Music Fundamentals Course Book

Adams State University
Dr. Matthew Schildt

Some thoughts on preparing for your freshman year music classes at Adams State University

Please feel free to contact me with any questions at mschildt@adams.edu

Studying music at the college level can be profoundly rewarding and exciting, though students can sometimes be unprepared and surprised by the rigor of music theory courses. Students all enter college with strengths and weaknesses – some have very developed ears and have been playing in bands, learning songs, etc., though have little or no experience reading music. Other students have read music for many years, though perhaps haven't developed as many listening skills and have little experience with music beyond the written page. Both of these are common, and lack of experience in reading or listening does not make one less suited for studying music, it just means that there are areas to focus on to make oneself the most complete musician possible (after all, that is what college is for!). While music theory study at the college level does start with the basic building blocks of music, coverage often goes quickly and there are some things you can do to make the transition into your college music classes easier. Below is some information that can help you prepare for studying music at the college level.

1) Purchase the Music Fundamentals course book written by Dr. Schildt (the one you're holding right now!)

2) Learn rhythmic values of all notes and rests.

3) Learn the notes in both treble and bass clefs.

4) Become familiar with major and minor scales and key signatures (particularly major).

5) Take some lessons on your primary instrument.

6) Learn the notes on the piano and begin getting some piano experience. Piano lessons, if possible, would be a great way to develop some piano skills.

7) Practice reading rhythms in simple meter (4/4, 3/4, etc…) and compound meter (6/8, 9/8, etc…). While you may use books such as beginner piano books to begin practice, there are numerous rhythm examples at the end of this book and lots of examples online.

8) Practice matching pitches played on piano with your voice. There are also many websites that provide pitch matching using your computer's internal microphone. One is: trainer.thetamusic.com

9) Listen to short melodic fragments and be able to sing them back. There are many websites for this as well, such as SonicFit (see links below).

10) Familiarize yourself with moveable do solfège – this is where the tonic of a given key is sang as 'do' with the syllables in a major key being do, re, mi, fa, sol, la, ti, do.

11) Listen to lots of music, in lots of different styles.

12) Attend concerts and recitals – see what concerts are in your area and explore some music that you may be unfamiliar with. Universities often have many free recitals (there are many, many free concerts at Adams State).

Below is a list of websites that are excellent resources.

1. Musictheory.net
An excellent site that gives lessons and exercises on topics. This is a great site for exercises on note identification and key signatures as well as lessons on rhythm, scales, keys, etc..

2. Teoria (www.teoria.com)
This is another excellent site with lessons and exercises.

3. Sonicfit (sonicfit.com)
A great site for ear training with lessons and exercises. I particularly like the scale degree ET exercise

4. Theta Music trainer (a good site for pitch matching)
trainer.thetamusic.com

5. Open music theory
http://openmusictheory.com

Music Fundamentals – The Elements of Music

All types of music utilize the same basic elements, whether the music is Bach, The Beatles, or Beyonce. While all of the elements listed below are usually present, there are pieces of music that do not feature every element, such as pieces that do not contain harmony or melody, or that have no sense of pulse or audible meter. While different styles of music have their own language and style traits, they are all comprised of the following six elements:

Melody: a succession of musical notes producing a distinct musical phrase or idea. Melody can be considered the horizontal aspect of music.

Harmony: the combination of different musical notes played or sung simultaneously. Some definitions often say that harmonies "have a pleasing effect," though this is subjective as what one finds pleasing, another may not. Harmony can be considered the vertical aspect of music.

Rhythm: Rhythm is the element of time in music, the placement of sounds in time, and the feeling of movement in music. Unlike visual arts such as painting or sculpture, music is an art dependent on time.

Texture: Texture is the way the above (melodic, rhythmic, and harmonic materials) interact in a composition. The term texture can refer to the number of voices or parts (such as thin vs. thick texture) and also the relationship between these voices (contrapuntal vs. homophonic, which will be covered later).

Form: The overall structure or organization of a piece of music. Form can be considered the layout or blueprint of a composition (rondo form, binary form, through-composed, etc.).

Timbre: The sound, tone color of an instrument or voice.

While most of the music you know and love will have some presence of all of the above, this is not always the case. Listen to the following online, what elements are central to these pieces, and which are absent?

1. Steve Reich – *Clapping Music*
2. György Ligeti – *Requiem*
3. Olivier Messiaen – *Danse de la Fureur* from *Quartet for the End of Time*

Our starting point for the book will be the discussion of pitch.

- Sound occurs when a vibration (a sax read, the pounding on a desk, the pluck a string, vocal cords, etc.) causes a movement of air molecules that travel through the air and reach the ear.

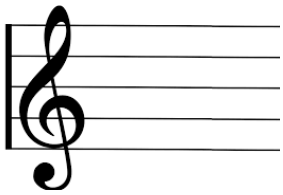
- This movement of air molecules is a sound wave, and the frequency of this wave is the number of times a wave repeats itself per second. Faster frequencies = higher pitch, slower frequencies = lower pitch. The standard tuning note for an orchestra is **A 440 hertz (Hz),** which means 440 cycles of the wave per second. The frequency doubles each octave higher, so the next A would have a frequency of 880 Hz.

Musical pitch is represented by the letters A through G and an **octave** is the distance between the two nearest notes of the same letter name. So, an octave above a given A would be the next highest A.

In music, pitches are notated with note heads on a staff (5 lines and 4 spaces) in a clef such as treble, bass, alto, or tenor. Pitches get higher as you go up the staff and ledger lines (short lines that extend the pitch range of the staff) are used when pitches are above or below the staff.

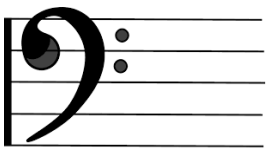
Treble and bass clef are the most commonly used, though we will cover the four primary clefs.

Treble clef (or G clef)



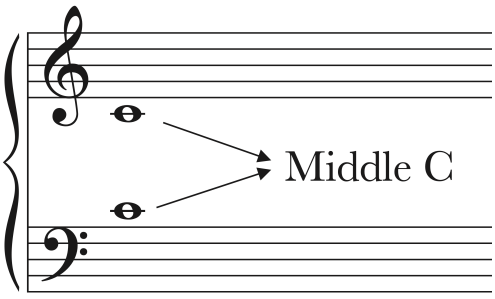
Treble clef is used for higher pitched instruments such as flute, soprano voice, and violin, and the lines of the staff are E,G,B,D,F (*Every Good Boy Does Fine* ***or*** *Every Girl Band Deserves Funding* ***or*** *Elvis' Guitar Broke Down Friday*). The spaces of the treble clef are the notes F,A,C,E.

Bass clef (or F clef)

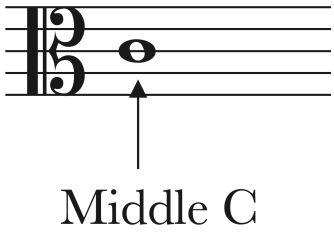


Bass clef is used for lower pitch instruments such as tuba, bass, and cello, and the lines of the staff are G,B,D,F,A (*Good Boys Deserve Fudge Always* ***or*** *Go Buy Donuts For Alice* ***or*** *Go Broncos Don't Fumble Again* ***or*** *Grizzly Bears Don't Fly Airplanes*). The spaces of the bass clef are A,C,E,G (*All Cows Eat Grass, All Cars Eat Gas*).

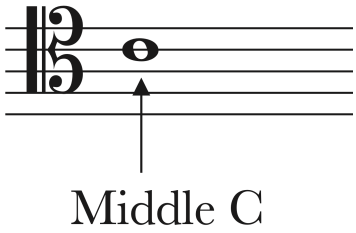
The **Grand staff** is used by piano and consists of a treble clef and bass clef, with the right hand typically playing the treble clef and the left hand playing the bass clef. The C below the treble clef and above the bass clef is the same pitch, middle C, which is the C in the middle of a piano.



Alto clef is used primarily by viola and the middle line is middle C (where the clef has an indent). The lines of the alto clef are *Frogs And Cats Eat Goats* and the spaces are *Goats Bring Dogs Fedoras)*

