. 5th

Major 7th Major 3rd Minor 6th Major 2nd Minor 7th Aug. 4th Major 6th

18. As you learned in Level Three, a chord is built on the root, the third, and the fifth. If you take the major scale and build a chord on all the degrees you can determine the nature (major, minor, augmented, diminished) of all the chords of the major scale.

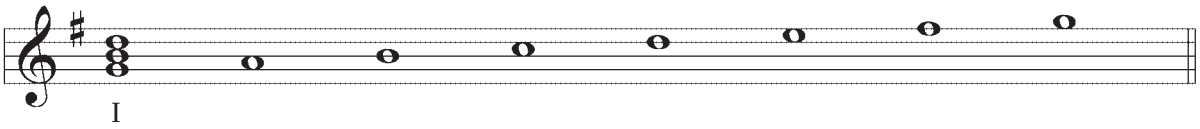


I Maj II min III min IV Maj V Maj VI min VII dim

19. By analyzing the major scale (above), we find that the tonic (I), sub-dominant (IV), and the dominant (V), are all the major chords. The supertonic (II), the mediant (III), and the sub-mediant (VI), are all minor. Finally, the leading note (VIII) is a diminished chord because the fifth is diminished.

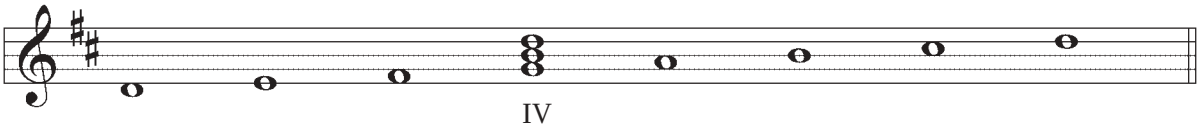
20. All the chords (major and minor) have different roles depending on their position in the scale. For instance, G major can be the tonic (I) in G major, the sub-dominant (IV) in D major, and the dominant (V) in C major.

G major



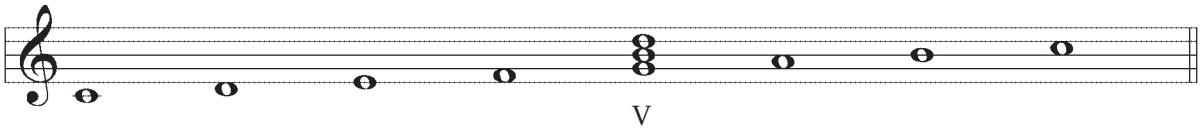
I

D major



IV

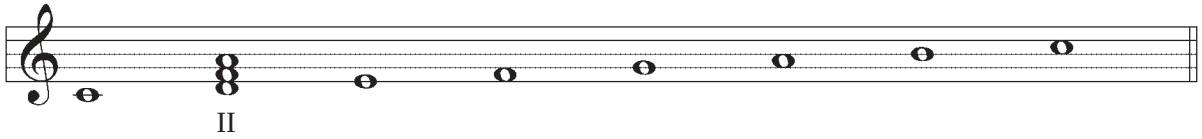
C major



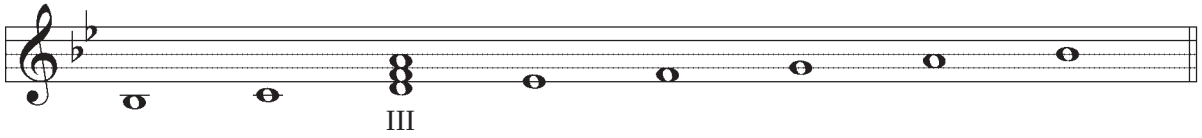
V

21. A minor chord like D minor can also be found in three different minor keys: it is the supertonic in C major, the mediant in Bb major, and the sub-mediant in F major.

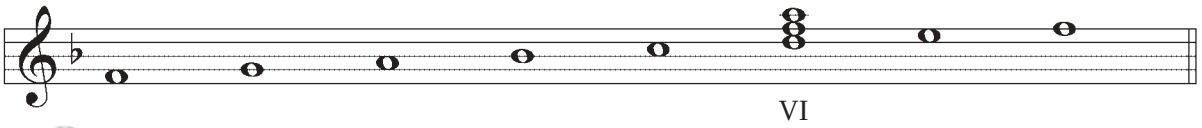
C major



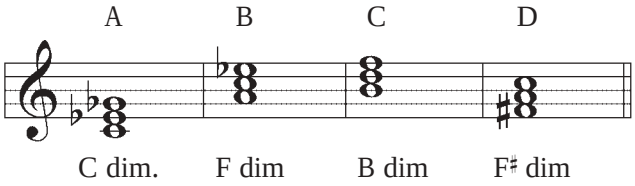
B♭ major



F major



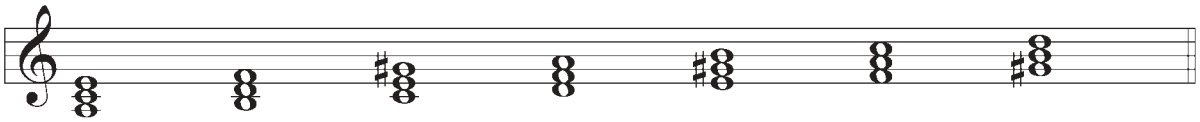
22. As mentioned, the chord found on the seventh degree of a major scale is diminished. A DIMINISHED TRIAD (chord) has a minor third and diminished fifth above the root.



In this example (above), the four chords are composed with minor thirds and diminshed fifths. Example A can be the chord of the leading note of D♭ major. Example B can belong to G♭ major; Example C of C major and Example D of G major.

Note: *It is important to remember the make-up of the principal chords of the harmonic minor scale: I, IV, and V degrees. The purpose for the role of the other chords can be studies by personal choice.*

23. With the harmonic minor scale you also can find the nature of the chords of each degree.



24. In summary, this table explains the break-down of all chords:

	Major Scales	**Harmonic Minor Scales**
Major Chords	I, IV, V	V, VI
Minor Chords	II, III, VI	I, IV
Diminished Chords	VII	II, VII
Augmented Chords	N/A	III

Note: *This table included only the principle chords of major and minor scales.*

EXERCISES

A) On which degrees of the major scale can you have major chords?

_____

B) On which degrees of the major scale can you have minor chords?

_____

C) In a harmonic minor scale, what is the nature (maj., min., or dim.) of the following chords:

1) V = _____
2) IV = _____
3) I = _____

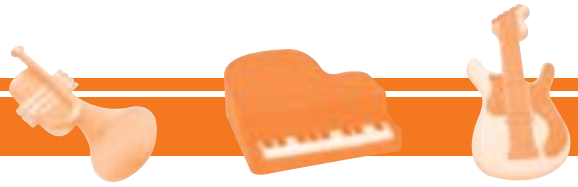
D) Find 3 scale degrees for each chord given, indicate the scale degree and key for each. Example: F major chord can be subdominant of C major, the dominant of Bb major, and the tonic of F major.

1) E minor = _____ _____ _____
2) G major = _____ _____ _____
3) F♯ minor = _____ _____ _____
4) B♭ major = _____ _____ _____
5) D dim. = _____ _____ _____

E) Why is the chord of the 7th degree different from the other chords? In what way? (nature and how it is built)

_____

_____



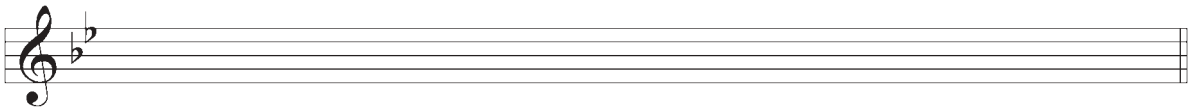
F) What does the chord of the 5th degree of the major scale and the chord of the 5th degree of the minor scale have in common?

_____

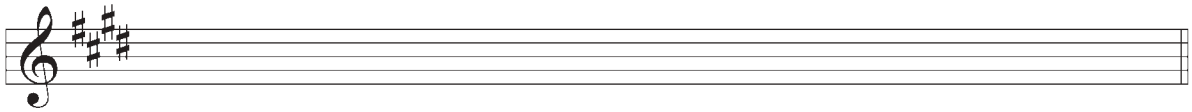
_____

G) Write out all the chords that we find in the following scales. Indicate their nature: (Example: A maj, F min, E dim, etc…)

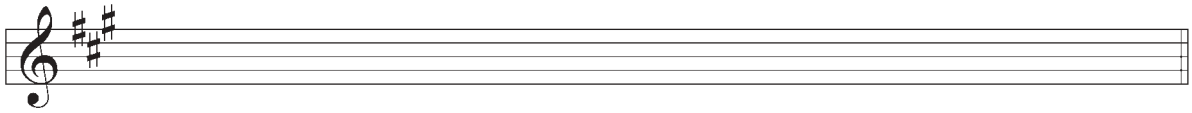
B♭ major



E major

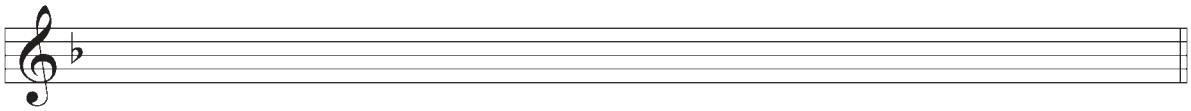


A major

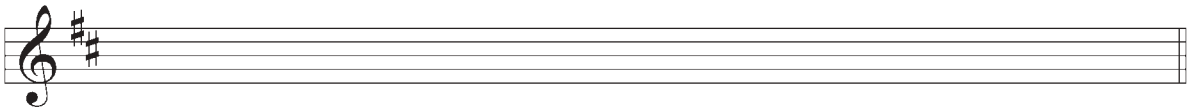


H) Write down the chords that are found on the I, IV, and V degrees of the following minor harmonic scales. Indicate their nature.

B♭ major



B harmonic minor



25. As seen in Level Three, it sometimes happens that you have to transpose a melody because it does not match a voice or instrument. You can transpose the melody in many different keys, and also in many different intervals.

26. To transpose a melody in a new key, you use the same steps as these learned in Level Three (Transposition of a major second higher):

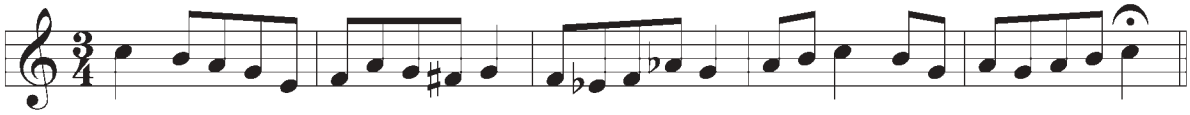
a) Determine the key of the original melody.

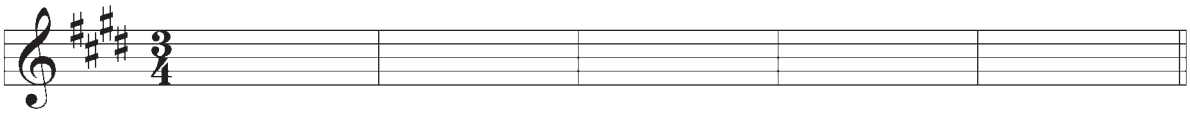
b) Find the new key in accordance with the new interval wanted.

c) Write down the accidentals at the key signature of the new melody.

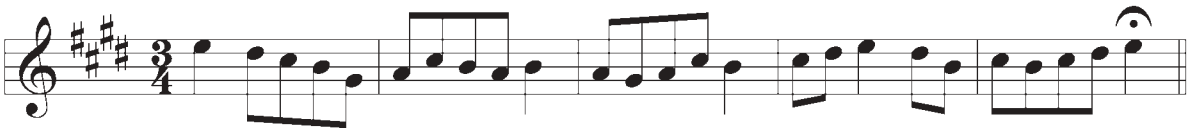
d) Transpose each note of the melody by the given interval.

e) Add any accidentals that appear in the new key that correspond to the transposition of the original note to the new note.

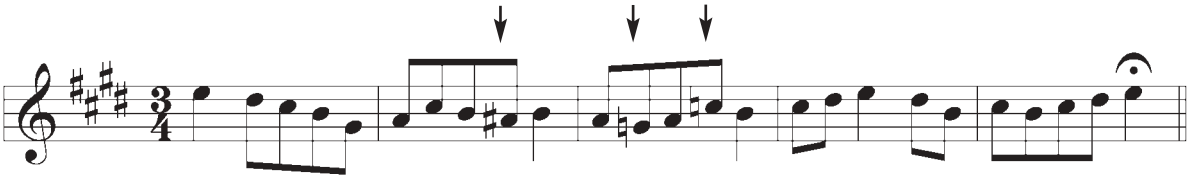
27. For example, if you want to transpose the following melody a major third higher, you will use this step by step method:

This example is in C major (step A). If you raise the C a major third higher, the new key will be E major (step B). Next, you write down the new key signature (step C).



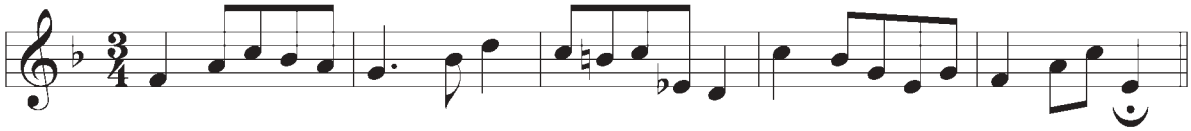
By respecting the desired interval, you transpose each note (step D) while keeping everything else the same (rhythm, dynamics, etc.).

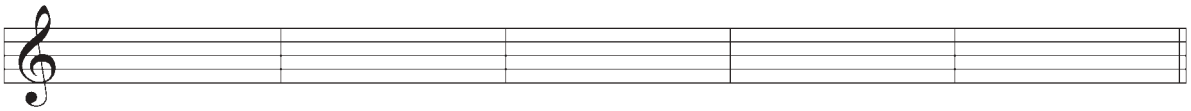


Finally, you add any accidentals that are a result of the transposition (step E). The arrows indicate the accidentals.

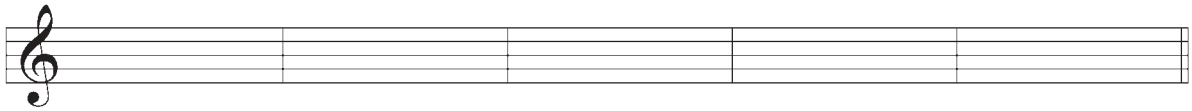


28. To ensure that all you transpositions are correct, you must follow the step-by-step method outlined above.

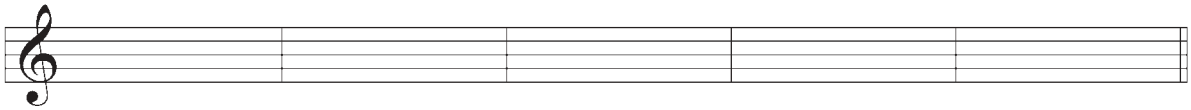
A) Transpose this melody by the requested interval.

A perfect fourth higher



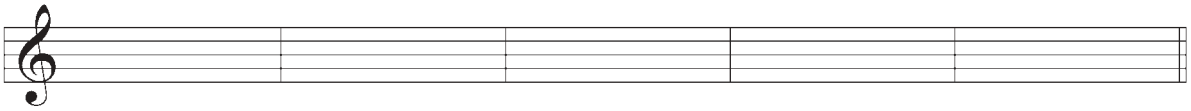
A perfect fifth higher



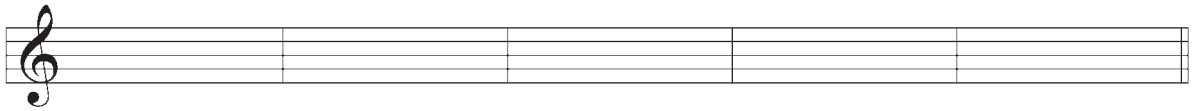
Major sixth higher



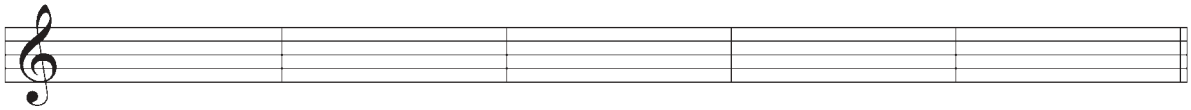
Minor third lower



Perfect fourth lower



Major seventh higher



29. Throughout your musical training, you will have to recognize and understand new Italian words that you will frequently find in musical pieces. These terms are the composer's way of expressing the interpretation of the musical piece. Certain words correspond to tempo, variation of tempo, and style, etc.