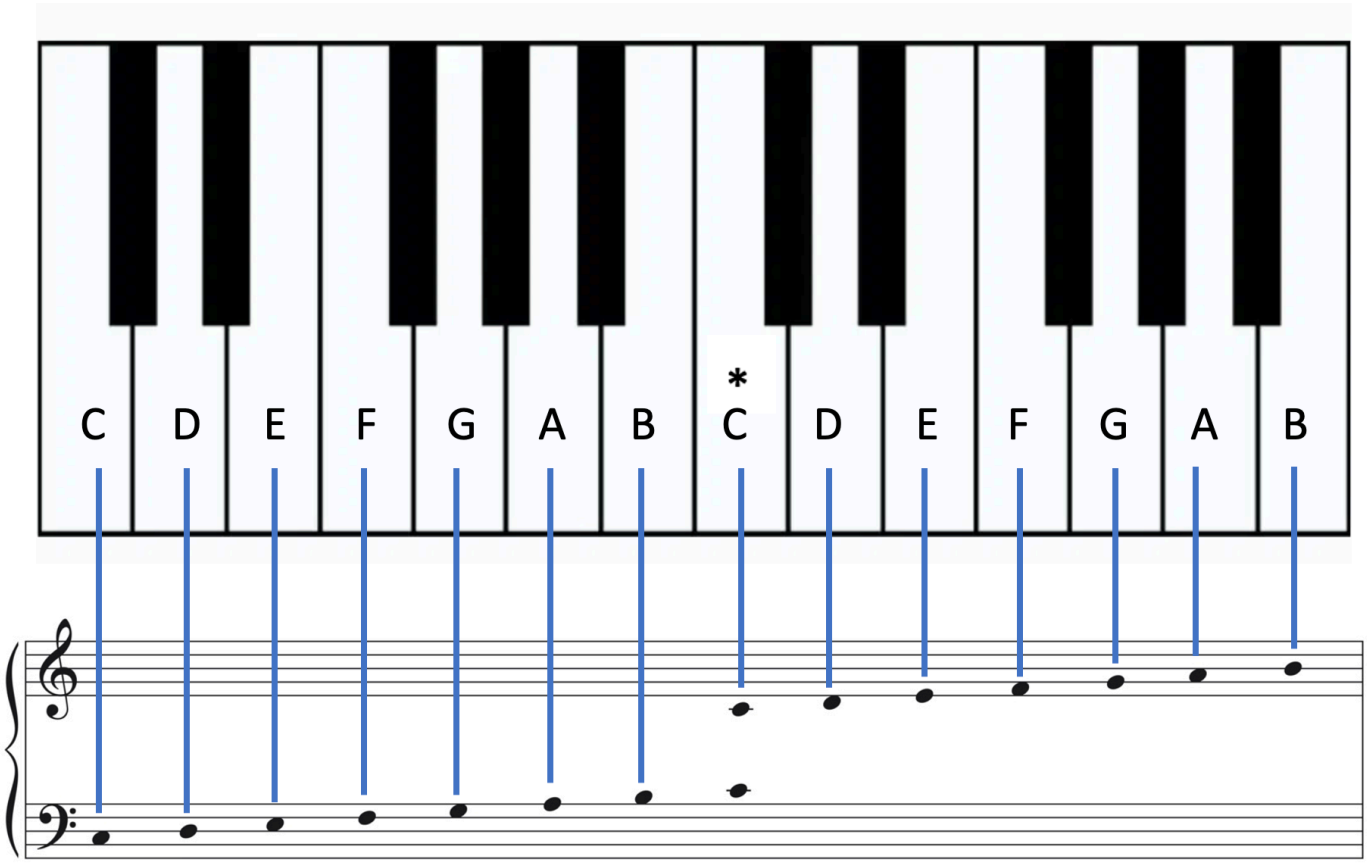


Tenor clef looks similar to alto clef, though the indentation on the clef, which corresponds to middle C, is one line higher. Composers tend to use tenor clef when writing in the upper registers for bassoon, euphonium, cello, trombone, and double bass.



The Piano keyboard, half steps and whole steps

It is essential for all musicians to know their way around a piano keyboard and as you can see, there are groupings of two and three black keys across the keyboard. The white key before the grouping of two black keys is C and the one before the grouping of three black keys is F. It is important to not only know what any given pitch is on the staff, but where it occurs on the piano keyboard. See the graphic below, with the * denoting middle C.

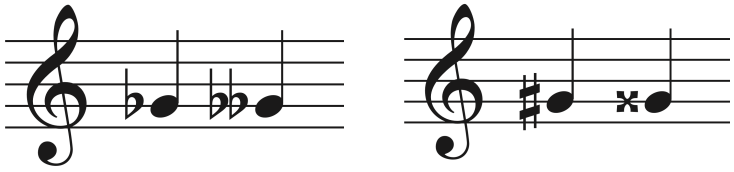


A **half step** is the distance between two adjacent pitches and this can be to a white key or a black key. A half step above E, for instance, would be F (there is no black key between them) and a half step above F would be F# or G♭. A **whole step** is **two** half steps.

- When a pitch is raised by a half step, it is **sharped**. A sharp is an **accidental** that looks like a number sign or hashtag. You will always place the sharp or flat on the exact line or space before the note.

- When you go a half step lower from a pitch, you **flat** a note. A flat looks like a stylized lower case b.

- C-sharp/D-flat and F-sharp/G-flat are examples of the same pitch (they sound exactly the same), though with different names. This is called an **enharmonic spelling**. Knowing when to use a sharp or a flat will depend on the musical context. We'll see later that each pitch needs represented in a scale (a C Major scale is C,D,E,F,G,A,B,C), so you would not call the 4th note of a C Major scale an E#, but rather an F. Enharmonic spelling may also be determined by the harmonic context and a D major chord would be spelled with an F#, not a G♭.
- **A double sharp raises a pitch by two half steps** and **a double flat lowers a pitch by two half steps.** A double flat is shown as two flat signs, where a double sharp looks like an x. While these are less common than regular flats and sharps, they do occur and are used based on their musical context.



There are many online sites for practicing pitch identification, such as musictheory.net and teoria, and I recommend regular practice if you are less familiar with a clef.

Which way do my stems go?

- Below the center line = stems go up.
- On or above the center line = stems go down.
- If two notes are beamed, the stem direction is determined by the note farthest from the center line.

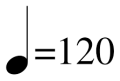
Music Fundamentals – Rhythm and Simple Meter

The pulse or beat is the heartbeat of music, the sense of regularity. Most music has a steady pulse/beat, though there are many pieces where a pulse is not discernable or is irregular. The Ligeti *Requiem*, mentioned previously, is a piece without a steady pulse, and we will see this in some music later on by composers such as Anton Webern and Arnold Schoenberg. Any note value can represent the beat and while we can make educated guesses as to this note value through listening, we won't know what note value receives the beat without seeing the music.

Tempo in music is the speed of the pulse/beat and tempo can be shown with a metronome marking, a tempo indication, or both. The tempo indications below are the most common, though interpretations of these may differ significantly. If a composer wants to be more specific, which is common, a metronome marking will be given showing how many beats per minute for the note value receiving the beat.

Presto – Very fast
Allegro – Fast
Moderato – Moderate
Andante – Walking tempo
Adagio – Slow
Largo – Very slow

The metronome marking below means that a quarter note gets the beat and that there are 120 beats per minute.



By setting your metronome to this value, you will know the exact tempo intent of the composer. Steady tempos are the norm for a composer such as Bach, though are less so for a composer such as Chopin. If you listen to a Chopin Nocturne, you will hear a frequent pushing and pulling of the tempo, making it difficult to tap the beat. This is something known as **tempo rubato,** which translates to "stolen" or "robbed" time. With tempo rubato, there is slight speeding and slowing of the tempo, allowing for more expressiveness, though it is not appropriate or effective in all situations. Excessive tempo rubato in a Bach fugue or pop song could seem out of place stylistically.

Meter is the grouping of musical pulses/beats into a recurring pattern of strong and weak, with duple, triple, and quadruple meters (two, three, or four beats in a measure) being the most common. Typically, beat one is the strongest beat, though this very much depends on the style of music. In rock music, the emphasis is very often on beats 2 and 4.

Listen to the following examples and tap a beat. What do you hear as the meter, duple, triple, or quadruple? It can be difficult to differentiate duple and quadruple, though it can often be determined by listening to the strength of the beat after beat two. Does the third beat sound strong enough to feel like a downbeat?

Listening examples:
- Bach: Brandenburg Concerto no. 3, mvt. 1
- Dvorak: Serenade for Strings, mvt. 2
- Mozart: Clarinet Concerto, mvt. 1
- The Beatles: *Revolution*
- Bach: Brandenburg Concerto no. 6, mvt. 3
- Tom Petty: *Higher Place*

Note and rest values

Reading music requires knowledge of pitch notation **and** rhythm notation. Below are both note and rest pyramids, showing how each note value divides.