30. The following are words that you might find in a musical piece at your level.

Variation in tempo

Italian	English
come prima	as at first
l'istesso tempo	the same time
rubato or tempo rubato	robbed time (taking a portion of time from one note and giving it to another) (at the discretion of the musical director)

Style

Italian	English
brillante	glittering, sparkling
cantabile	in a singing style
con brio	with vigour, spirit
con espressione	with expression
dolce	sweetly
grave	slow and solemn
grazioso	gracefully

Adverbs used in conjunction with other words

Italian	English
sempre	always
quasi	as if, almost

Cadences

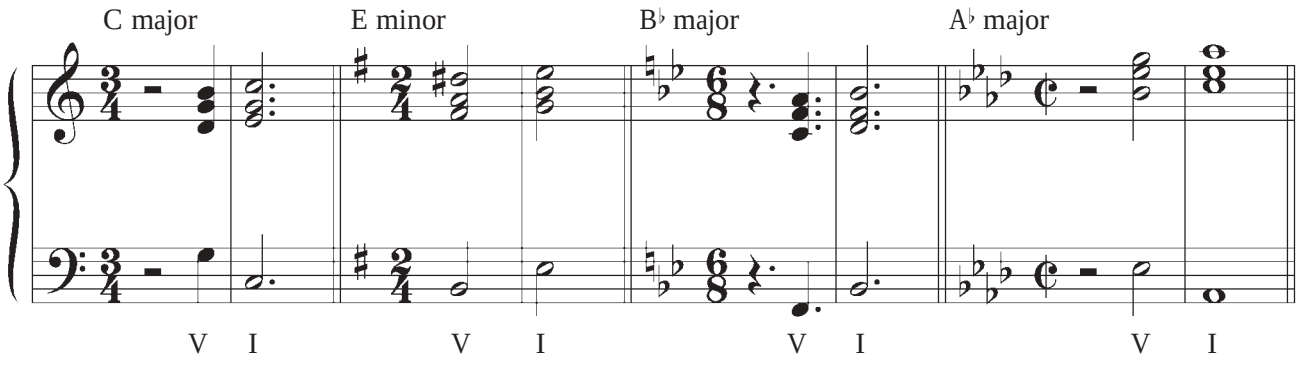
31. Similar to the English language, music is composed around phrases. A cadence represents the punctuation of the musical phrase being it a comma or a period.

32. A CADENCE is a two-chord ending phrase. The second of these chords is nearly always on the accented beat.

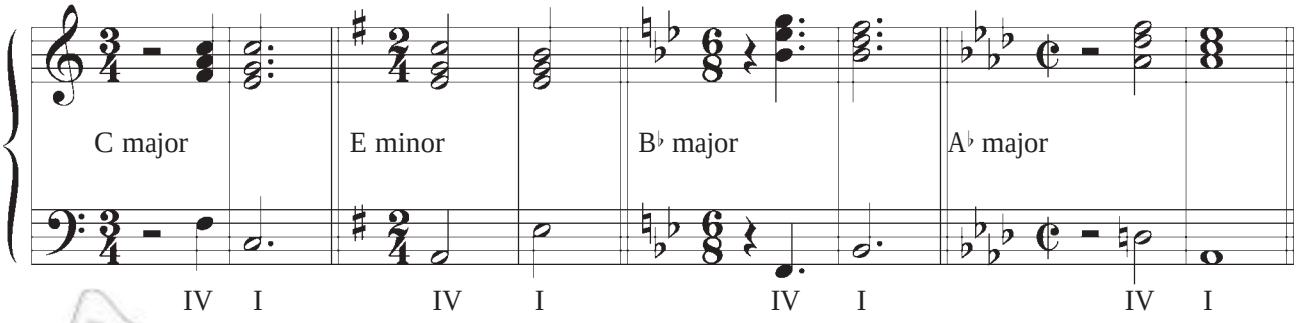
33. There are two categories of cadences that may be classified as "final" and "non-final". The two types of "Final" cadences, which may be found at the end of a sentence or at the end of a piece of music, are PERFECT AND PLAGAL. Here in Level Four, you will simply study the different types. In Level Five, you will learn how to write the different cadences.

Note: *Take note on how the notes are placed on the staff. The bass note is usually written in the bass clef and the other notes of the chord are usually written in the treble clef.*

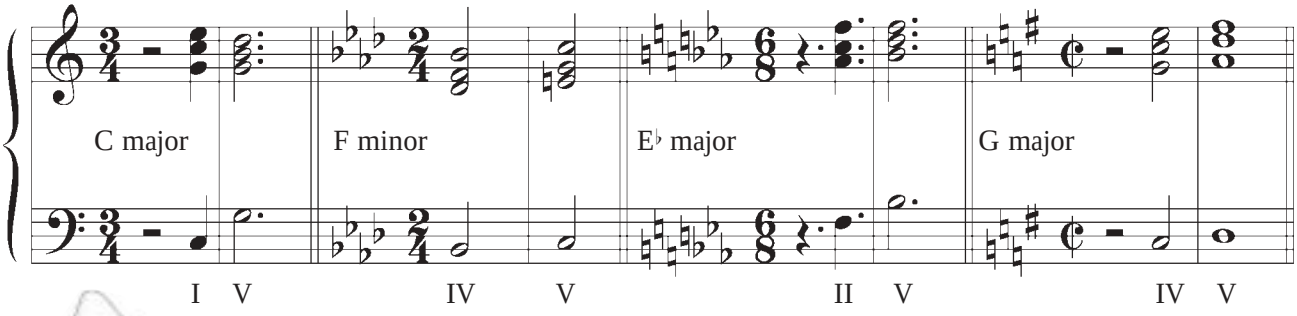
34. The PERFECT CADENCE is the most common of all cadences. It is sometimes called an authentic cadence. It is a conclusive cadence because it gives a strong impression that the musical piece is ended. It consists of the DOMINANT chord, followed by the TONIC chord (V-I). In certain situations, this cadence can also be called an imperfect cadence.



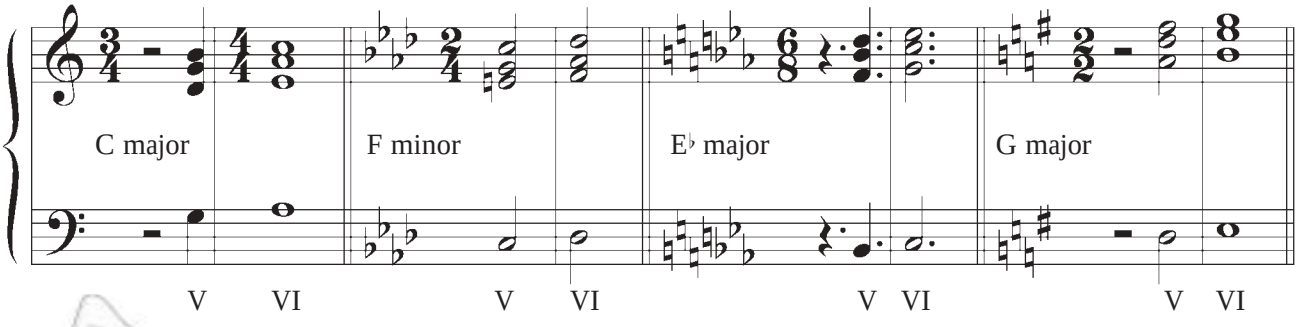
35. The PLAGAL CADENCE is the other kind of “final” cadence. It consists of the Subdominant chord followed by the Tonic chord (IV-I). It is sometimes referred to as the “church” cadence because one can recognize it when they hear AMEN.



36. The IMPERFECT CADENCE/HALF CADENCE is a “non-final” cadence that occurs in the middle of a piece but not at the end. It ends on the Dominant chord indicating a continuation in the musical piece. It gives the strong impression that the music is not ended. The two chords that create this cadence can be I-V, IV-V, II-V, etc.

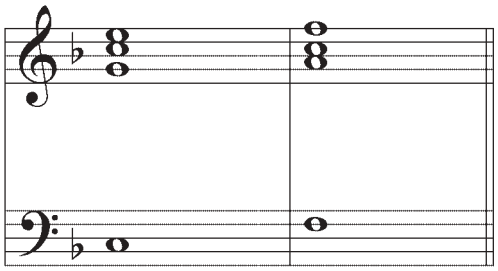


37. Finally, the DECEPTIVE CADENCE is equivalent to the “:” of the English language. It consists of the Dominant chord followed by the Sub-Mediant chord (V-VI). It is called deceptive because the listener is wanting for the final tonic after the dominant, but instead the musical phrase continues. This is also considered a “non-final” cadence.

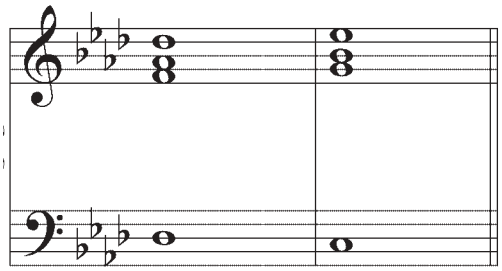


38. To identify a cadence, it is important to clearly know each chord in its key context. The root of the chord (found at the bass clef) will usually state the type of chord. Once all the chords are indicated and characterized, then you can determine the cadence type.

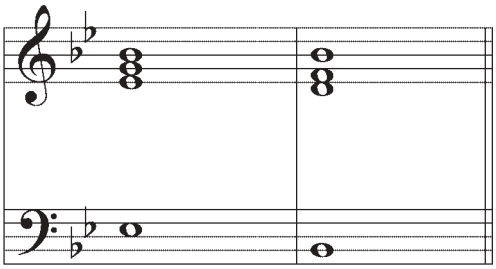
A) Identify the following cadences and state the key below the staff:

1) 

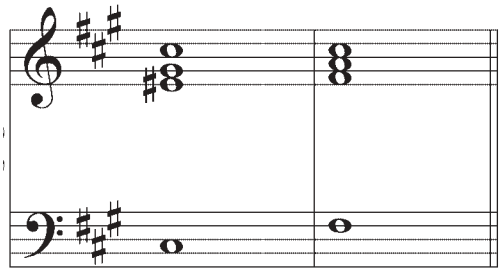
_____

2) 

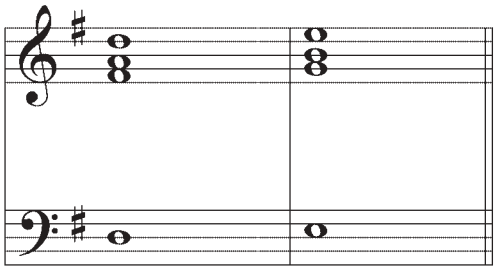
_____

3) 

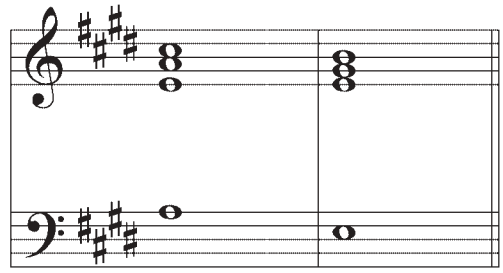
_____

4) 

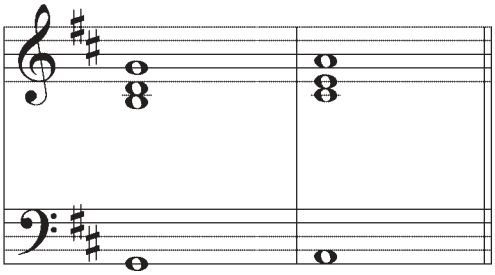
_____

5) 

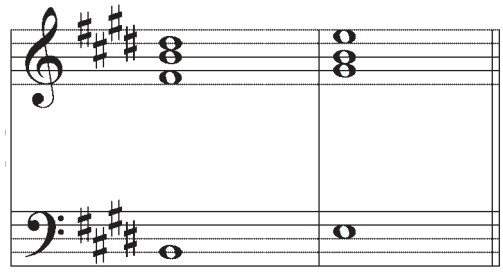
_____

6) 

_____

7) 

_____

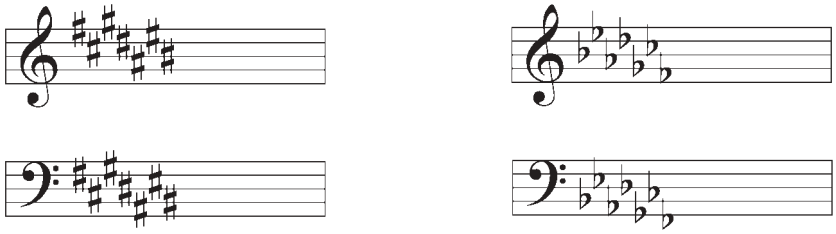
8) 

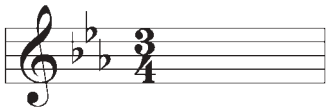
_____

39. There exists certain principals for writing music correctly. These conventions must be known and any errors on the score can therefore be detected. Here are some questions to ask yourself when studying a musical piece.

a) Is the clef in its correct position on the staff?

b) Do the sharps or flats in the key signature occur in the right order, and in their proper place?

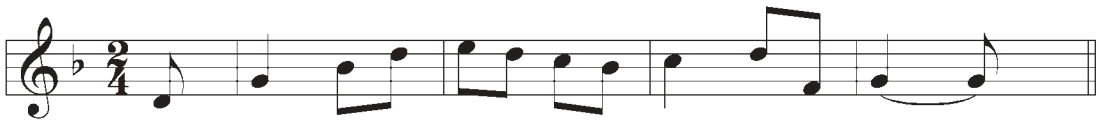


c) Is the time signature right side up and AFTER the key signature?

d) Are there any bar lines omitted, or any extra ones put in?

e) Are there any double bar lines in the middle of the tune, which should be replaced by a single bar line?

f) Are the stems on all the notes facing in the right direction?

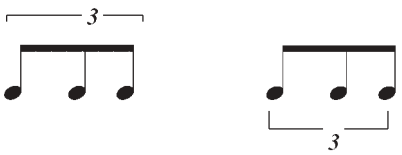
g) Is there a double bar line at the end?

h) Does the piece start with an incomplete bar? If it does, does the last bar contain the fraction of time necessary to complete it?

i) Are there any tied notes which a single note of equal time value could correctly replace?

Incorrect Correct

j) Is the tie of the triplet joined at the stems or the heads?

Correct Incorrect

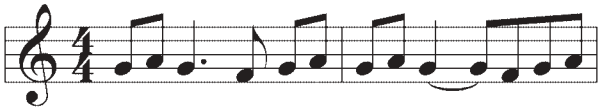
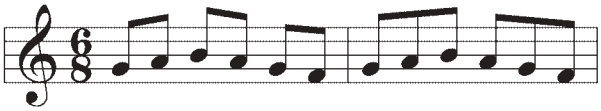


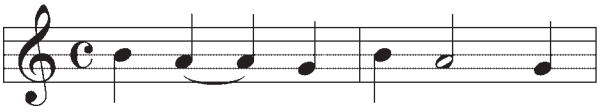
k) Are the dynamics written under the staff?

l) Are the tempo words written above the staff (allegro, adagio)?

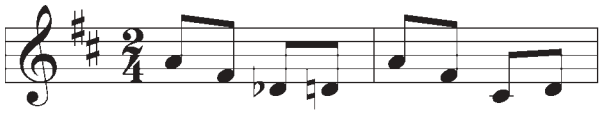
m) Are the articulations written in the opposite direction of the stems?

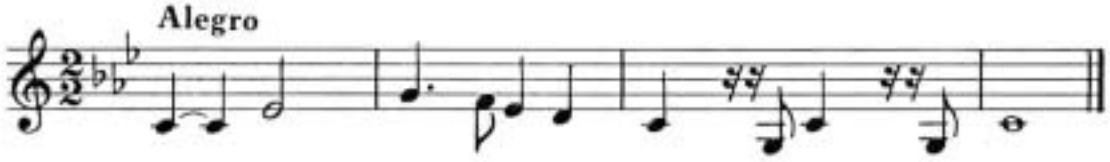
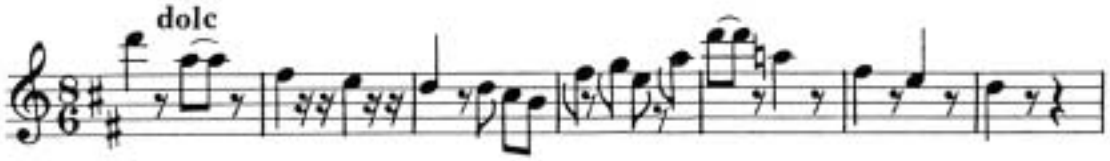
n) Are the notes and rests correctly grouped and conforming with the rules established? Is the separation of each beat, especially that of the second and third beat, clearly defined?

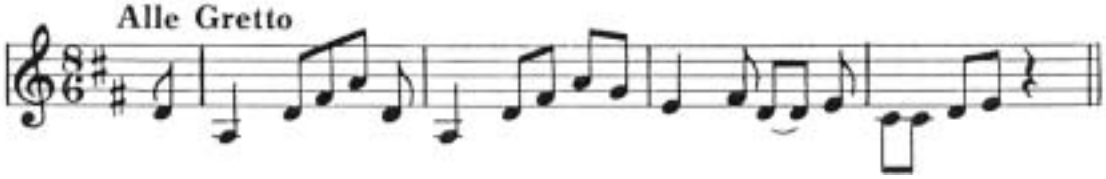
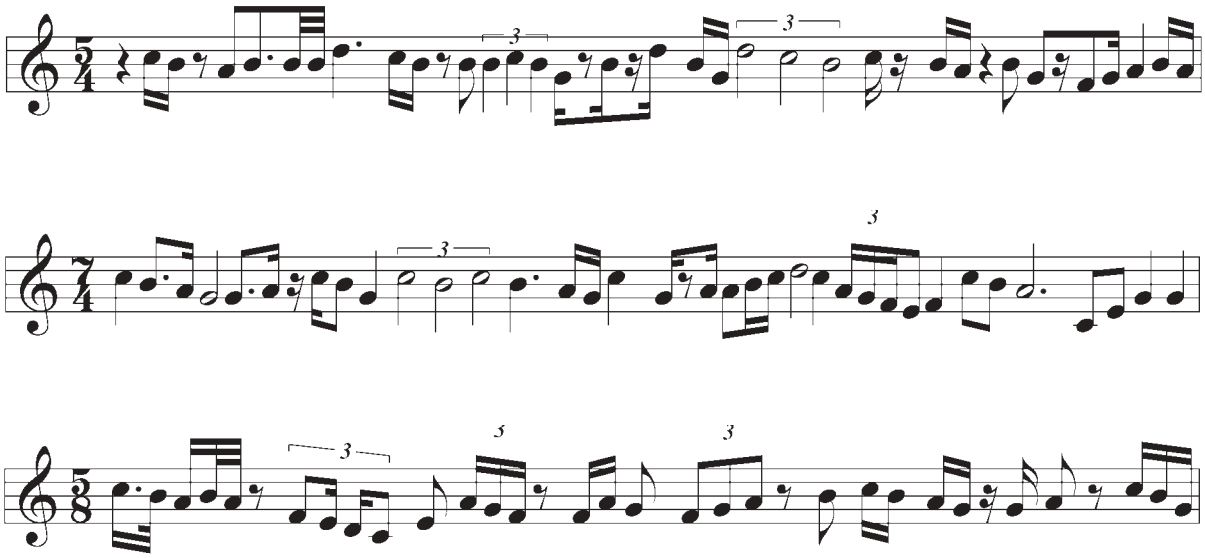
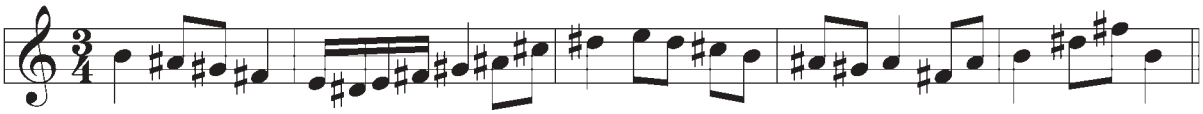
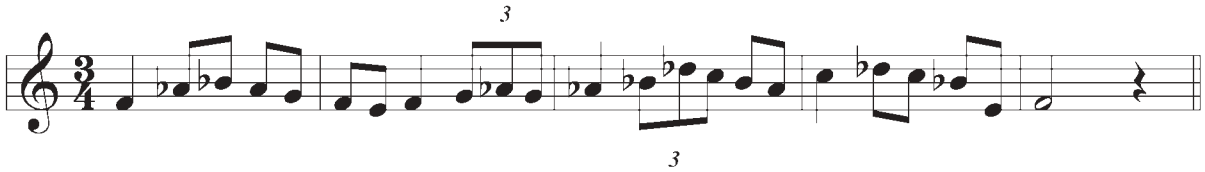
Incorrect Correct

Incorrect Correct

Exception

Incorrect Correct

o) Are there any slurs or ties joining the stems of the notes instead of the heads?

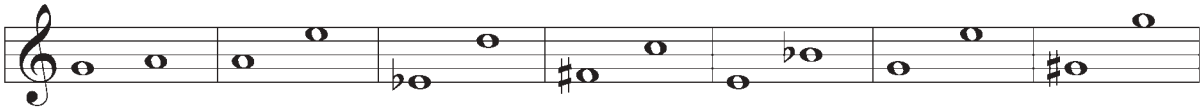
p) Are there any accidentals (or enharmonic changes) that do not logically fit?

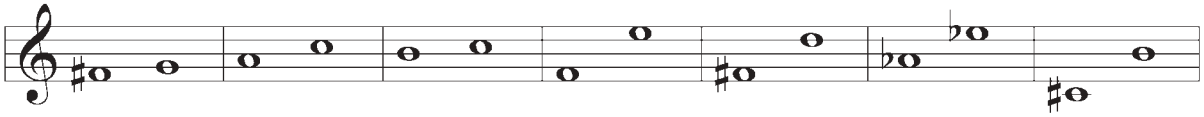
D major Incorrect Correct

A) Rewrite the following passages correctly.*

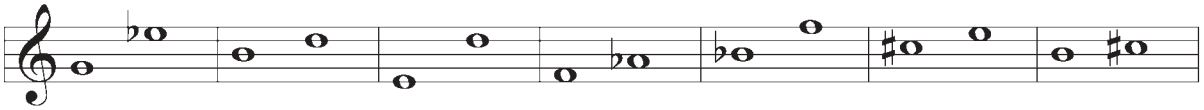
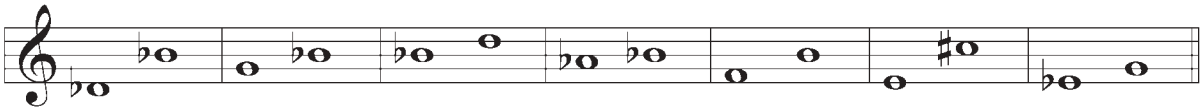
1)

2)

3)

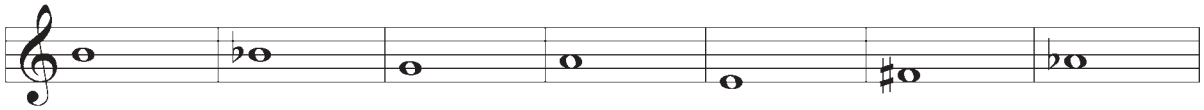
4)

A) Place the bar lines at the appropriate place:

B) State the key of these musical examples:

_____

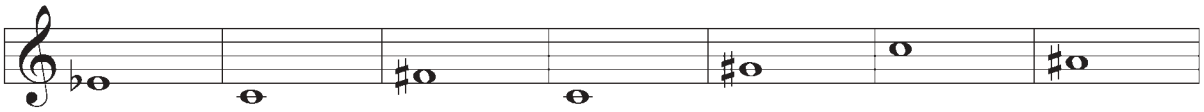
_____

C) Name the following melodic intervals:

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

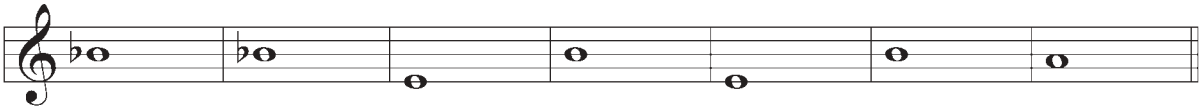


8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

D) Write the harmonic intervals above the given note:

minor 6th major 3rd major 7th perfect 4th major 2nd major 2nd major 6th



minor 3rd minor 7th minor 6th minor 6th perfect 5th minor 3rd dim 5th



major 7th minor 3rd minor 6th major 2nd minor 7th dim 5th major 6th

E) How do you build a major chord? _____

_____

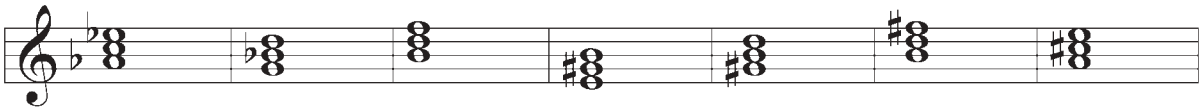
F) How do you build a minor chord? _____

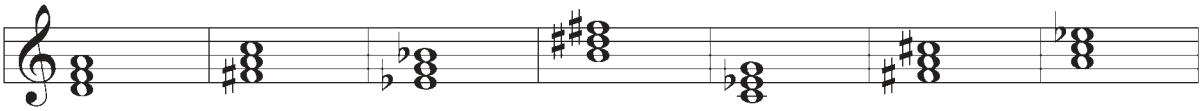
_____

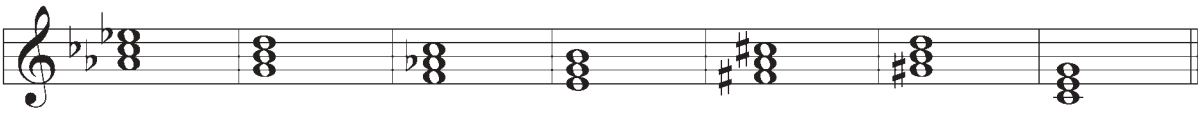
G) What is a diminished chord? _____

_____

H) Name and identify the following chords:

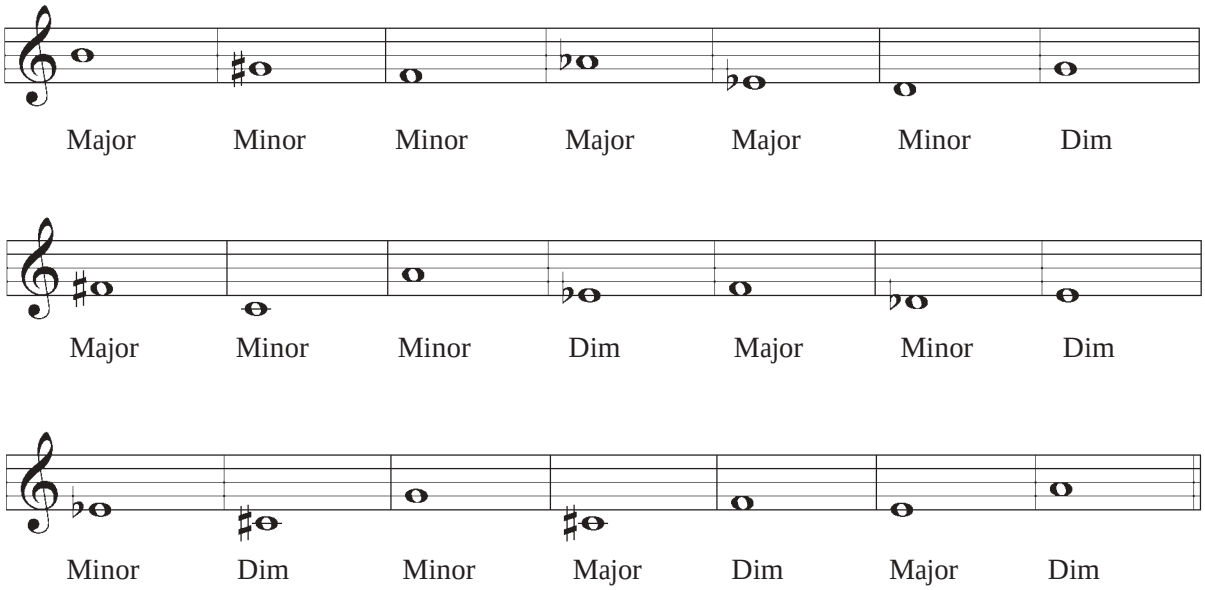


1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____



15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

I) Complete the following chords:



J) To which keys can the following chords belong to. State their degrees:

a) F minor = _____ _____ _____

b) E major = _____ _____ _____

c) B minor = _____ _____ _____

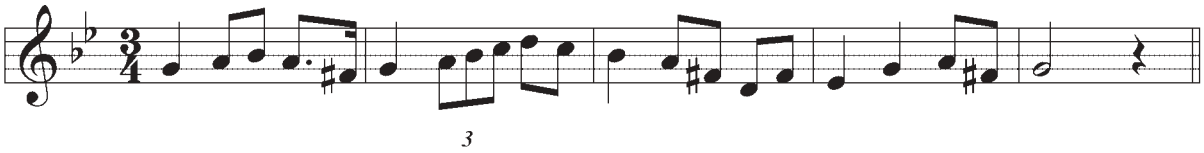
d) E♭ major = _____ _____ _____

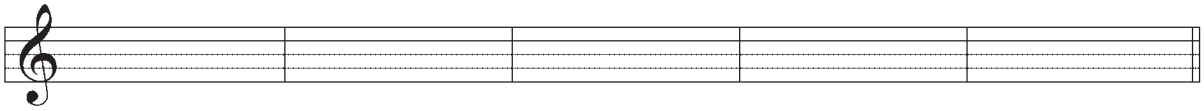
e) C♯ dim. = _____ _____ _____

f) A♭ major = _____ _____ _____

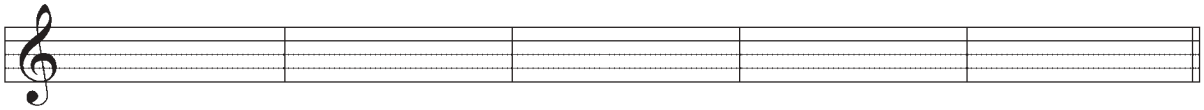
g) G dim. = _____ _____ _____

h) D♭ major = _____ _____ _____

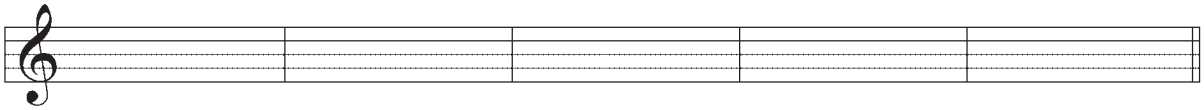
K) Transpose this melody in the given intervals:

Perfect 5th higher



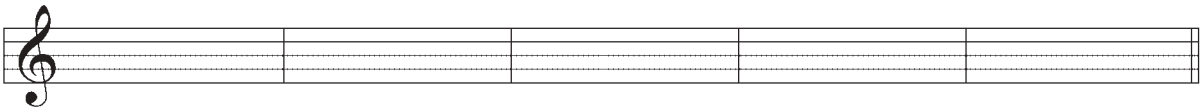
Major 3rd higher



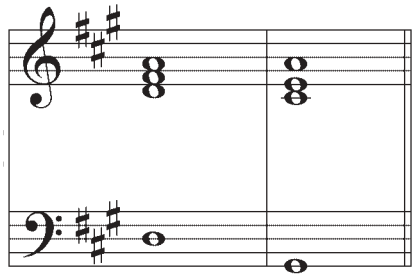
Minor 6th higher



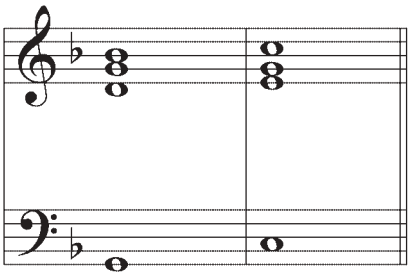
Major 2nd higher



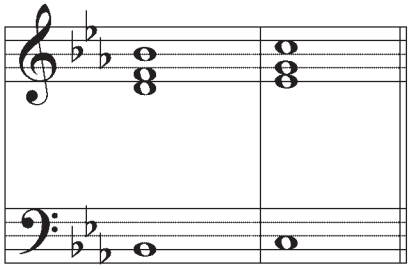
L) Identify the following cadences. Write the key under the staff.



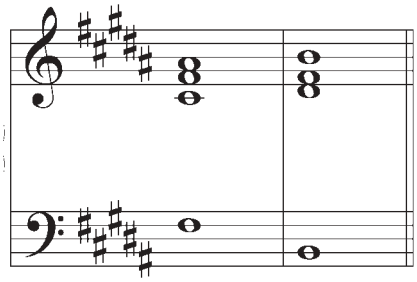
_____



_____



_____



_____

Notes

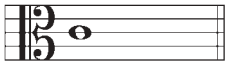
The C Clef

1. There used to be many other clefs before the Treble and Bass clefs. Only one of these other clefs now remains. It is called the C Clef and it fixes the place of the middle C. This clef used to be called UT. When it is placed on the third line, it is called the Alto Clef and is used in music written for viola and alto trombone.