Note values

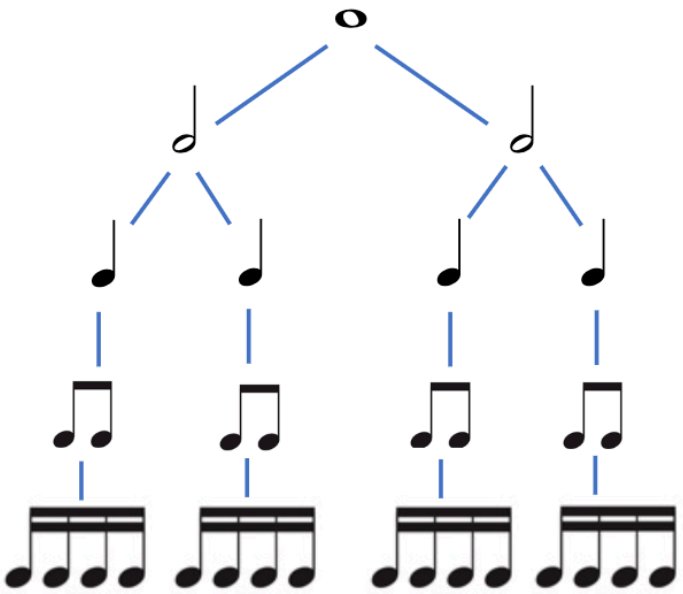
Whole note

Half notes

Quarter notes

Eighth notes

Sixteenth notes



Rest values

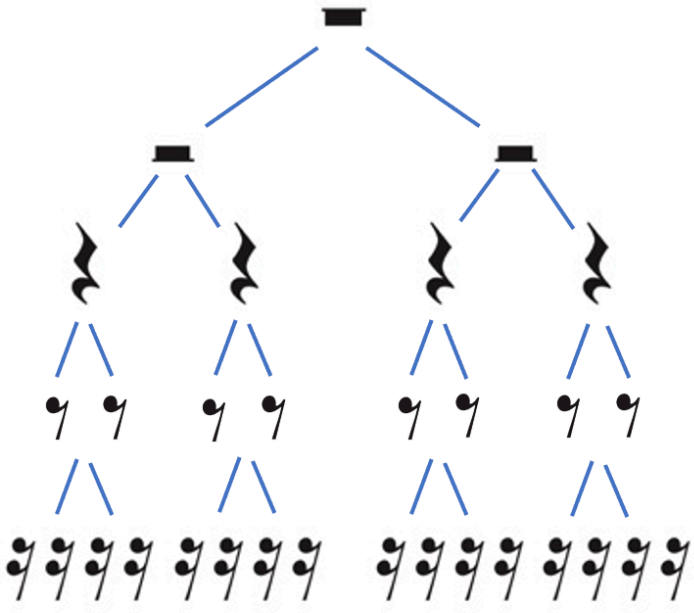
Whole rest

Half rests

Quarter rests

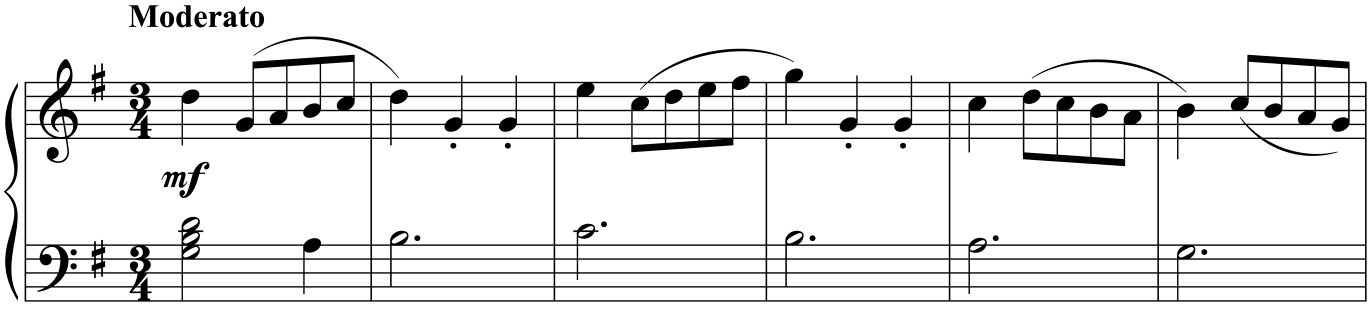
Eighth rests

Sixteenth rests

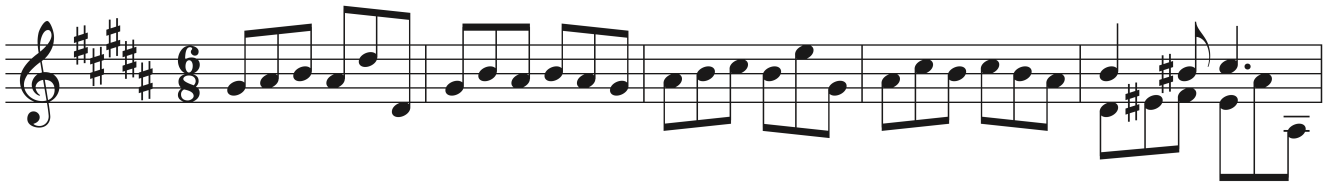


Simple Meter vs. Compound Meter
In **simple meter**, the beat is divided into **2** equal divisions. In **compound meter,** the beat is divided into **3** equal divisions**.** Listen and compare the two examples below, noticing how the first example has a beat divided into 2 and the second has a beat divided into 3. We will call the division of the beat the **subdivision.**

J.S. Bach: Minuet in G from Notebook for Anna Magdalena BWV Anh. 132
Here, we have a simple meter, with each beat divided into two. We would count 1, 2& 3&.



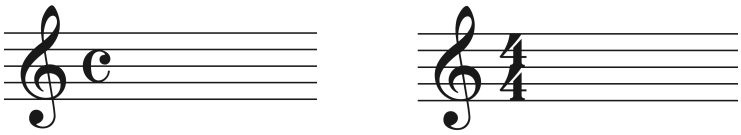
Bach: Well-Tempered Clavier Book 2 Fugue in G# minor
Here, we have a compound meter. The meter 6/8 will have two beats, which we can see from the beaming, with each beat divided into three eighth notes.



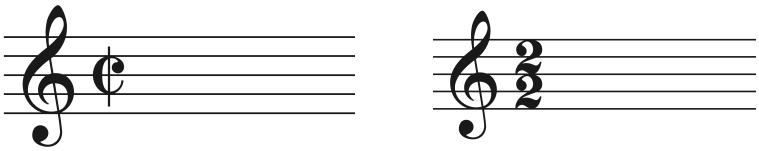
The difference between simple and compound meter is audible in the following two movements of Bach Brandenburg Concertos. Listen to these movements, do you hear simple or compound meter, duple, triple, or quadruple?

1) Bach: Brandenburg Concerto #3, movement 1 (hereby abbreviated as mvt.)
2) Bach: Brandenburg Concerto #6, mvt. 3

In simple meter, the top # will show how many beats are in a measure and this will be 2, 3, or 4 for duple, triple, or quadruple meter. The bottom # is the note that receives the beat, so 3/4 meter would have 3 beats in a measure with the quarter note getting the beat, and 4/2 meter would have 4 beats per measure with the half note getting the beat. We would refer to 3/4 as "**three four"** and this is a simple triple meter. 4/4 would be considered simple quadruple meter, as would the meters 4/2 or 4/8. 4/4 is the most common time signature and is thus referred to as **common time,** shown with the symbol below. The meter 2/2 is often called cut time and this abbreviation is also below.



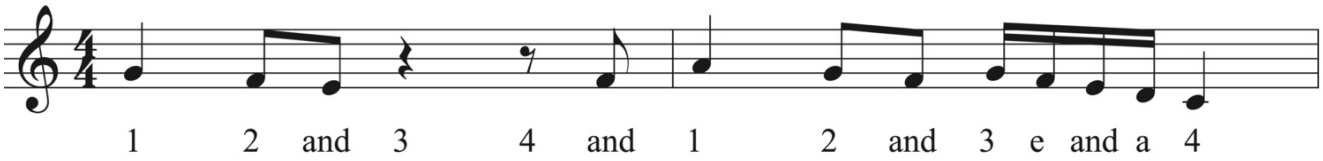
Common time = 4/4 time



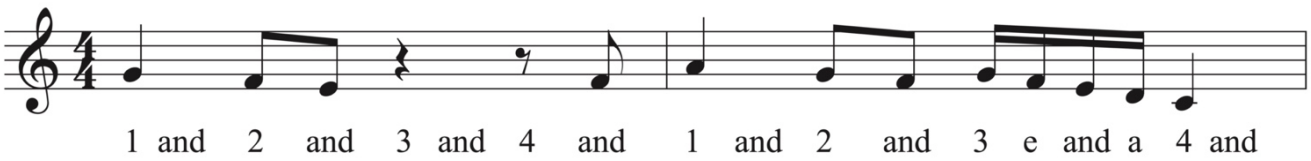
Cut time = 2/2 time

When counting simple meter, we will say the beat followed by the syllable *"and"* for 8th note divisions and *"e and a"* for 16th note divisions.

Counting in simple meter

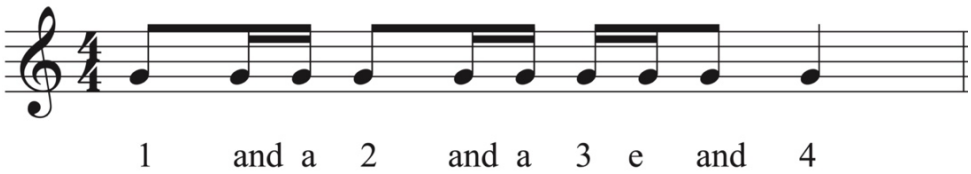


I advise trying to feel the subdivision (how the beat is divided) as much as possible, especially when first trying to establish rhythmic skills. Internally, you might feel the rhythm as:

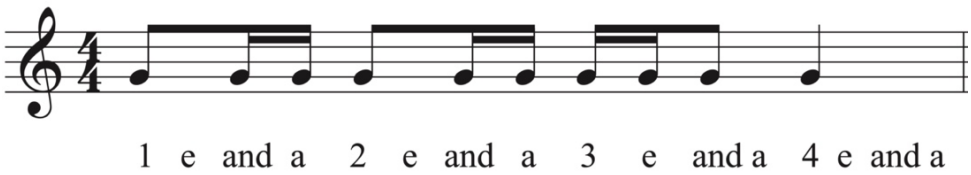


The rhythm below would be counted as shown in #1, with #2 showing how you might internally feel the 16th note pulse.

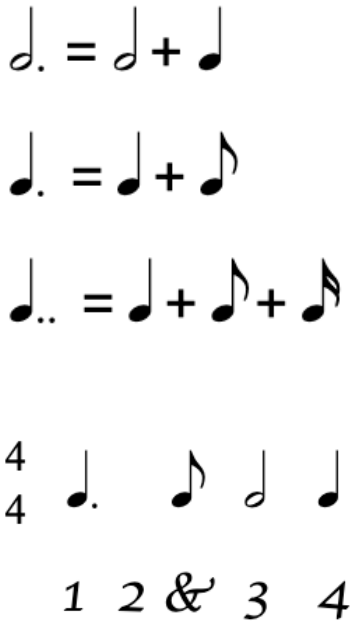
1.



2.

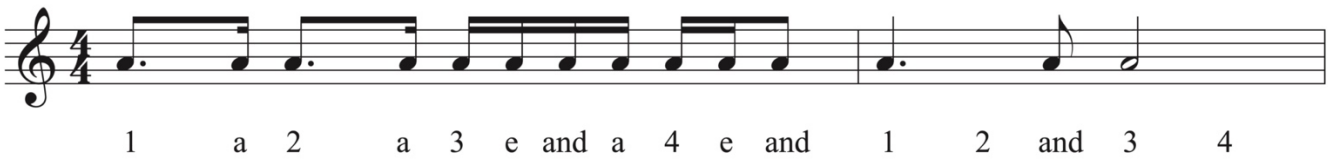


We now move to dotted notes, and a dotted note has half of the note's value added to the note. So, in 4/4, a dotted quarter note would be a beat and a half, or the equivalent of three 8th notes. A second dot, which is less common, adds another half value to the note.

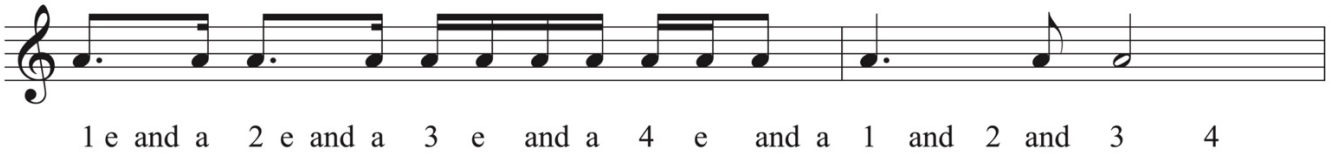


#1 below is how you could count a rhythm that includes dotted values, while the second example shows how you might internally feel the 16th note pulse. Notice that the incomplete beams point inward.

1.



2.



Beaming

When we beam rhythms, we want to **visually make clear how many beats are in a measure and how the beat is divided.** We want to make beats easy to see, specifically strong beats 1 and 3 in the meter 4/4. Notation should never obscure the meter and should instead make the meter clear to see, and rhythms easier to perform. Be careful not to overlook things like beaming in your music – you may have trouble getting a wonderful piece of music performed if it is difficult to read and contains beaming errors. Just like you wouldn't submit a novel or a cover letter with spelling and grammar errors, you do not

want to submit music with notation errors! What is obviously wrong in the writing below? These are grouped in a way that is very hard to read and obscures the words. Rhythms can feel the same way – if grouped/beamed wrong and in a way that obscures the meter, they can be frustrating and difficult.

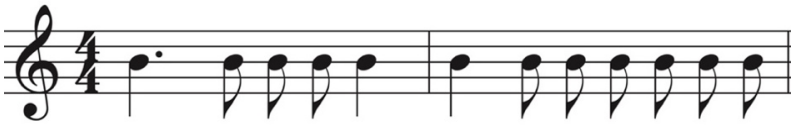
We lc om etot he ory (Welcome to theory)

Tod a yism ond ay (today is Monday)

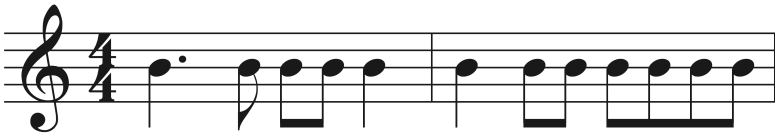
Abi gdo gch ase dac art (a big dog chased a cart)

In the example below, the 8th notes need beams. We want to make sure we show beat 3 in a 4/4 measure and to make sure we do this, it is helpful to draw a dotted line down the middle of the measure. It is very important to not beam across beat 3 (barring some exceptions, as shown below). In the beamed example shown next, we can see each half of the measure and it is clear that we are in simple meter with the beat divided by 2. It is also much easier to read!

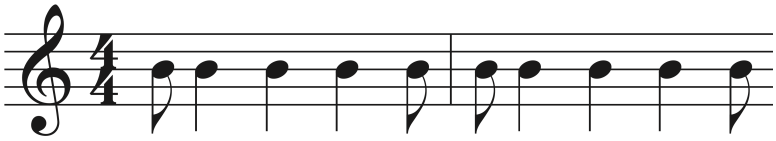
1.



2.

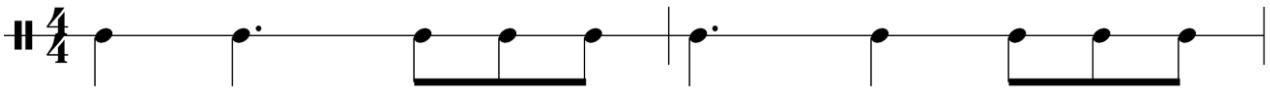


There are exceptions to this, like when an entire measure is syncopated, like so.

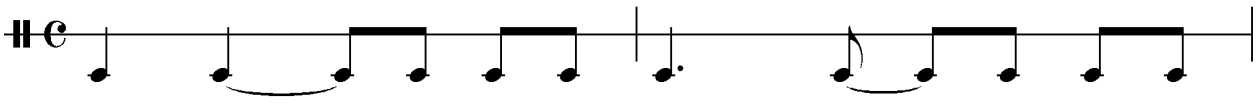


In the example below, to make sure beat 3 is shown, the dotted quarter note needs to be broken up and tied. Though the 8th notes in beats 3 and 4 are technically correct, beaming them together would also be acceptable.

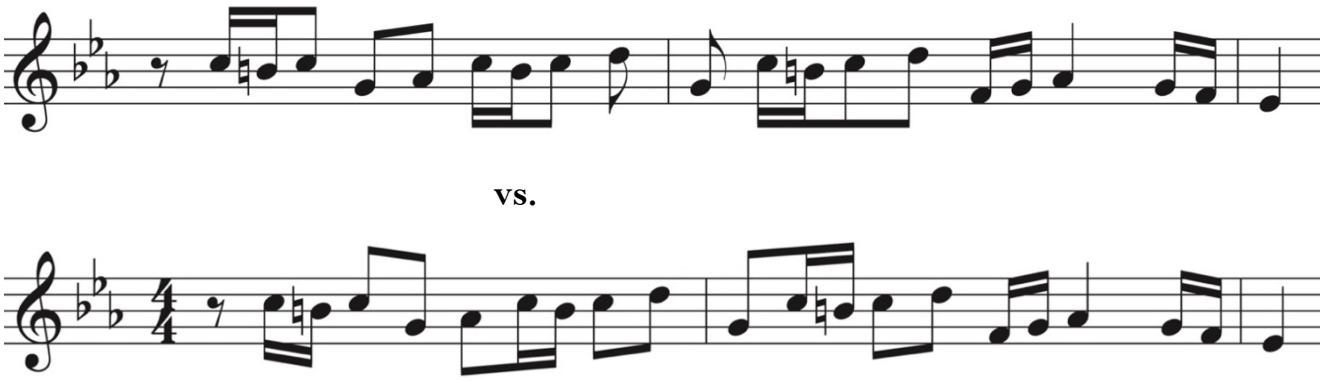
Incorrect



Correct

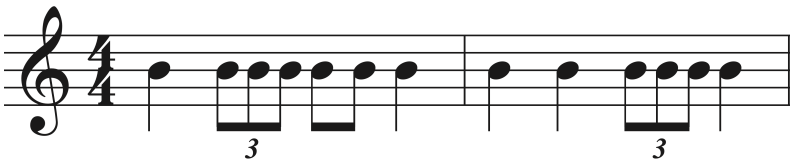


This excerpt from Bach's fugue in C minor, from the Well-Tempered Clavier Book 1, is in 4/4. Notice how much easier the second example is to read while the first example looks like gibberish! Our eyes expect to see groupings that fit with the meter and the first example would almost certainly be performed wrong if notated this way.



Triplets

We know that the difference between compound and simple meter is how the beat is divided. When you have a beat divided into 3 while in simple meter, this is a triplet and we are essentially substituting in compound meter division. This is seen below and shown with the number three (if the rhythms are not beamed, like quarter notes or half notes, a bracket with a 3 is used). It is important when performing triplets that all notes are even and that it does not sound like a dotted rhythm. The word trip-a-let, straw-ber-ry, blue-ber-ry are sometimes used when practicing triplets.



Further listening examples. Listen to the following, identify whether in simple or compound meter, duple, triple, or quadruple, and answer any questions.

1) Death Cab for Cutie: *What Sarah Said*
   - On what beats are the snare drum hits? What about the hi-hat?

2) Phish: *My Friend*
   - Listen from 1:10 to 2:25, what meter do you hear? What changes at 2:25?

3) Great Big Sea: *Barque in the Harbor*
   - Listen to the vocals as they are a good indicator as to whether this is in duple or quadruple.

4) The Impressions: *It's Alright*

5) Beyonce: *Daddy Lessons*
   - Try tapping both the beat and the subdivision.
   - Listen to the bass in the chorus at around 1:33, on what beat does it move?
   - Listen to the claps at the beginning, they sort of sound like downbeats, though where do they occur in the measure once everything comes in?
   - While stomping the beat, tap the guitar part. How would you describe this?

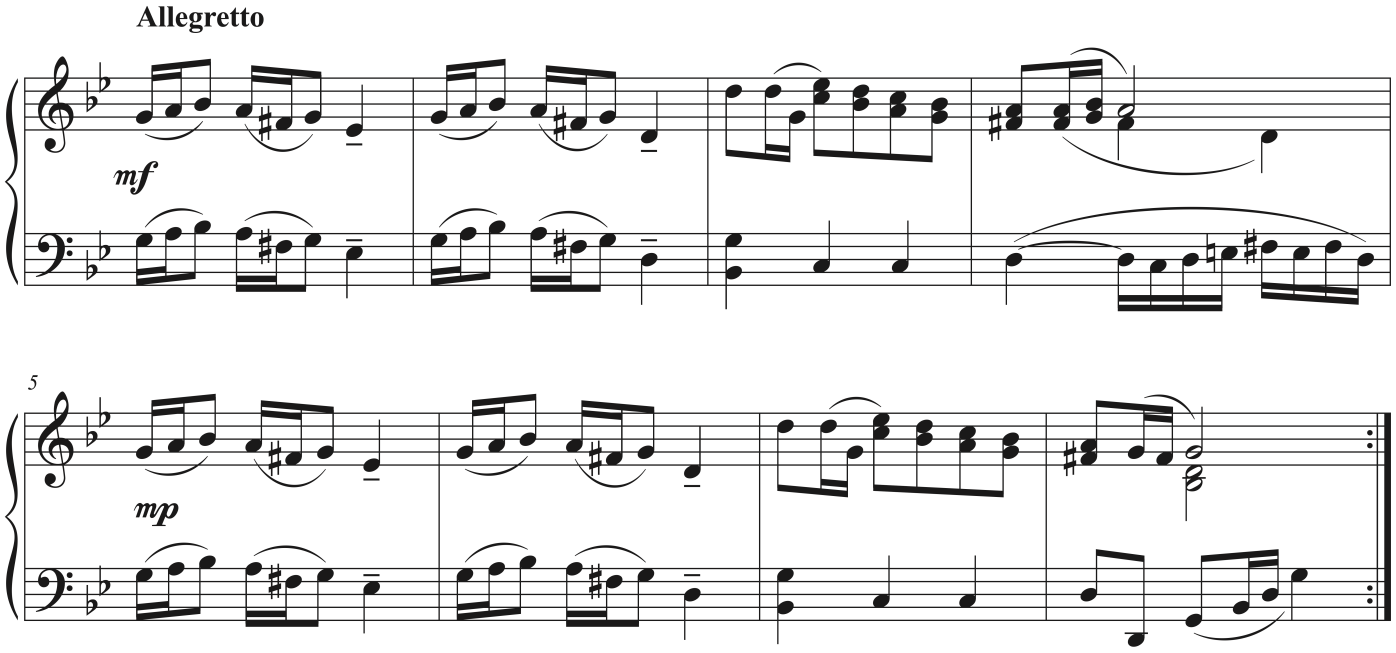
6) Vaughan-Williams: Greensleeves (we will look more in detail at this later).