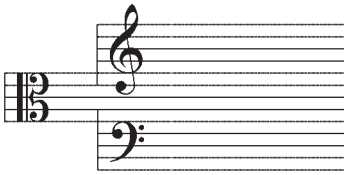
2. When it is placed on the fourth line, it is called the Tenor Clef. It is used in music written for the tenor trombone, and cello. Even if you do not play either of these instruments, it is important to know how to read in the C clef.

3. The clef of C fixes the place of middle C on the piano:

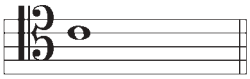
Alto Clef



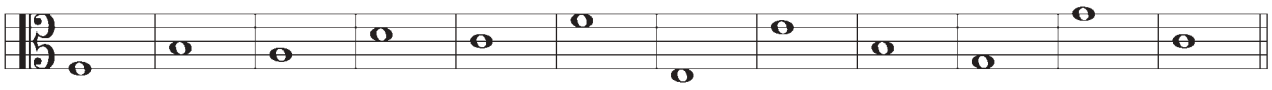
Middle C

4. This illustration shows the relative position of the three clefs mentioned on the staff.

5. The most common C clef is found on the third line. The other clefs are less used but not obsolete.

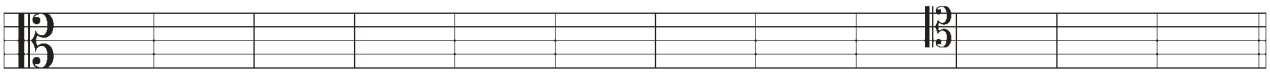
Tenor Clef



Middle C

A) Name the following notes:

_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

B) Place the notes on the staff (L= line and S= space):



D(S) G(S) B(S) C(L) E(L) A(L) F(S) F(L) G(S) E(L) D(L)

6. As mentioned in the previous levels, there exists two categories of intervals:

The intervals are:

PERFECT	MAJOR or MINOR
Unison	Second (2nd)
Fourth (4th)	Third (3rd)
Fifth (5th)	Sixth (6th)
Octave (8ve)	Seventh (7th)

7. Up to now, you have learned how to distinguish intervals as perfect, major or minor. Now you are ready to learn how to distinguish diminished or augmented intervals.

8. A diminished interval is one semitone smaller than a minor interval, which makes it two semitones smaller than a major interval.

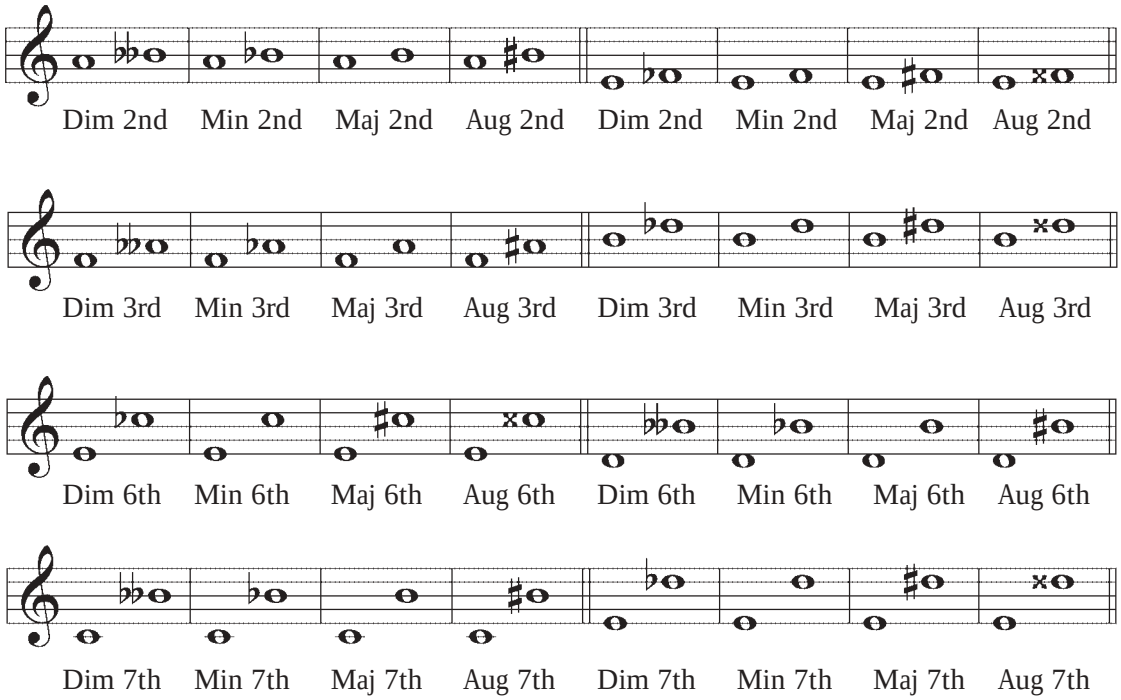
9. An augmented interval is one semitone larger than a major interval, therefore, one tone larger than a minor interval.

10. You can therefore state that, by starting with a diminished interval and raising it by one semitone at a time, you will end at a augmented interval.

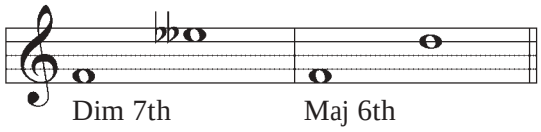
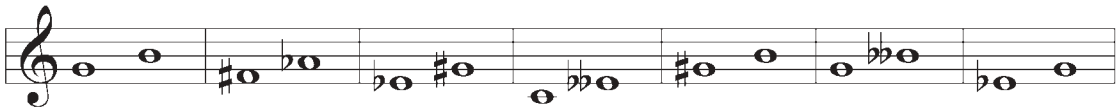
The spectrum of intervals is:

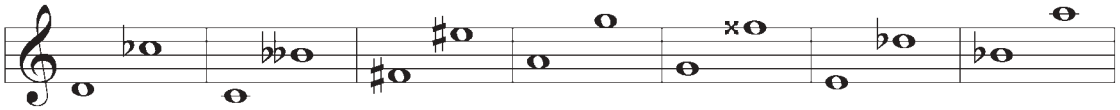
DIMINISHED – MINOR – MAJOR – AUGMENTED

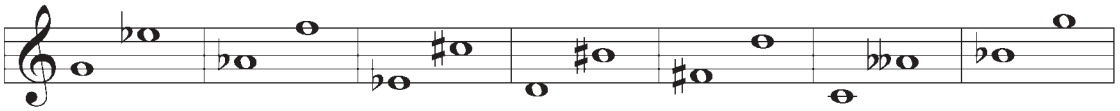
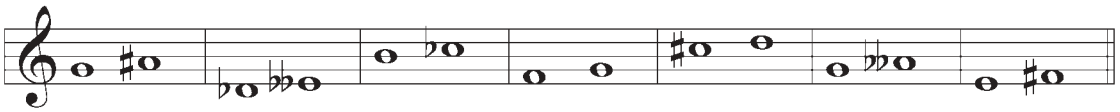
11. The following are examples indicating the differences between all the intervals mentioned: diminished, minor, major, and augmented.



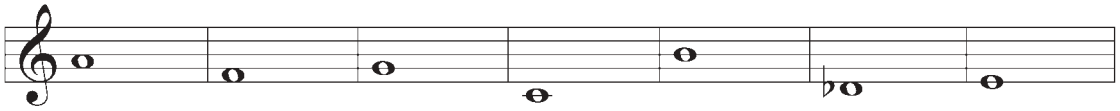
12. It will happen that the diminished or augmented interval will contain a double flat or a double sharp. It is important that you keep these accidentals and not change them into enharmonic notes. By changing the note, you alter the interval. For example, the diminished 7th of F is E*bb*. If you change the E*bb* to D, you have just altered the interval to a perfect 6th, a completely different interval.

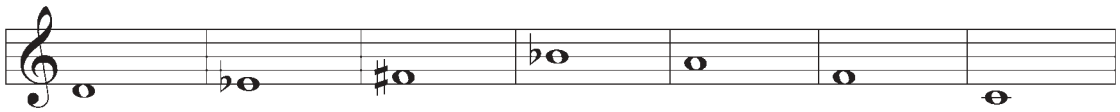
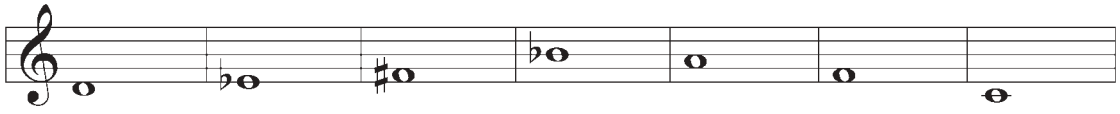
Incorrect to change like this.

A) Name the following intervals:

1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____



8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

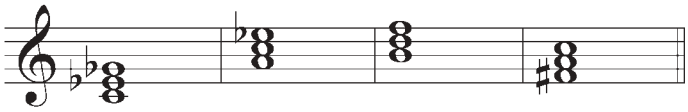
B) Complete the following intervals:



Aug 3rd Min 2nd Dim 7th Min 6th Dim 6th Dim 7th Dim 3rd

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

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

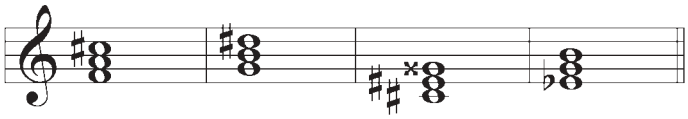
Diminished or Augmented Chords

14. As studied in Level Four, a diminished chord is a chord composed of a minor third and a diminished fifth above the root.



C dim F dim B dim F♯ dim

In this example, the four chords all have a minor third and a diminished fifth. Therefore, you call these chords "diminished chords".

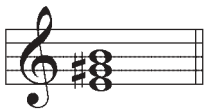
15. An augmented chord is a chord composed of a major third and an augmented fifth above the root.

F aug G aug C♯ aug E*b* aug

In this example, the four chords are all composed with a major third and an augmented fifth. Therefore, you call these chords "augmented chords".

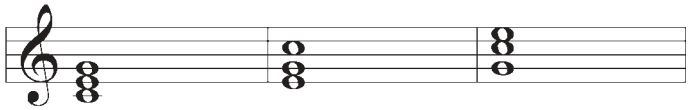
Note: *As mentioned in Level Four, a diminished chord is found on the 7th degree of a major scale, and on the 2nd or 7th degree of a harmonic minor scale. An augmented chord would be found on the 3rd of a harmonic minor scale.*

Inverted Triads (Chords)

16. A chord is written with the root at the base, followed by the third and finally the fifth. The chord is in root position.

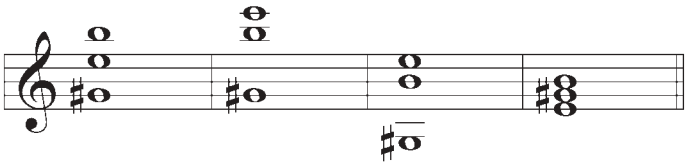
Root Position

E major

17. The same chord can be placed differently. A triad has two INVERSIONS. The first inversion has the third of the chord as the bottom note. The second inversion has the fifth of the chord as the bottom note.

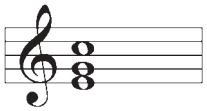
Root Position 1st Inversion 2nd Inversion

Root at base 3rd at the base 5th at the base

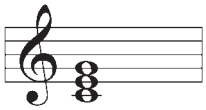
The example above shows the construction of the inverted chords.

Note: *The position of the notes has little importance except the one at the base because it indicates the existence of an inversion. The first three examples (below) are all chords of E major 1st inversion because the base note is always G♯, third of the chord.*



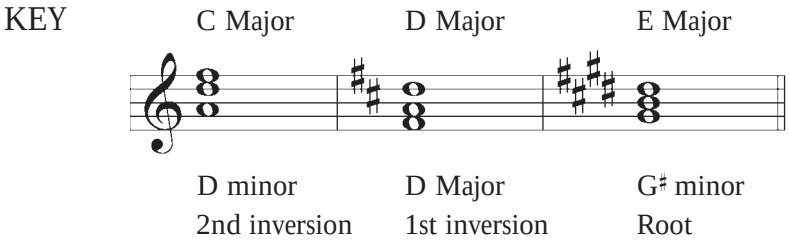
18. To identify a triad, you must first put it in root position. Once this is done, you can tell what kind of chord it is and in which position it is in.

If you take this inverted chord 

and place it in its root position, 

you can name the chord, the chord of C major.

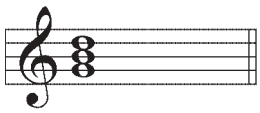
ATTENTION: *Many people have difficulty differentiating between the root, the bass note, and the tonic. The Root is always the lowest note of the triad in its natural state. The bass note is the lowest note of the chord, whether it is in root position or in an inverted position. The tonic is the name given to the first degree of a scale. The root is not necessarily the tonic of the scale because you find chords on all the degrees of the scale.*



In the above example, the first chord demonstrates that the tonic is C (C major), the root of the chord is D (chord of D, F, A), and the bass note is A (2nd inversion). In the second chord, the tonic is D (D major), the root is D (chord of D, F♯, A), and the bass note is F (1st inversion). In the last chord, the tonic is E (E major), the root is G♯, (G♯, B, D#) and the bass note is also G♯ (root position).

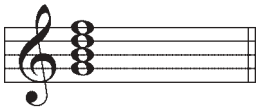
19. The dominant chord is only found on the 5th degree of a scale.

Here is the dominant of C major:



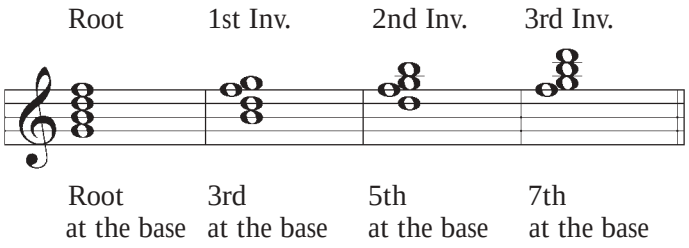
20. The DOMINANT SEVENTH chord is a four-note chord containing the dominant major triad and the interval of a minor seventh above the root.

Here is the dominant seventh chord of C major:

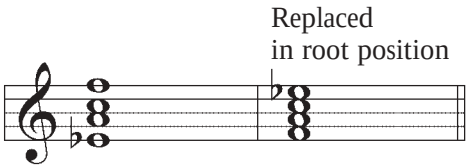


21. As for the three-note chord, the dominant seventh chord can also be inverted. Since there are four notes, there are three inversions. The seventh degree at the bass creates the 3rd inversion.

Here are the possible inversions:



22. To recognize the dominant seventh chord, you must place the chord in its root position. One way to write or recognize dominant seventh chords is by V7.

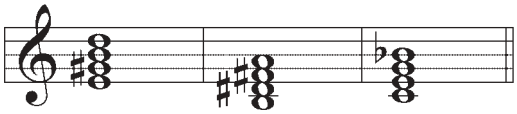


The name of this chord is F7, 3rd inversion. The 7 is named after the 7th degree.

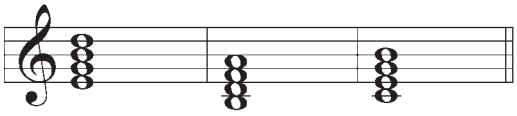
Note: *There are many ways in which you can identify the inversions of three-note and four-note chords. Should you decide to further your musical education, you will encounter all the various ways of naming chords in different styles (classical, jazz, etc.)*

23. Not every four-note chord is a dominant seventh chord. The structure of the dominant seventh has to be root, major third, and perfect fifth, and minor seventh. Anything else is something different.

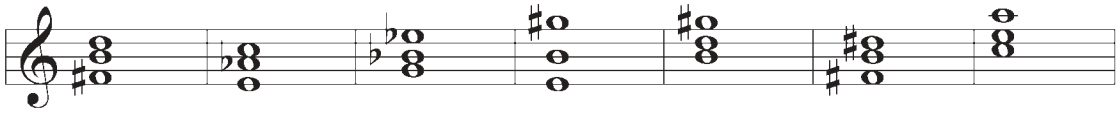
Dominant Seventh Chords

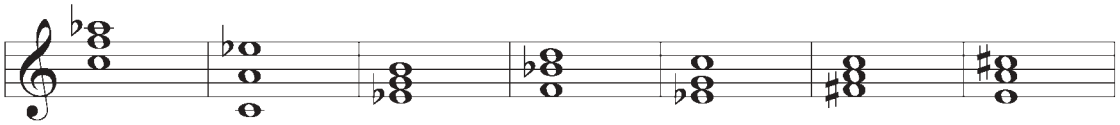


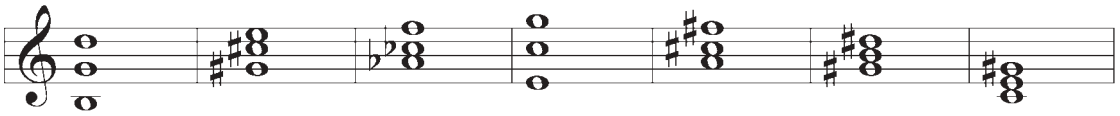
4-note chords

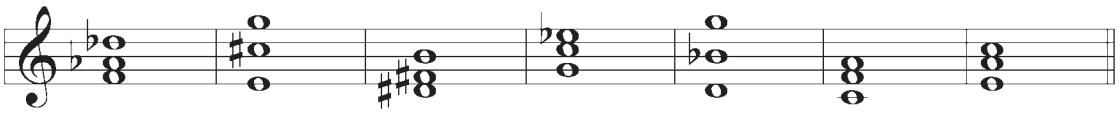


A) Identify the following chords and their inversions:

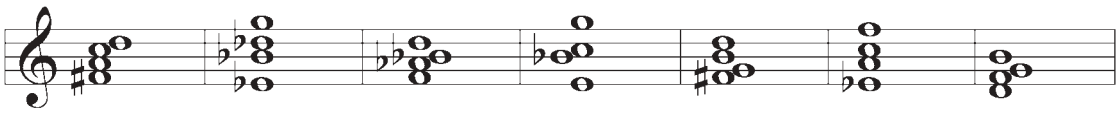


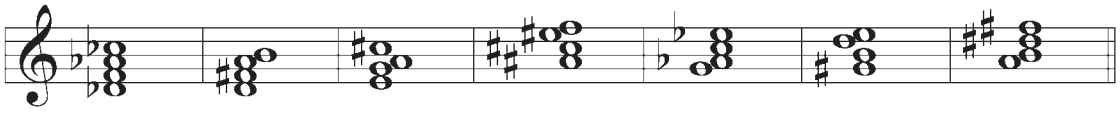
1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

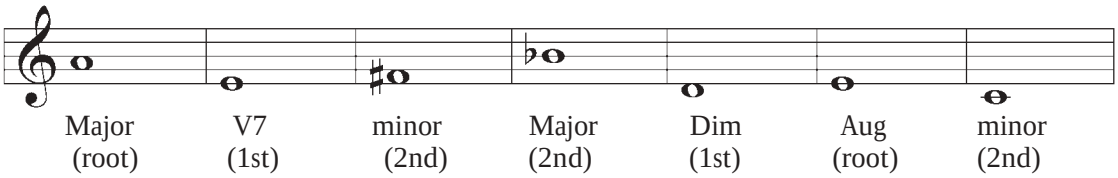


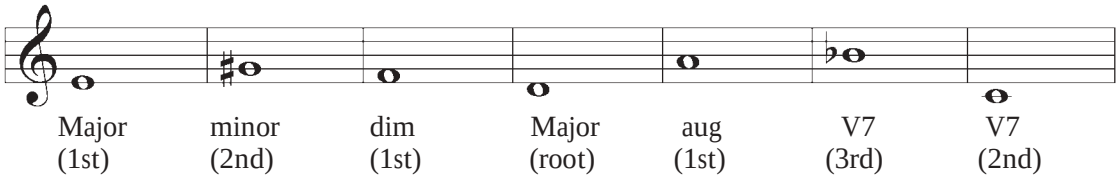
15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

22 _____ 23 _____ 24 _____ 25 _____ 26 _____ 27 _____ 28 _____

B) Name the following dominant seventh chords with their inversions. Some examples are not dominant seventh chords, but write the name of the chord as well. (e.g. of answer: V7 of F (C7) 2nd Inversion)

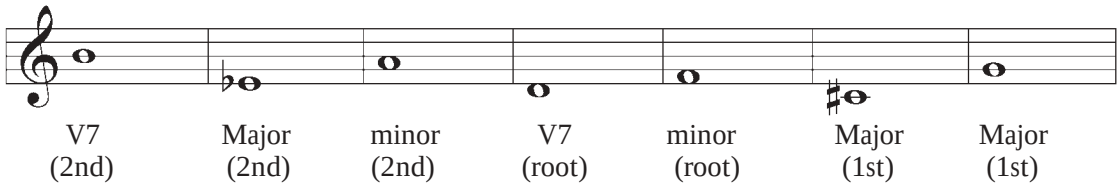


1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

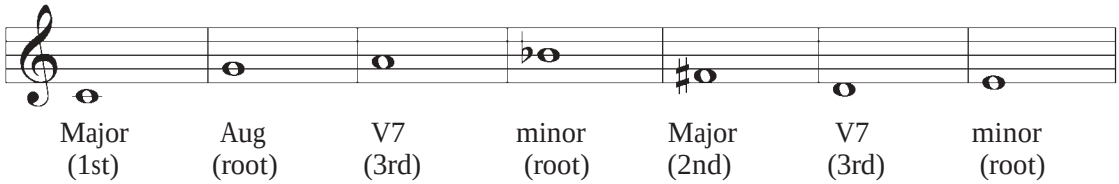
C) Complete the following chords with their inversions:

Major (root)	V7 (1st)	minor (2nd)	Major (2nd)	Dim (1st)	Aug (root)	minor (2nd)



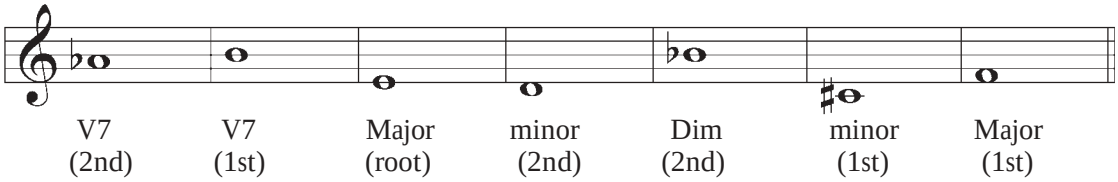
Major (1st)	minor (2nd)	dim (1st)	Major (root)	aug (1st)	V7 (3rd)	V7 (2nd)



V7 (2nd)	Major (2nd)	minor (2nd)	V7 (root)	minor (root)	Major (1st)	Major (1st)



Major (1st)	Aug (root)	V7 (3rd)	minor (root)	Major (2nd)	V7 (3rd)	minor (root)



V7 (2nd)	V7 (1st)	Major (root)	minor (2nd)	Dim (2nd)	minor (1st)	Major (1st)

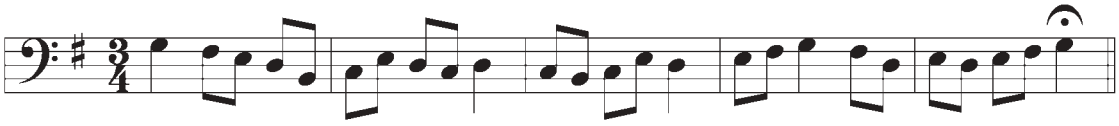
24. Up to this point, you have learned the different possibilities of transposing a melody: transposing by an octave or by changing keys. These techniques lead us to how to transpose between instruments.

25. Due to the different sizes and different mechanisms of each instrument, the C that you know on the piano is not necessarily the same pitch for another instrument. Therefore, the musical notation for the instruments is not always indicated with the real pitch but a transposed pitch to accommodate the composition of logical fingerings.

26. If you refer to the table (to follow), you will notice the difference between the real pitch and the transposed pitch. The transposed pitch is what instrumentalists sees on their score. What comes out as sound are the notes you see in the column of the real pitch. Why is this? Because instruments come in different sizes made with different material and made with a certain logical system for appropriate fingering.

27. After you understand the function of the table, you are now ready to transpose any melody from one instrument to another by using the step-by-step method learned in Level Four.

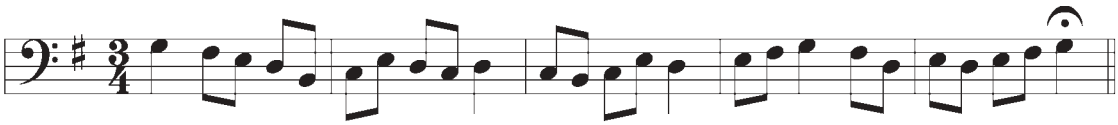
28. Let's transpose the following melody for the tenor saxophone by using the steps fore-mentioned:

G Major

(real pitch)

Note: *You can determine the pitch of an instrument by using a precise note which is considered the natural note of the instrument. For example, B^b on the trumpet is played open (no pistons are down). This note therefore is a natural note for the trumpet. C for the trumpet is a B^b on the piano.*

1) First, by looking at the table, the melody is written is the correct register of the instrument.

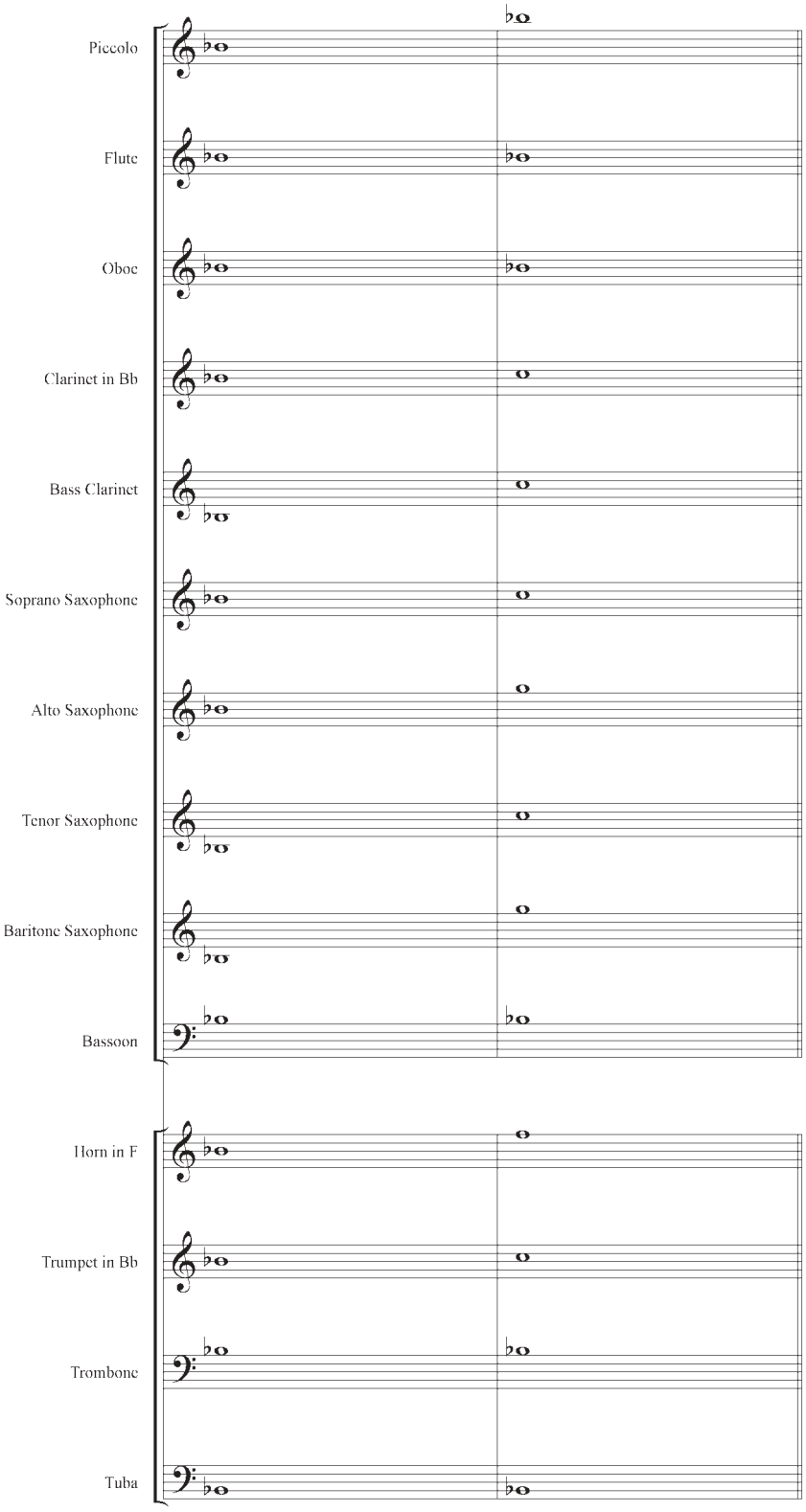
2) Next, you see that you have to raise the melody by a major ninth (perfect 8ve and a major 2nd) to obtain the right pitches (sound).

A Major

(transposed melody)

3) Finally, you have to make sure that the melody is written in the proper range and proper clef so the instrumentalist can read the music. After transposing the melody by a major ninth, you can see that the tenor saxophone always reads in the treble clef so that the pitch desired (real pitch) is heard. The tenor saxophone reads higher placed notes to achieve low-sounding notes.

Note: *It is important to take note of all the instruments registers of real pitch and transposed pitch. This demonstrates to the musician the wide range of written notes and heard notes.*

29. There exist other possible techniques of transposing between instruments. You might know one that is easier to use. However, whichever technique is used, do not short-change an interval change. For example, if you want to transpose a melody for an alto saxophone, you need to raise it by a major 6th. Do not take short cuts by transposing it a minor third lower because you will not be in the correct register. You will have to transpose it again an octave higher for the transposition to be correct.



Transposition

Raise the real pitch by a perfect octave.

No transposition needed.

No transposition needed.

Raise the real pitch by a major second.

Raise the real pitch by a major ninth (perfect 8ve + major 2nd).

Raise the real pitch by a major second.

Raise the real pitch by a major sixth.

Raise the real pitch by a major ninth (perfect 8ve + major 2nd).

Raise the real pitch by a major thirteenth (perfect 8ve + major 6th).

No transposition needed.

Raise the real pitch by a major second.

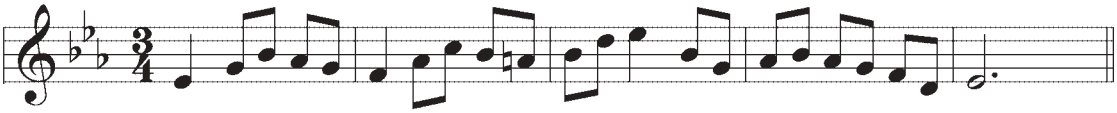
Raise the real pitch by a perfect fifth.

No transposition needed.

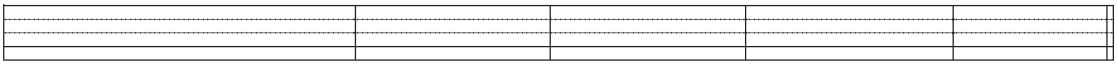
For the baritone treble clef, we use the same fingerings as for the trumpet, therefore we raise the real pitch by a major ninth (perfect 8ve + major 2nd).

No transposition needed.