7) Aretha Franklin: *I'll Never Be Free*
   - On what beat does the bass move?
   - Where do the brass stabs happen starting around 0:49?

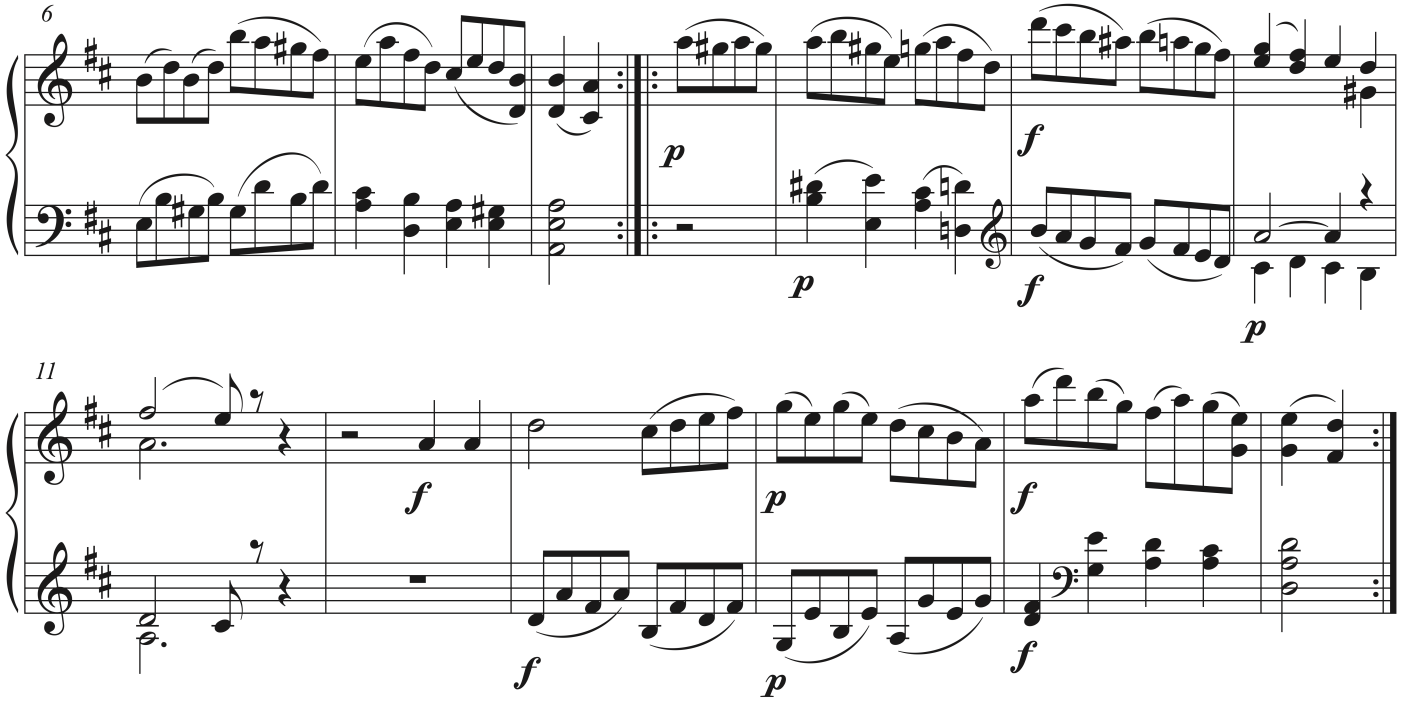
Can you identify the simple meters in the scores below?

Ask yourself:
1) How many beats are shown?
2) We can visually see each beat in these examples, what note value (combine the values that are beamed) receives the beat?
3) Does the division seem to be simple (the beat divided evenly in two) or compound (the beat divided evenly in three)?

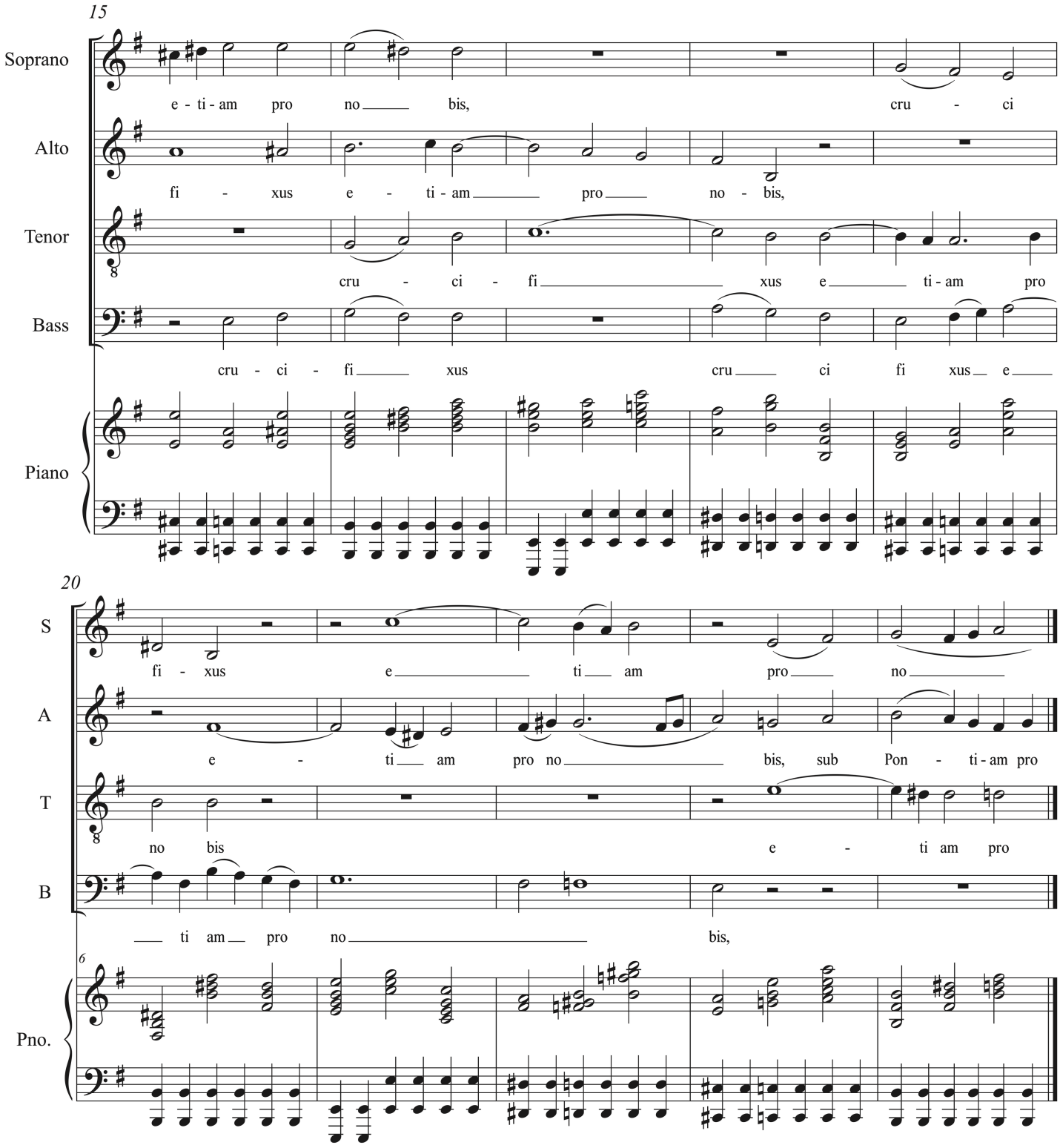
1. J.S. Bach: Polonaise from Notebook for Anna Magdalena, BWV Anh. 132



2. W.A. Mozart Piano Sonata K. 284, mvt. 3



3. J.S. Bach: Mass in B minor, Crucifixus

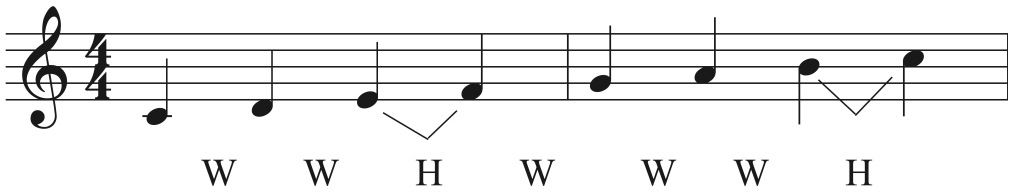


Music Fundamentals – Major Scales and key signatures

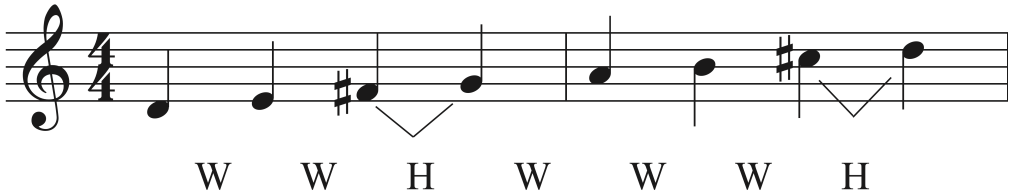
A scale is a group of pitches that in Western music are **1) patterns of whole steps and half steps 2) that span an octave** and **3) form the basic pitch material of a composition**. A scale is the essential "building block" of music and provides the melodic and harmonic material for a piece. There are many types of scales, though major and minor comprise much of the tonal music you are familiar with, from Beethoven to Ariana Grande. Both major and minor scales are built on patterns of whole steps and half steps and this pattern imbues all scales with the same sound. The reason that some music of other culture sounds different to our ears is often due to the use of less familiar scales, some with intervals smaller than a half step (called microtonal music).