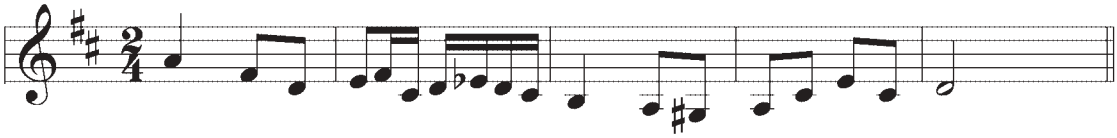
A) Transpose the following melodies as requested:

1)

For the Clarinet

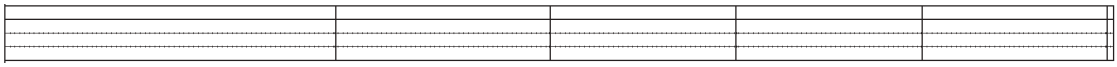
For the Alto Saxophone



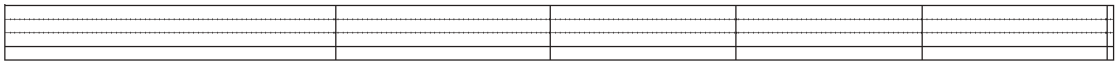
2)

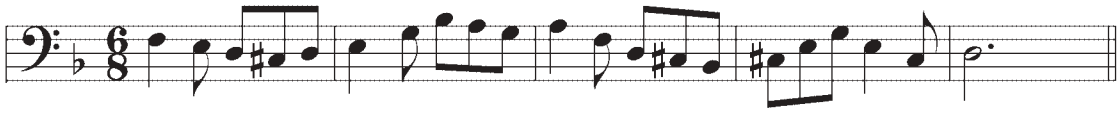


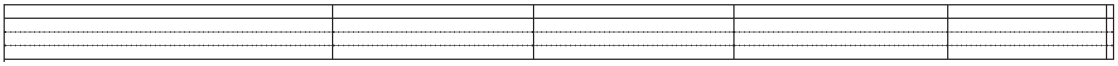
For the Trumpet



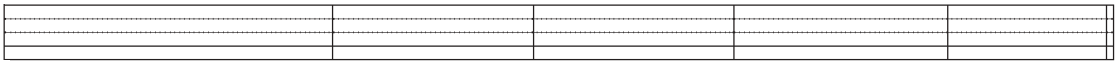
For the French Horn



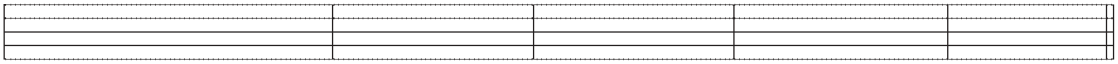
3)

For the Tenor Saxophone



For the Baritone Saxophone



For the Bass Clarinet



Cadences

29. As you saw in Level Four, a cadence is like a musical punctuation, like that of a comma or period in language. This punctuation allows for a pause or a breath mark that in turn gives the direction to the music. A cadence is a union of 2 chords that indicate musical phrase endings.

30. You have already studied the types of cadences. Now, you will learn how to write them.

Note: *Before you learn to write the cadences, it is very important to identify them. If you have any difficulty, please refer to Level Four.*

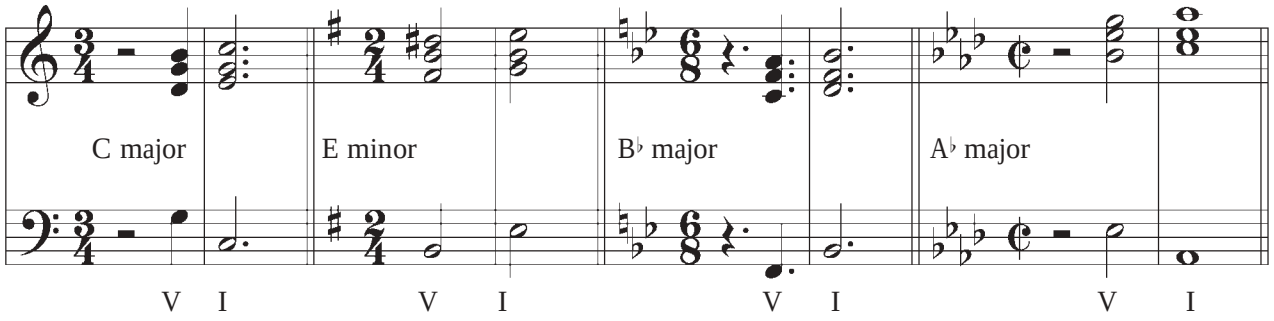
31. To write a cadence, you must follow the following steps:

a) state the key (write the key signature)
b) use the right chords of the cadence in reference with the key
c) place the lowest note (not necessarily the root) of the chord in the bass clef and then place the others on the treble clef
d) keep the common notes with the same voice
e) use a scale-like pattern for each voice

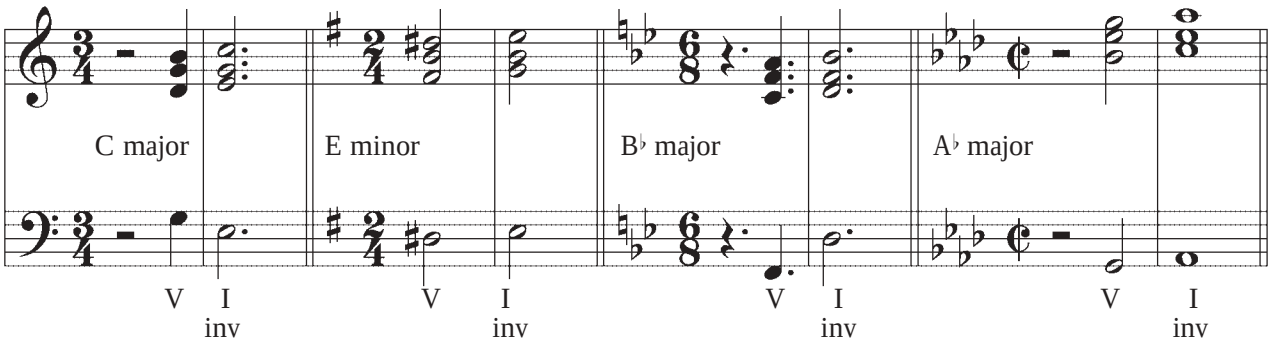
Note: *As two chords follow each other, it is important that each note of the first chord is followed by another note of the second chord. Each note is considered a voice which can be played by an instrument*

32. Following are the cadences studied in Level Four with their definition and their characteristics. Observe closely how these are written.

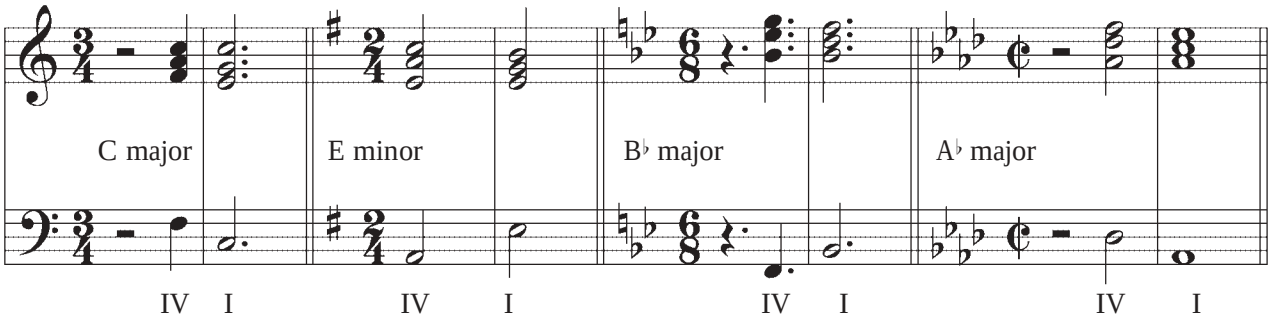
34. The PERFECT CADENCE is formed with the dominant chord followed by the tonic chord (V-I). Both chords are in root position (no inversion) and the root is written in the bass clef.



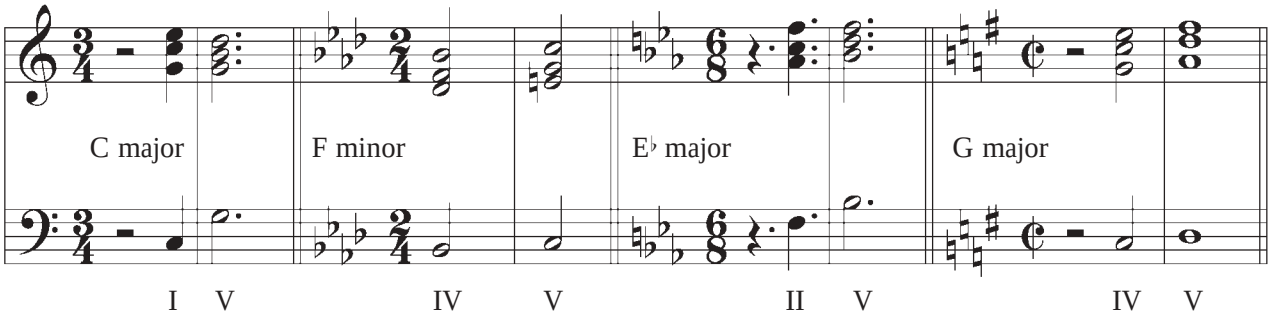
35. Once one of the two chords is in an inverted position, (usually only in 1st inversion), the cadence is then called an IMPERFECT CADENCE. This cadence, however, still is formed as V-I.



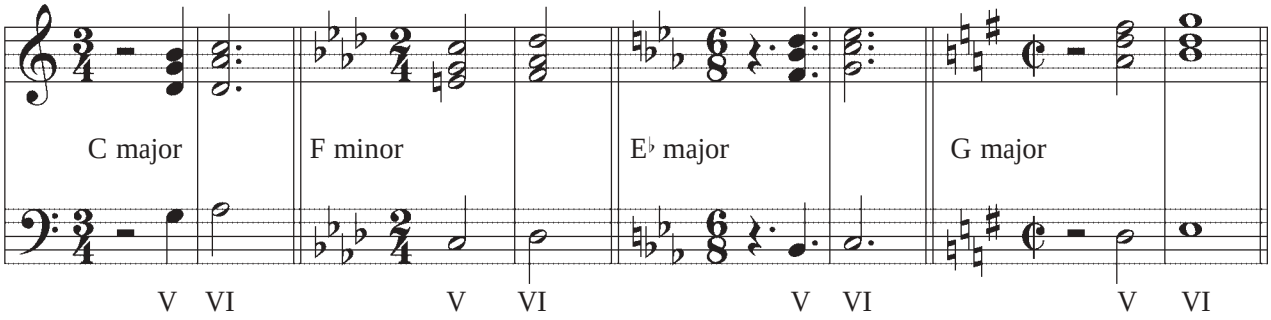
36. The PLAGAL CADENCE is formed with the sub-dominant chord followed by the tonic chord (IV-I). The chords are usually in root position.



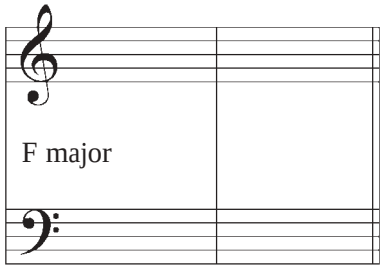
37. The dominant cadence, called IMPERFECT/HALF CLOSE CADENCE, is formed with these following chords: I-V, IV-V, II-V, etc. All these chords are usually found in root position.



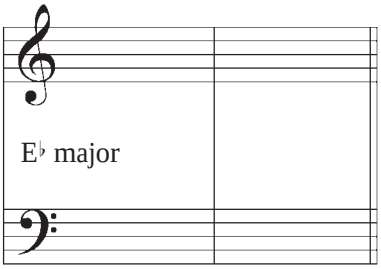
38. Finally, the DECEPTIVE CADENCE is formed with the dominant chord followed by the sub-mediant chord (V-VI). The chords are usually found in root position.



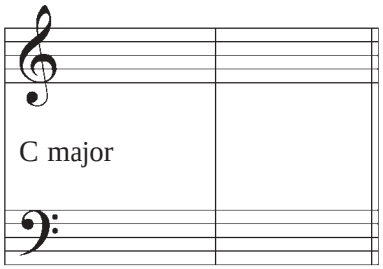
A) Complete the following cadences:



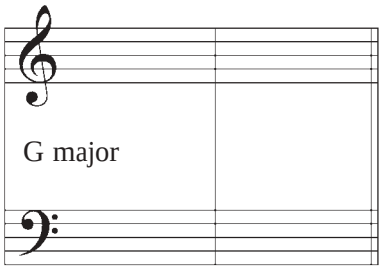
Half Cadence



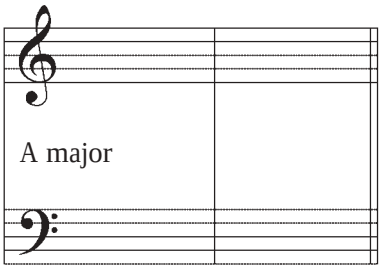
Deceptive Cadence



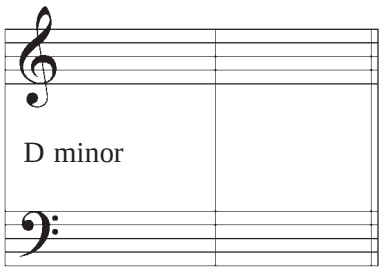
Perfect Cadence



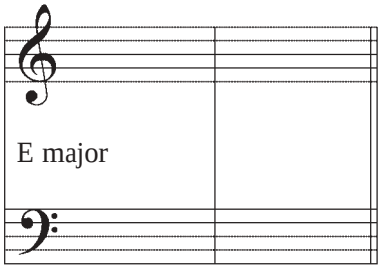
Imperfect Cadence



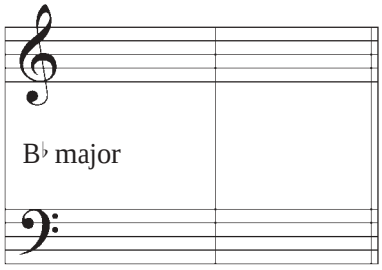
Plagal Cadence



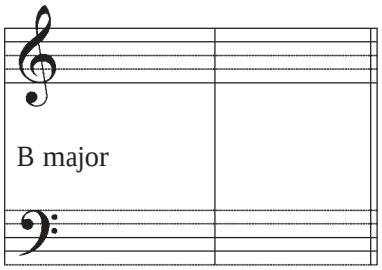
Deceptive Cadence



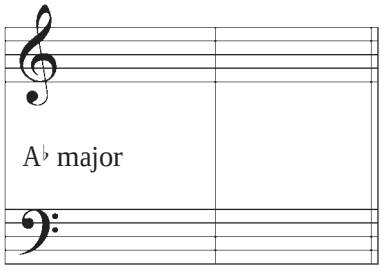
Perfect Cadence



Plagal Cadence



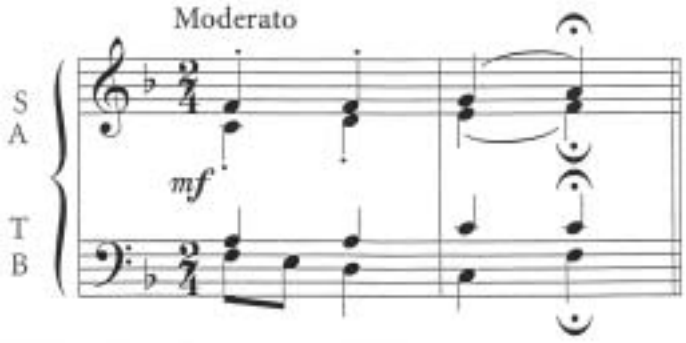
Half Cadence

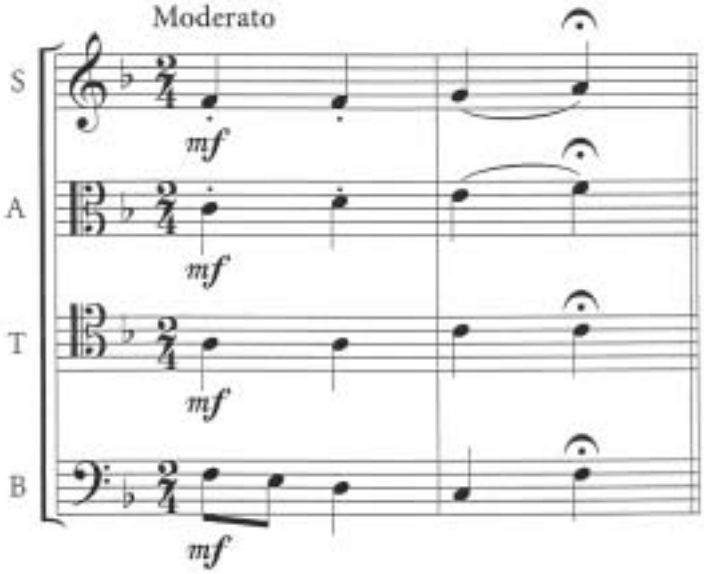
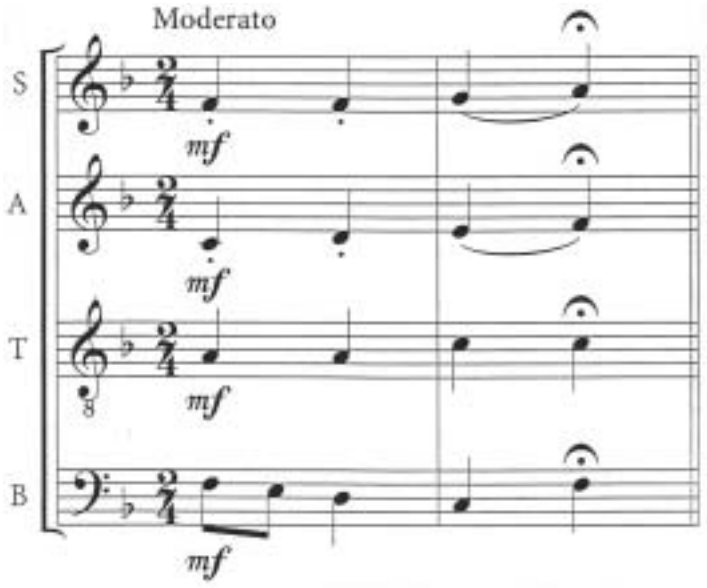


Imperfect Cadence

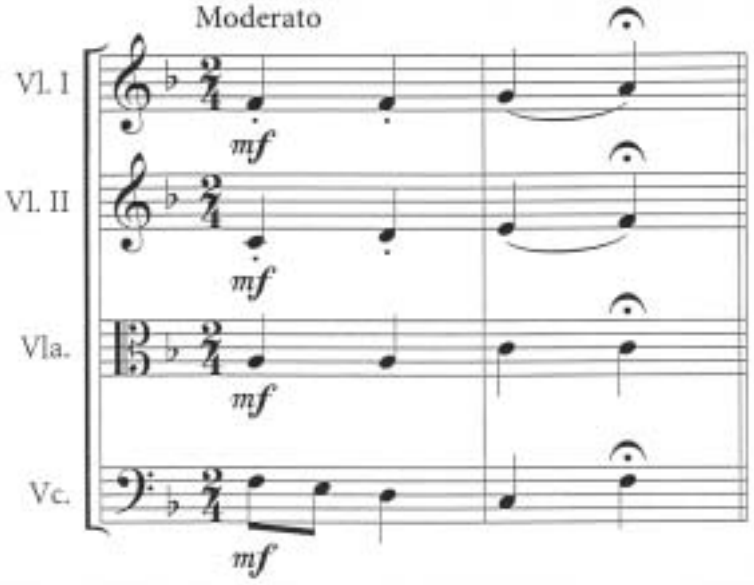
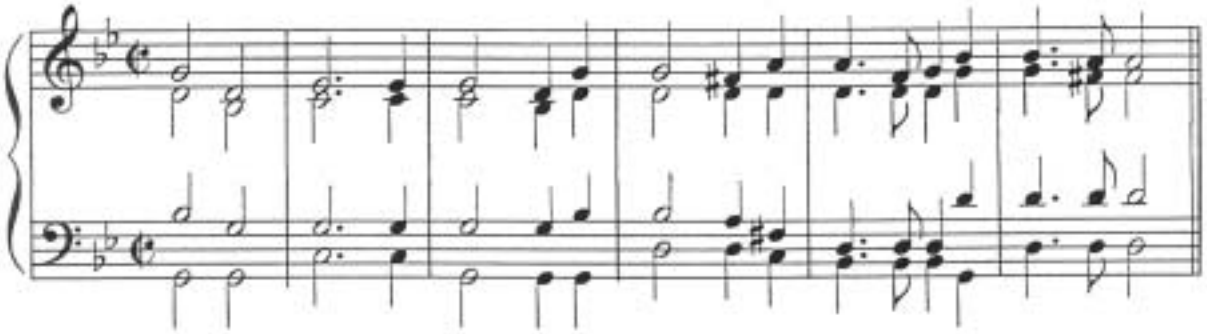
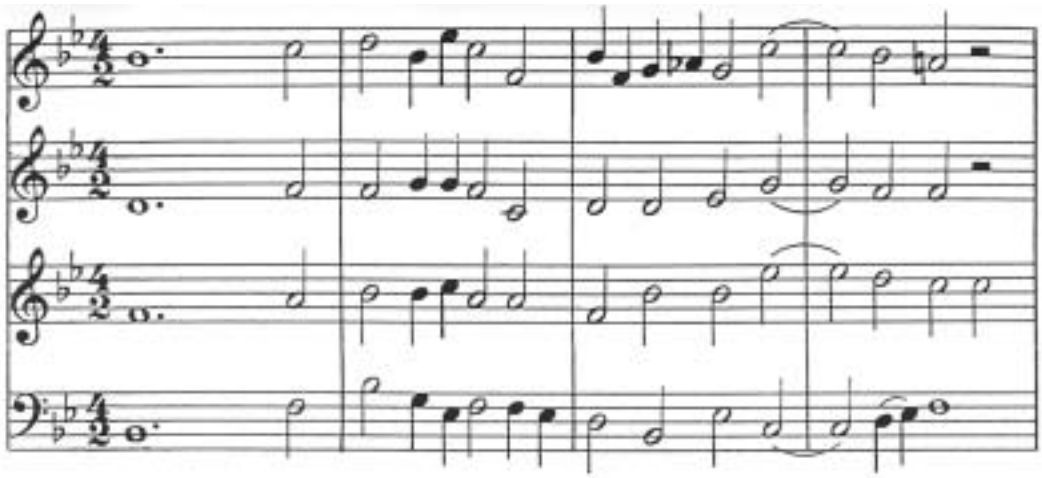
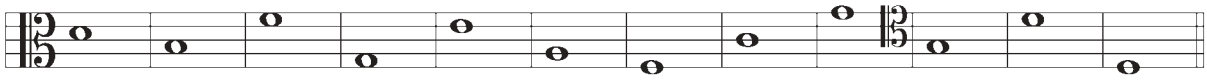
39. Short Score is also referred to as a compressed, condensed or close score. In vocal music, there are two ways in which the notes can be presented. Vocal music is written for a combination of voices, usually four (soprano, alto, tenor and bass) but can be written for more.

40. The soprano and alto parts are written in the treble clef, while the tenor and bass parts are written in the bass clef. The stems for soprano and tenor go up and the stems for the alto and bass go down.

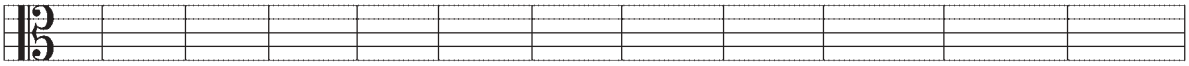
This example is written in short or close score:

41. Open Score refers to a score where each of the four voices is written on its own staff. The old form has each voice written in its own clef (the alto and tenor clef using the C clefs).

This is the same passage written in vocal score with C clefs.

Here is the same passage written in modern vocal score.

Music written for String Quartet also has four staves. Instrumentation is as follows: first violin, second violin, viola and cello.

Note: *The viola is written in the Alto clef.*

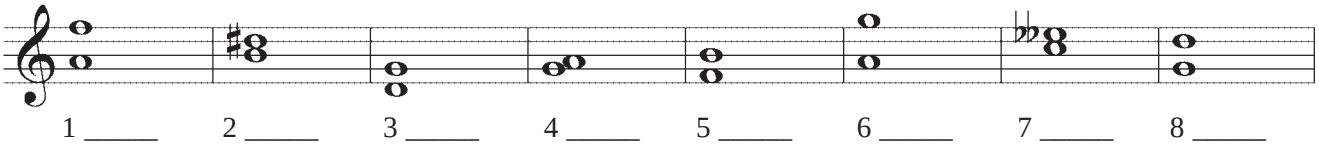
Here is, again, the same passage written in string quartet score.

A) Write the following passage in open score for string quartet.

B) Write the following passage in short (condensed) score.

A) Identify the following notes:

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

B) Find the following notes on the staff: (L = line and S = space).

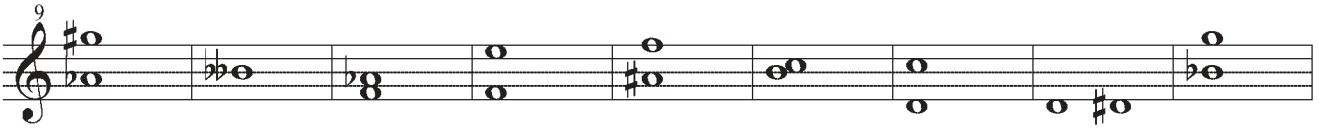


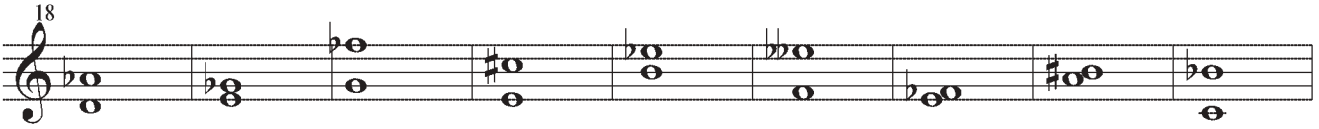
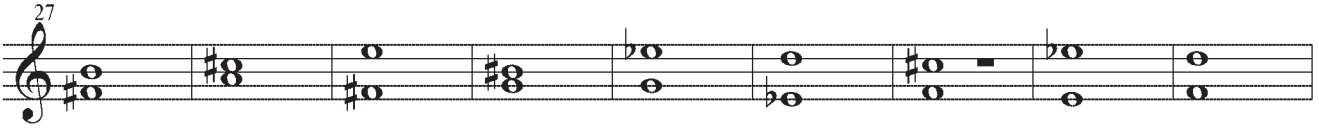
G(L) G(S) E(L) D(S) F(S) E(S) C(L) A(L) A(S) F(L) D(S) B(S)

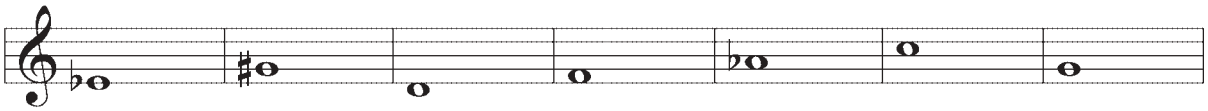
C) Identify the following intervals:

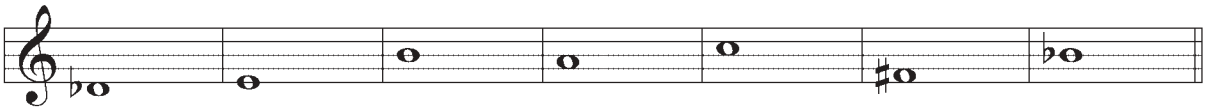


1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____ 8 _____



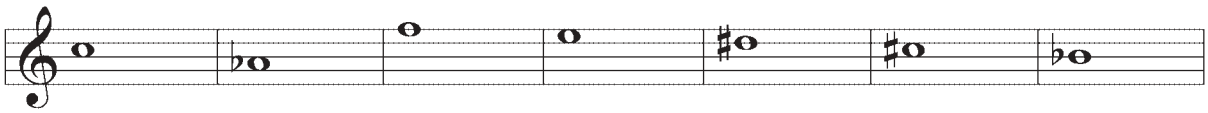
9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____ 15 _____ 16 _____ 17 _____

18 _____ 19 _____ 20 _____ 21 _____ 22 _____ 23 _____ 24 _____ 25 _____ 26 _____

27 _____ 28 _____ 29 _____ 30 _____ 31 _____ 32 _____ 33 _____ 34 _____ 35 _____

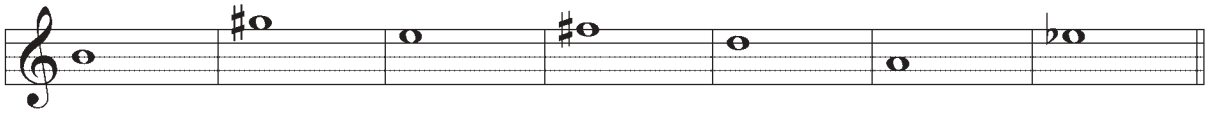
D) Complete the following intervals by adding the upper note:

Maj 7th Maj 2nd Dim 6th Dim 8ve Dim 5th Min 6th Maj 6th



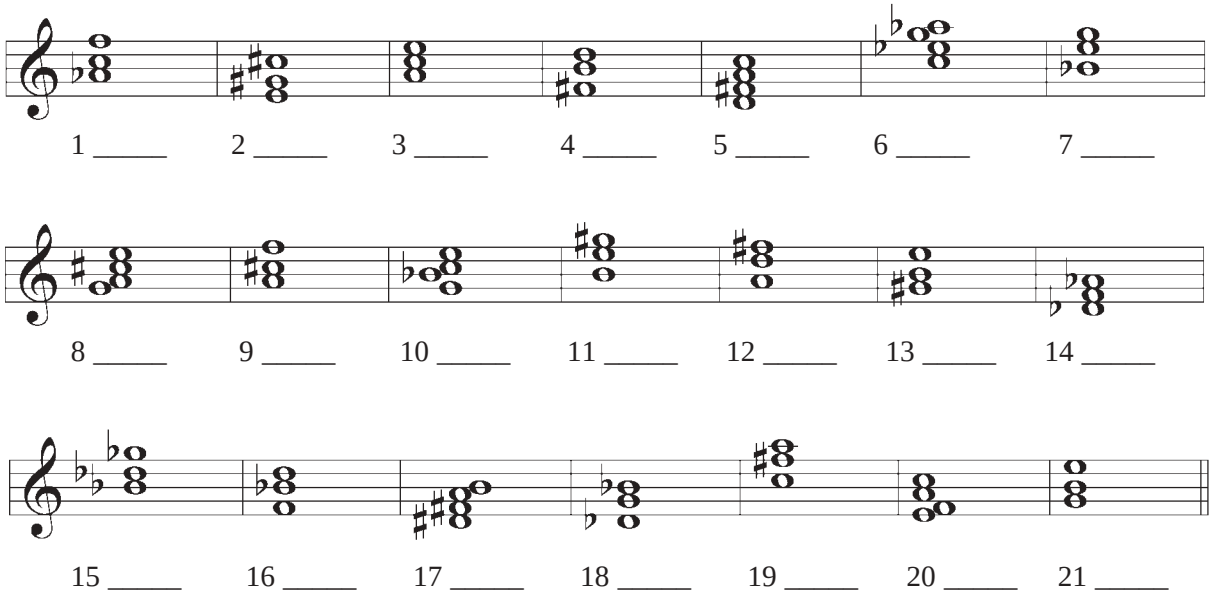
Perfect 4th Maj 6th Aug 2nd Maj 3rd Dim 7th Dim 3rd Min 7th

E) Complete the following intervals by adding the lower note:



Maj 7th Dim 5th Min 7th Min 6th Maj 6th Maj 2nd Dim 7th

Perfect 5th Maj 3rd Min 2nd Perfect 4th Maj 3rd Min 2nd Aug 4th

F) Name the following chords and state their inversion (e.g. F7 1st inv.) Not all the examples are dominant seventh chords (V7).

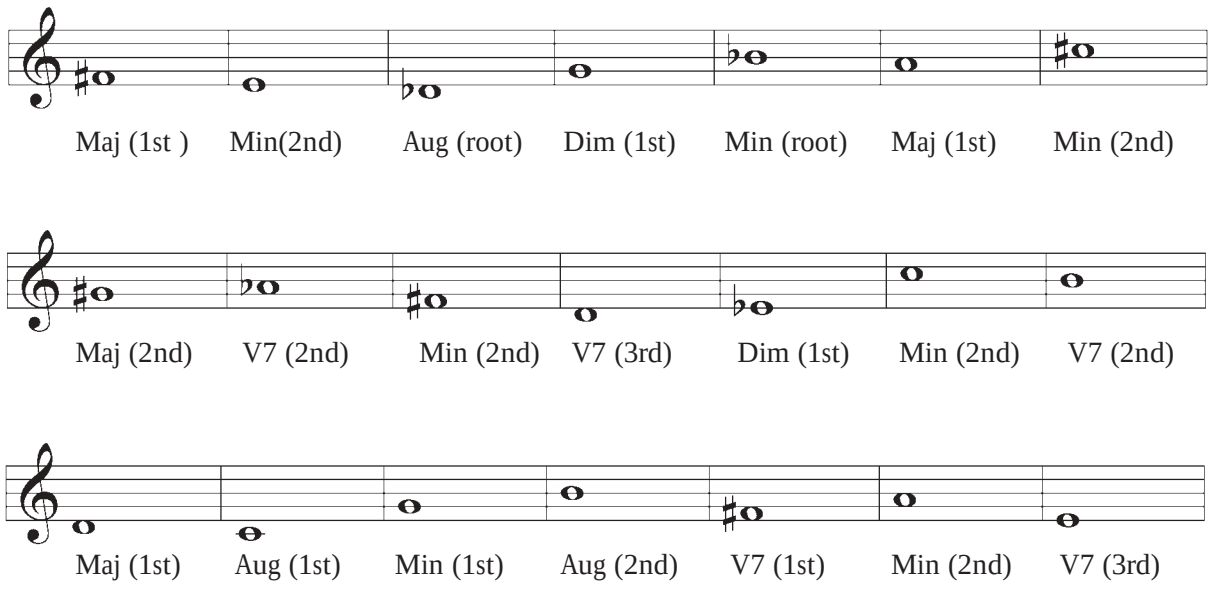


1 _____ 2 _____ 3 _____ 4 _____ 5 _____ 6 _____ 7 _____

8 _____ 9 _____ 10 _____ 11 _____ 12 _____ 13 _____ 14 _____

15 _____ 16 _____ 17 _____ 18 _____ 19 _____ 20 _____ 21 _____

G) Complete the following chords by respecting the correct inversion.