Major scales have the following interval pattern (w = whole step, h = half step). In a major or minor scale, all note letter names must be represented. So there will be some kind of A (A natural, A-flat, or A-sharp), some kind of B, etc.. I advise writing out each pitch on the staff and then adding accidentals to ensure you don't make an enharmonic mistake. Notice in the F# major scale below that the 7th note is an E#. Notating this as an F natural would be incorrect for the above reasons.

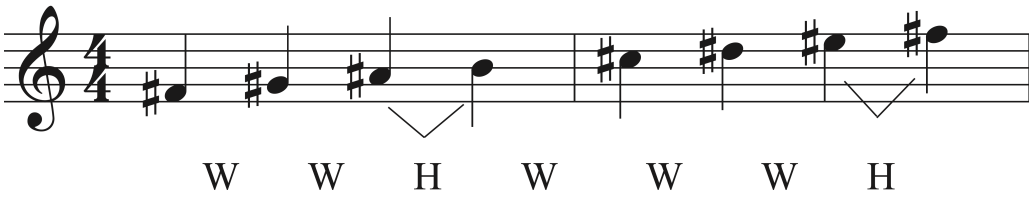
C Major scale



D Major scale



F# Major scale

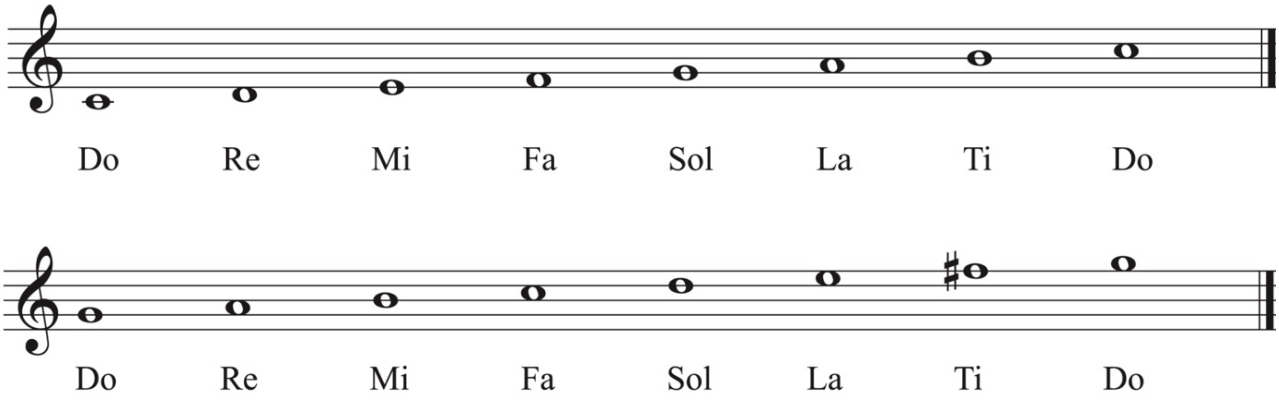


The first note of a scale or key is called the **tonic** and it is the home base of a key, the pitch which feels resolved, and the note to which other notes pull. The 5th note is called **dominant,** named for its importance in melody and harmony, and is next in importance to the tonic. The chord built on the dominant has a strong pull to the tonic.

The **leading tone** is the next scale degree we will discuss and it is called this because it has a tendency to *lead/pull* to the tonic. This is the 7th note of a major scale and is a half step below tonic. This leading tone is a reason that the chord built on the dominant has such a strong pull to the tonic.

Solfège

Solfège is a technique for sight-singing in which each note of a key is sung to a special syllable, called a **solfège syllable**. The seven syllables normally used for major scales are: **do**, **re**, **mi**, **fa**, **sol**, **la**, and **ti**. **We will use the movable 'do' system** which uses the syllable 'do' for the tonic of the given key. So, in G Major, G is 'do', A is 're', etc.. Using moveable 'do' solfège can strongly develop your ability to hear the functions of scale degrees, a skill that is invaluable to musicians.

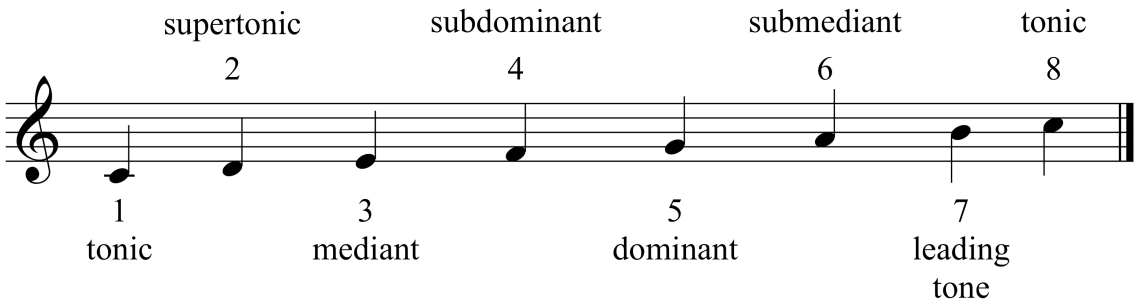


There are two half steps in a major scale which create tendency tones. These are notes that tend, or pull to another note. These are 'ti' (the leading tone), which has a pull to 'do', and 'fa' which has a pull to 'mi'.

There are many books with sight melodies for practice, as well as many free resources. The book *Music for Sight Singing* by Robert Ottman and Nancy Rogers and online resource *Eyes and Ears* by Benjamin Crowell are ones I recommend.

Scale degree names, how to figure out the key/scale without a key signature

We have discussed the names of some notes of the scale (called scale degrees), though below is a complete list.



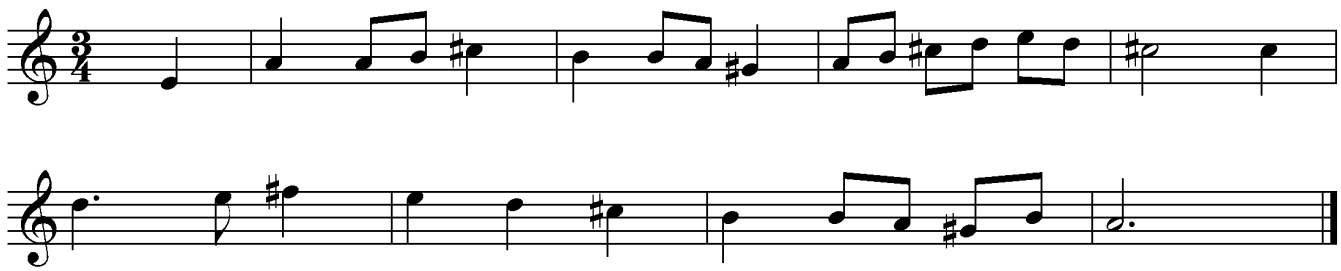
There are three ways to refer to scale degrees and all are important to know as a musician. We can use the scale degree number, the name, and the solfège syllable. Scale degrees are typically shown with the number of the scale degree and a caret symbol above.

$\hat{1}$ = tonic = do, $\hat{2}$ =supertonic = re, $\hat{3}$ = mediant = mi

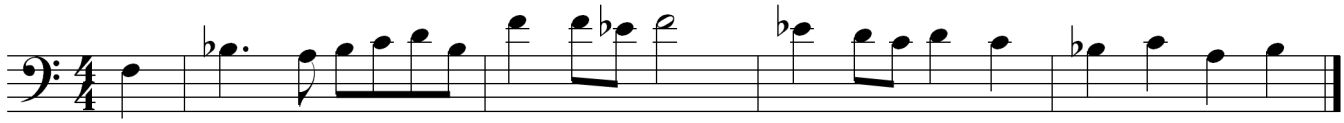
If you were unable to hear the example below, how could you determine what scale/key is used?

- Look for the use of dominant and tonic scale degrees- these pitches are the pillars of a scale and are often emphasized.
- There are 3 sharps in the first example below, what major scale would have 3 sharps?
- If we listened to this, how can we tell the key? There is a pull to tonic (notice the leading tone to tonic motion) and a feeling of rest/conclusion at the end. The tonic will sound all nice and resolved, so ask yourself, what note sounds and feels like home base?

1.



2.



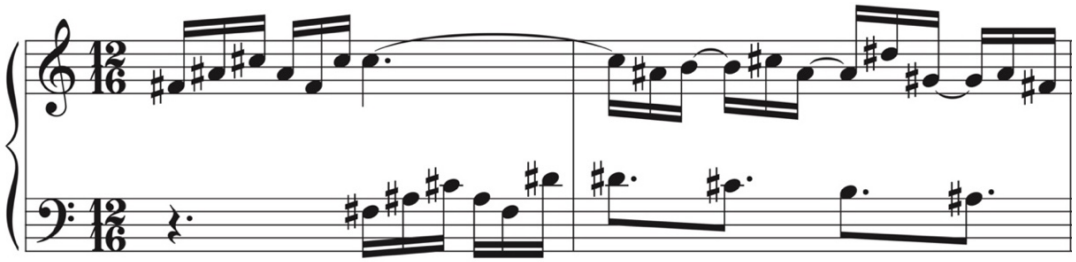
Major key signatures

A key signature is a grouping, at the beginning of the staff, of all accidentals found in the major or natural minor scale on which the piece is based. A few points:

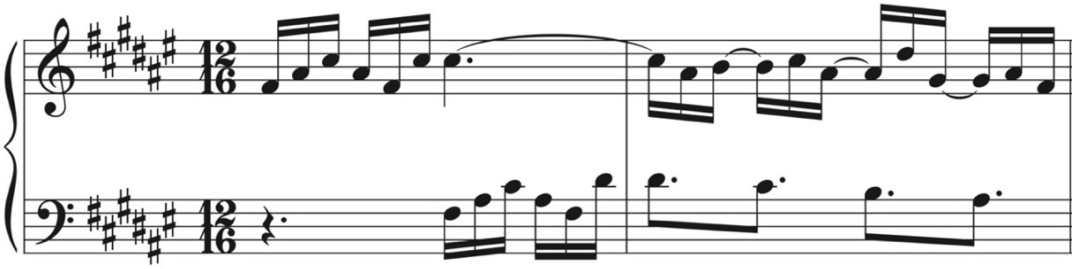
* Sharps/flats in a key signature hold true for all octaves.
* When we say the *key of A Major*, we mean that A is the tonal center (tonic) and that the piece (or section) uses the pitches of the A Major scale.
* Each major and minor key has a signature. In addition to de-cluttering a music score (see below), it enables quick recognition of a piece's key. Seeing a key signature of 3 sharps would allow you to know quickly that we are either in A Major or F# minor (there are mode possibilities too, though we'll get to that later).

J.S. Bach: Prelude in F# Major from Well-Tempered Clavier Book 1

with accidentals



with key signature



The circle of 5ths

If major keys are arranged in the order of increasing sharps, they progress one to the next by the interval of ascending perfect 5th. Likewise, if flat major keys are arranged in order of increasing flats, they progress one to the next by the interval of descending perfect 5th. You'll see this circle of 5ths below and it is on the wall of just about every music classroom!

The interval of a perfect 5th is important in understanding the relationship between key signatures and you can think of a perfect 5th (or P5) as the distance between the tonic and dominant (5th note) of any major scale. For instance, a perfect 5th above C is G (since G is in the C major scale), above B is F#, above F is C. A perfect 5th contains 7 half steps and though counting half steps can determine an interval, I find it much quicker and more intuitive to use a major scale as a reference.

The order of sharps can be remembered by a simple saying:

Fat **C**ats **G**o **D**own **A**nd **E**at **B**ananas (or **F**ather **C**harles **G**oes **D**own **A**nd **E**nds **B**attle, or **F**reaky **C**hickens **G**et **D**own **A**t **E**very **B**arbeque)

With flat keys, the process is reversed – we will go down a P5th **A trick is to look at the last flat of the key signature to know what the next key signature will be. For example, the last flat of the key of E♭ is A♭, which is the key a P5th down and next on the circle of 5ths.

The order of sharps can be remembered by a simple saying:

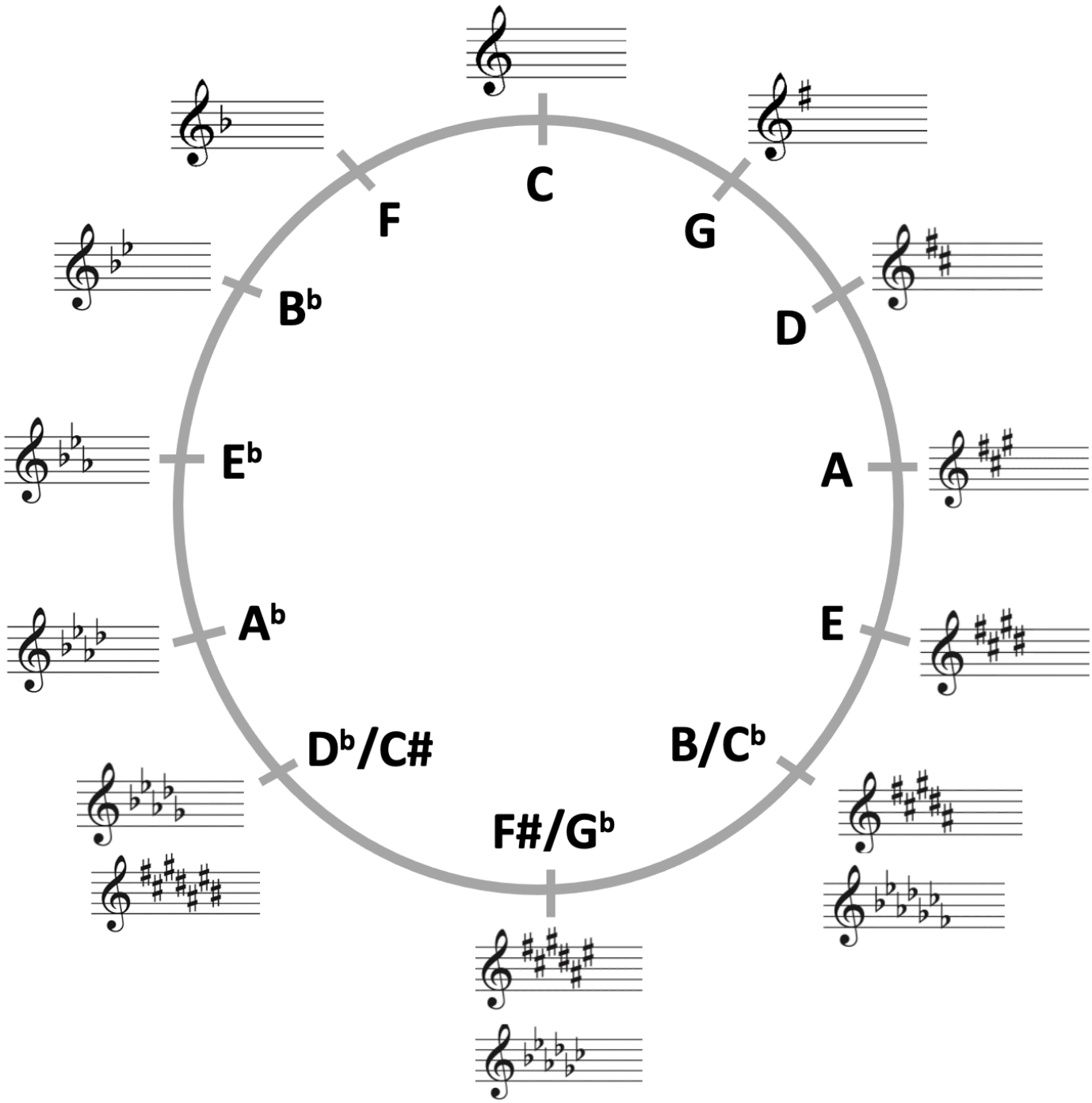
Before **E**ating **A** **D**onut **G**et **C**offee **F**irst

The placement of sharps and flats in a key signature is VERY important! With sharps, observe the key of C# Major below and notice the groupings: a group of two sharps, a group of three sharps, and a group of two sharps. Be mindful that after the C#, the G# is placed above, not below! With flats, you will group in twos until the last flat.

Shortcuts!!!

- A half step up from the last sharp of a key signature is the key!
- The 2nd to last flat in a flat key signature is the key!

B/C-flat major, F#/G-flat major, and C#/D-flat major are considered enharmonic keys, meaning they sound the same but are notated differently.


C
G
D
A
E
B/C♭
F#/G♭
D♭/C#
A♭
E♭
B♭
F

Music Fundamentals – Some tips for melodic and rhythmic dictation

Melodic dictation, the process of notating a melody you hear, is an important skill for musicians and develops the ability to 1) notate rhythms 2) hear scale degree function 3) hear and identify patterns 4) match what you hear with the correct notation. You will likely be working on melodic dictation in class by this point and there are many websites that have melodies to use for practice. It is also beneficial to pair up with someone and for each to write their own melodies. Gaining skills in melodic dictation, which will in turn enhance many other skills, takes time, and below are some suggestions I have found helpful for both pitch and rhythm.

1. Do not write too much down on the first hearing and instead, listen intently and try to get to know the melody. Listen for aspects of the melody and make some general observations such as: key/scale, high/low points, outlining of patterns/triads, contour, stepwise vs. leaps, etc. Try to sing back the melody (internally or externally, depending on where you are) shortly after the first hearing.

2. I have found that listening and notating the rhythm first is most beneficial. Try to notate the rhythm by shorthand on the 2nd hearing. To do this, you might consider the following, or using another shorthand method.

- Put slashes/marks above each beat in each measure: / / / /
- If there is one sound per beat, so a quarter note in 4/4, simply cross each slash: x x x x
- If you hear two even divisions of a beat (two 8th notes in 4/4), cross each slash and add a dot: x. x. x. x.
- If a note receives two beats, cross the slash and draw a line through the next beat. x –

The above are pretty straightforward and you can experiment with what works for you for more complex rhythms. You may want to identify where more complex rhythms are happening and address those with notation, or use a shorthand method like the following.

- For dotted quarter/eighth rhythms (if in 4/4, 3/4, etc.), you might consider noting as suggested above and putting a dot above the slash.
- For further subdivisions, you might consider two dots stacked above each other.

3. Do not feel that you need to always work from left to right. You may try
1) writing the end/cadences down first.
2) identifying the pitches that fall on the downbeats.
3) listening for notes you hear as the pillars and as most important.

4. With your rhythm down, you might now add solfège syllables to the rhythm. Where does the tonic occur (what feels like home base)? Listen for this and write down your 'do's'. One of the goals of dictation is to get a sense of the sound/pulls/tendencies of the various pitches in a scale. Think in terms of solfège: do you hear mi? re? ti? Does the pitch seem to have a tendency (is it a "frustration note")? Does it want to resolve up to tonic, down to tonic? If you find yourself stuck on a pitch, use "do" as a reference point and sing (internally or externally) from a given note up or down to the tonic. Approaching melodies this way is much more musical and useful than just listening for successive intervals.

5. Use your theory knowledge to help you listen and to make intelligent guesses. This is especially useful in harmonic dictation, but also in melodic dictation.