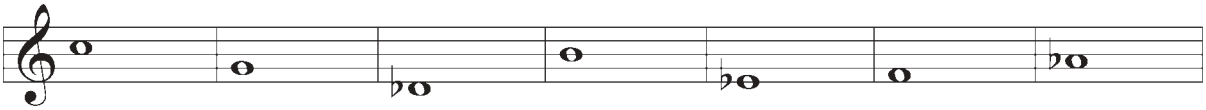


Maj (1st) Min(2nd) Aug (root) Dim (1st) Min (root) Maj (1st) Min (2nd)

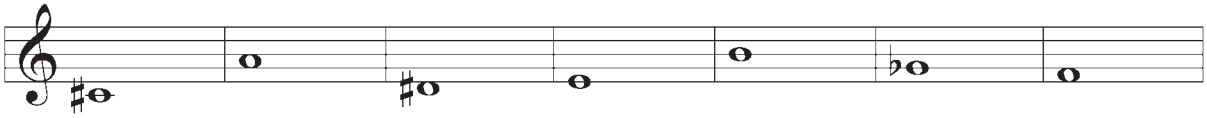
Maj (2nd) V7 (2nd) Min (2nd) V7 (3rd) Dim (1st) Min (2nd) V7 (2nd)

Maj (1st) Aug (1st) Min (1st) Aug (2nd) V7 (1st) Min (2nd) V7 (3rd)

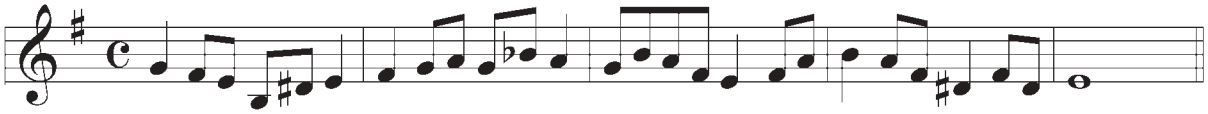
G) (continued)

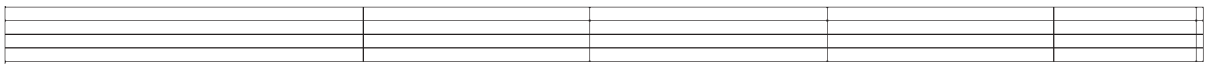


Maj (2nd) Min (root) Min (1st) Min (1st) V7(2nd) V7 (1st) Min (1st)

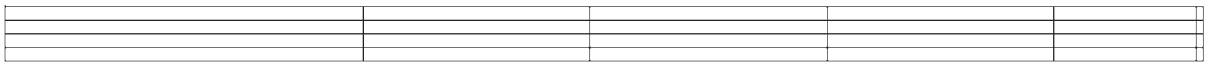


Min (root V7 (3rd) Maj (2nd) Maj (1st) V7 (3rd) Dim (2nd) V7 (2nd)

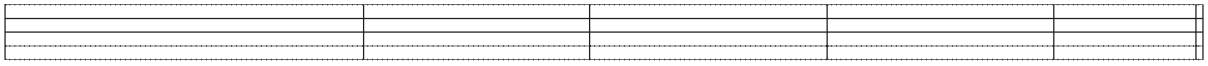
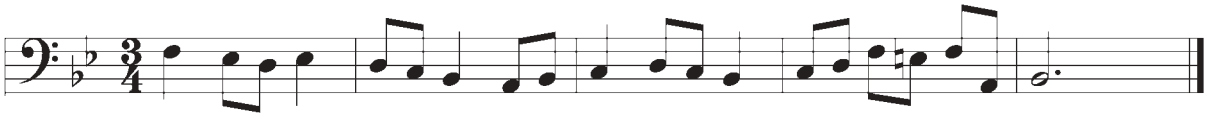
H) Transpose the following melodies for the instruments asked:

For the alto saxophone:



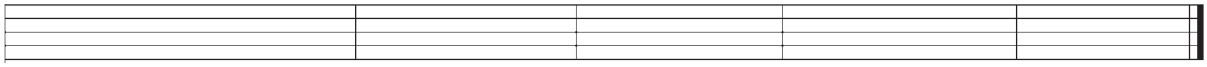
For the French horn:



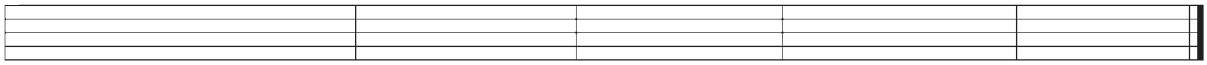
For the trumpet:



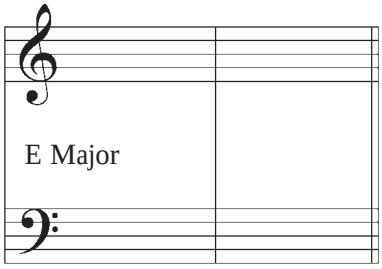
For the bass clarinet:



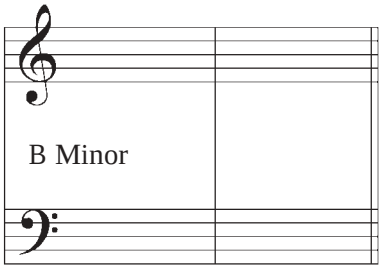
For the baritone saxophone:



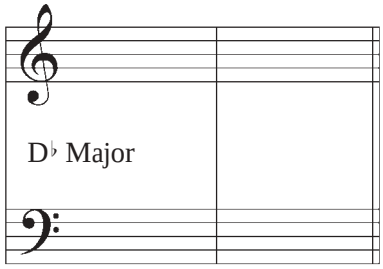
I) Write out the following cadences:



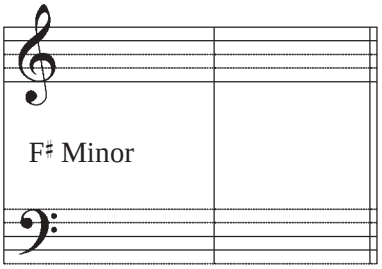
Perfect Cadence



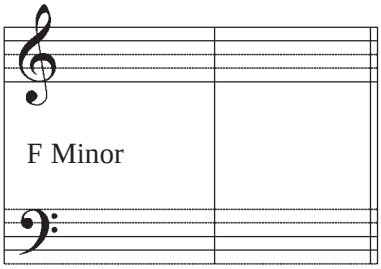
Plagal Cadence



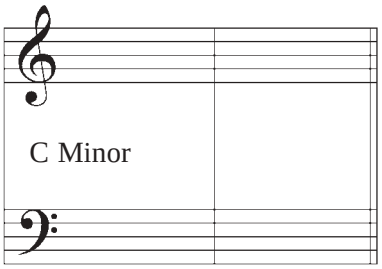
Deceptive Cadence



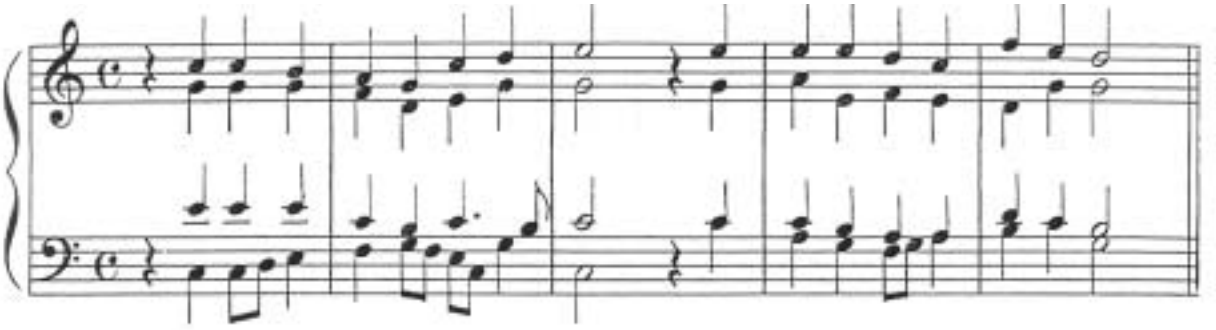
Imperfect/Half Close Cadence



Perfect Cadence



Imperfect/Half Close Cadence

J) Write the following in modern vocal score.

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
a cappella	in the chapel style, which in choral singing has come to mean unaccompanied (no instruments)	terme d'abord religieux qui, en chant choral, en est venu à signifier "chanter sans accompagnement" (sans instrument)	
a tempo	resume original speed	revenir à la vitesse originale	
accent	an emphasis on a particular note, giving regular or irregular rhythmic pattern	une intensification conférée à un son, pour donner un relief rythmique régulier ou irrégulier	
accidental	indicates momentary departure from the key signature by raising or lowering of a note by means of a sharp, flat or natural	indique un changement temporaire de l'armure originale en haussant ou baissant une note à l'aide d'un dièse, d'un bémol ou d'un bécarre.	
adagio	at ease, slow (not as slow as largo, but slower than andante)	à l'aise, lentement (pas aussi lent que largo, mais plus lent qu'andante)	
alla breve	indicated 2/2 time when in a measure of 4 beats, the tempo is so fast that the measure may be considered to have 2 beats	on écrit 2/2 quand, dans une mesure de 4 temps, le tempo est si rapide que la mesure peut être considérée comme si elle avait 2 temps	
allegro	merry, i.e., quick, lively, bright	joyeux, c.-à-d. rapide, vivant, vif	
amabile	lovable	aimable	
amoroso	loving, affectionate	amoureusement	
anacrusis	an unstressed note or group of notes at the beginning of a musical phrase	une note ou un groupe de notes sans accent situées au début d'une phrase musicale	
andante	moving along, flowing	allant, gracieux	
animato	animating	animé	
appassionata	impassioned, passionately	de façon passionnée, passionément	

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
arpeggio	a chord 'spread', i.e., the notes heard one after the other from the bottom up, or from the top downwards	exécution successive de chaque note d'un accord joué du grave à l'aigu ou vice versa	
brace / accolade	perpendicular line, with bracket, joining the staves in scores, and indicating that music on these staves should be played simultaneously	ligne perpendiculaire unissant les portées dans les partitions de direction, et indiquant que les notes sur ces portées doivent être jouées simultanément	
brillante	glittering, sparkling	de façon brillante, étincellante	
brio	vigour, spirit, fire	vigueur, esprit, vivacité	
calando	lowering, diminuendo	en diminuant	
cantabile	singable, singingly, i.e., with the melody smoothly performed, and well brought out	chantant (en exécutant la mélodie d'une manière douce et en la faisant ressortir)	
coda	tail, original section of a movement added at the end	finale, nouvelle section d'un mouvement rajouté à la fin	
come prima	as at first	comme en premier	
con delicatezza	with delicacy	avec délicatesse	
con dolore	with sorrow	avec douleur	
con espressione	with expression	avec expression	
con fuoco	with a combination of forces and speed; fire	avec feu, passion	
con moto	with motion	avec animation ou avec une certaine rapidité	
con sordini	with mute	avec une sourdine (pour les cordes)	
con spirito	with spirit	avec esprit	
con tenerezza	with tenderness	avec tendresse	

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
crescendo	gradually increase in loudness	de plus en plus fort	*cres*
da capo	from the beginning	depuis le début	*D.C.*
dal segno	from the sign; return to the sign	depuis le signe	*D.S.*
decrescendo	gradually getting softer	de plus en plus doux	*decres*
delicatamente	delicately	délicatement	
diminuendo	gradually getting quieter	en diminuant graduellement le son	*dim*
dolce	sweetly	doucement	
doppio movimento	double speed, twice the preceding speed	deux fois plus vite	
energico	energetic	énergique	
espressivo	with sorrow	avec douleur	
fine	end	fin	
forte	strong. loud	fort	*f*
fortepiano	loud then immediately soft	fort et doux immédiatement après	*fp*
fortissimo	very loud	très fort	*ff*
furioso	furious	furieusement	
gracioso	graciously	gracieusement	
grave	slow and solemn	extrêmement lent et solennel	
innocente	innocently	de façon innocente	
l'istesso tempo	the same speed	le même tempo	
larcrimoso	tearful	larmoyant / éploré	
larghetto	slow and dignified, but less so than largo	un peu moins lent que largo	

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
largo	slow and dignified	lent et ample	
legato	bound together; so that there is no perceptible pause between notes	en liant les sons, de manière à ce que l'on ne perçoive pas de silence entre chacun	
leggiero	light	légèrement	
lento	slow	lent	
maestoso	majestically, dignified	majestueux, avec dignité	
malinconico	melancholy	mélancolique	
marcato	marking; marked, i.e., each note emphasized	bien marqué, accentué	
meno mosso	less moved, i.e., slower	moins vite, plus lent	
mesto	mournful, sad	triste, lugubre	
mezza voce	half voice	à demi voix	*mez. v.*
mezzo forte	half loud	moyennement fort	*mf*
mezzo piano	half soft	moyennement doux	*mp*
moderato	moderate	modéré	
molto	much, very	très, beaucoup	
morendo	die away gradually	en mourrant	
moto piu	with more motion	plus de mouvement	
mysterioso	mysteriously	mystérieux	
nobile	noble, grand	noble, grandiose	
non molto	not much	pas beaucoup	
non ritenuto	not held back	sans retenir	

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
non tanto	not so much	pas autant	
non troppo	not too much	pas trop	
parlante	speaking; in instrumental music it calls for an expressive freedom greater than is implied by cantabile	dans un style parlé, récitatif	
patetico	pathetic	pathétique	
perdendosi	gradually dying away	en laissant mourir le son et rythme	*perd*
pianissimo	very soft	très doux	*pp*
piano	soft	doux	*p*
piu	more	plus	
pizzicato	strings to be plucked	cordes pincées	*pizz*
poco	a little, rather	peu	
poco a poco	little by little	peu à peu	
pomposo	pompous	pompeux	
prestissimo	very quick	très pressé	
presto	quick	vivement, rapidement	
piu mosso	more moved	plus de movement	
quasi	as if, almost	presque, à la façon de	
rallentendo	slowing down, gradually	en ralentissant	
religioso	religiously	religieusement	
rinforzando	reinforcing	en renforçant le son	
ritardando	holding back, gradually	en retardant	*rit*

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
ritenuto	held back, not as gradually as ritardando	en retenant	
rustico	rustic	rural, rustique	
scherzando	joking, playful	joyeusement, enjoué	
semplice	simple, simplicity	simple	
sempre	always	toujours	
sforzando	a note or chord to be strongly accented or played in a 'forced' manner	fortement accentué	*sfz*
simile	the same; a phrase is to be played in the same manner	comme, pareil	
slargando	slowing, broadening, widening	en amplifiant	
sotto voce	below the voice	à demi voix	*smorz*
staccato	detached	détaché, séparé	
stretto	drawn together	serré	
stringendo	squeezing, intensity in the music is to be increased	en pressant le mouvement/ en se hâtant	
tacet	it is silent, no part to play for a considerable time	silence (dans les partitions d'orchestre)	
tempo commodo	time, also used in the sense of 'beat'	aisément, sans hâte	
tempo giusto	strict time	strictement en mesure	
tempo primo	same tempo as at the beginning	retour au tempo initial	
tempo rubato	robbed time; strict time is disregarded	temps libre, façon d'échapper à la rigeur de la mesure	
teneramente	tenderly	tendrement	

Italian/Italien	English/Anglais	Français/French	Symbol/Symbole
tenuto	hold note to its full value	soutenu, tenu	
tranquillo	tranquil	tranquille	
tristamente	sadly	tristement	
troppo	too much	trop	
tutti	everybody	tous, l'ensemble	
un poco forte	a little loud	un peu fort	*poco f*
un poco piano	a little soft	un peu doux	*poco p*
un poco piu	a little more	un peu plus	
veloce	with velocity	avec velocité, rapidement	
vivace	vivacious; fast and lively	vivant, pressé	