6. Practice! Acquiring listening skills is not a "cramming" activity. Setting aside 15 minutes a day is much more advantageous than a 2-hour cram session every two weeks. How can you practice outside of class? Practice on websites like Sonicfit, Teoria, or musictheory.net a little bit each day, find a buddy to play things back and forth during a break from practicing, and try to sing a sight melody every day. Ask yourself questions and assess yourself – where did I go wrong? What pitch did I write instead of the correct pitch? Sing your melody in addition to the correct melody. If you're not completely correct, or even if you are completely incorrect when practicing, don't consider this a failure. If you're improving, learning, and building on your skills for next time, you are moving in the right direction!

Music Fundamentals – Compound Meter

Listen to the song *It's Alright* by The Impressions and Bach's Brandenburg Concert No. 6, movement 3. What meter do they have in common? Both of these are in compound meter and have a beat divided into three equal divisions. Whereas simple meter has the number of beats in the measure as the top number of a time signature, this is not the case (most of the time) in compound meter. In compound meter, **dividing the top number by three will give us the number of beats**. Therefore:

6/8 = 2 beats per measure
9/8 = 3 beats per measure
12/8 = 4 beats per measure

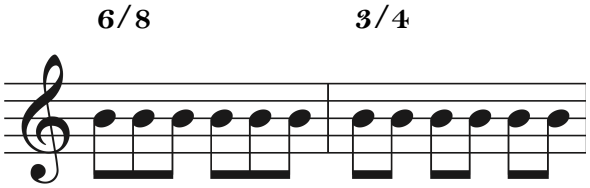
There are times when the tempo may be slow enough to actually feel 6 beats in a meter when 6 is the top number, though almost always a meter such as 6/8 (or 6/4, or 6/16) **will be felt as 2 beats.**

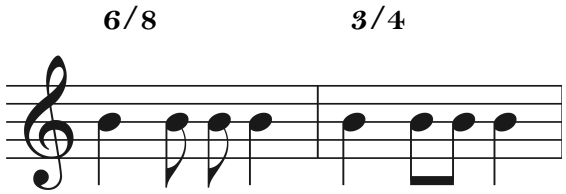
If a beat is divided into 3, then the note that receives the beat will have to be dotted. To figure out the note that receives the beat, **add three of the bottom number of a time signature together.** So, in 6/8, adding three 8th notes together gives us a dotted quarter note, which is the note that receives the beat.

To summarize:

- The primary pulse in compound meter is a dotted note. The top number will be 6 (duple), 9 (triple), or 12 (quadruple).
- Divide the top number by 3 for the # of beats in a measure. Combine 3 of the bottom number/note value for the note that receives the beat.
- The terminology we will use, in addition to stating the meter, is compound duple, compound triple, etc..
- Considering the above, the meter of 12/16 would therefore be compound quadruple, would have 4 beats in measure, and the dotted 8th note would receive the beat.

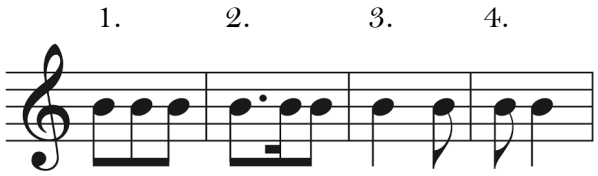
Beaming in compound meter
As with simple meter, we will beam in compound meter so that we can clearly see the beats and the beat division. Below are examples of how the same note values would be beamed differently in 6/8 and 3/4.



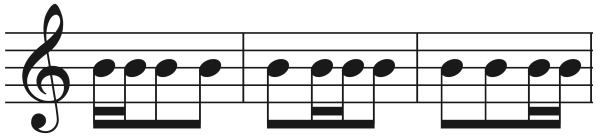


Compound meter tends to use the same patterns a great deal. Rather than thinking of individual rhythmic durations, it can be beneficial to think in terms of patterns. Four patterns commonly used (assuming a dotted quarter note gets the beat) are below, as well as some subdivisions of pattern #1.

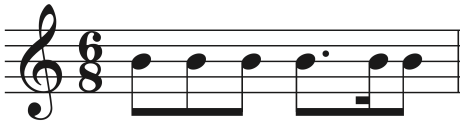
Compound meter patterns



Subdivisions of pattern #1



One way to count our compound rhythms is by saying the subdivision, so we would count the following rhythm as: 1-2-3-4-5&6.



If one beat is felt in a measure of 3 (often 3/8, though sometimes 3/4), this is known as **compound single meter** as there is the feeling of one beat per measure. This is usually felt as a hypermeter (four measures feeling as though it were one measure, with each downbeat of a measure feeling like the beat).

Rhythmic dictation: Listen to the first phrase of the melody of Greensleeves (if listening to the beautiful Vaughan Williams *Fantasia on Greensleeves*, this is after the intro). Notate the rhythm below, matching the four patterns above to the appropriate beats in each measure. The excerpt begins with a pickup.

Further rhythmic dictation examples from recordings.

1. Listen to the *Imperial March* from Star Wars and notate the rhythm of the first four measures. The music is in 4/4 and features a dotted rhythm.
2. Listen to *Larghetto in E minor* by Igor Stravinsky and notate the rhythm of the first four measures in the right hand. The excerpt is in 6/8 (some recordings may be slow and feel like triple meter) and exclusively uses the compound meter patterns discussed above. Be mindful of a grace note.
3. Listen to Bach's Polonaise in G minor (from the Anna Magdalena Notebook) and notate the rhythm of the first four measures in the right hand. The meter is 3/4.
4. Listen to Ariana Grande's *God is a Woman* and notate the rhythm of the first four measures of the guitar. The first three measures are the same and feature a tie into beat 3, and the fourth measure uses eighth note triplets. The meter is 4/4.
5. Listen to the song *Best Day of My Life* by The American Authors and notate the rhythm of the first two measures of the guitar as well as the repeating bass drum pattern. The song is in 4/4.

Further listening examples. Listen to the following, identify whether in simple or compound meter, duple, triple, or quadruple, and answer any questions.

1) The Impressions: *Fool For You*
   - Listen to the horns to help hear beat 1.
   - Listen to the bass, on what beat does it move?
   - What instrument keeps the subdivision when the vocals enter?
   - Where does the brass hit in the instrumental opening? What about in the verse?
   - Notate the ride cymbal rhythm of beat 2, assuming a dotted quarter note receives the beat.

2) The Impressions: *I'm Loving Nothing*
   - This starts with a pick up. Tap the beat with one hand and keep it going while tapping the subdivision in the other.
   - Notate the first four measures of the bass line, assuming a dotted quarter as the beat. Think of the common patterns in compound meter and try conducting and 'ta'ing' the rhythm.
   - Listen for the tonic chord. The tonic chord, like the tonic note, is going to have a feeling of home bass. Which chord sounds like tonic in the opening, the 1st or 2nd?

- Listen to the chorus (0:42) - where, if anywhere, is the tonic?

3) Rush: *The Way the Wind Blows*
   - What is the meter heard at the beginning drum intro?
   - What is the meter when the band kicks in?
   - On what beats does the snare hit in this section?
   - Notate the rhythm of the bass in the first three measures.
   - What is the meter at 0:48?

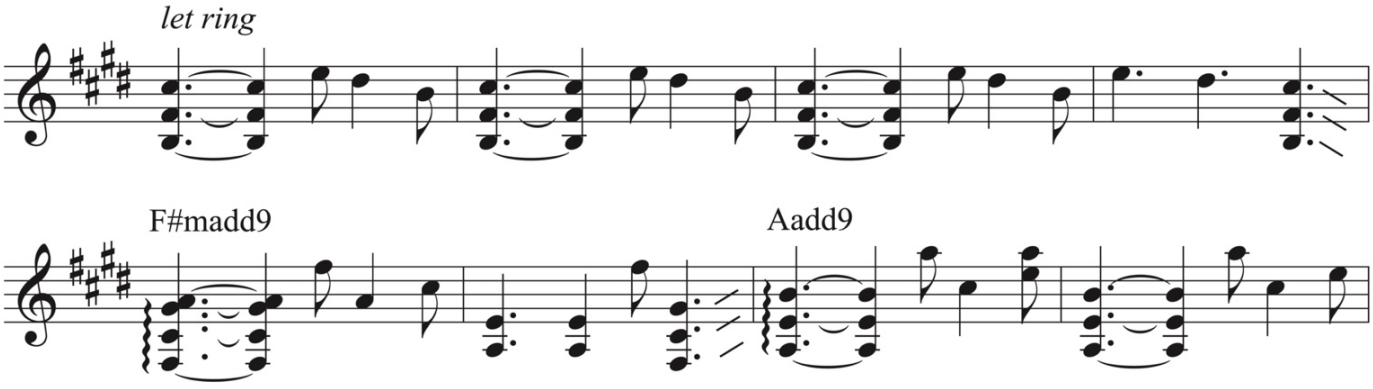
What is the meter of the Radiohead tune?

Radiohead is a band that formed in Abingdon, England in 1985 and are known for having music with interesting meters and rhythmic relationships. Below are some song excerpts, can you determine the meter?

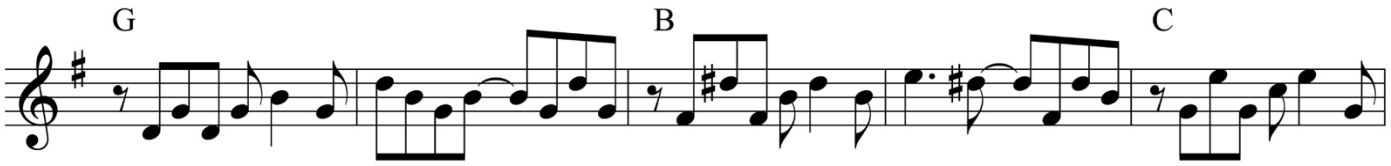
Helpful hints

1. Is it compound or simple meter (look at the beaming)?
2. What note looks like it receives the beat?
3. Bracket the number of beats. If you have bracketed 2 beats in compound meter, then the top number will be 6. If you bracketed 3 beats in compound meter, the top # will be 9, etc..
4. Looking at the top #, ask: there are 6 of what in each measure **<u>or</u> 3 of what note values combine to form each beat?**
5. Clap each rhythm.

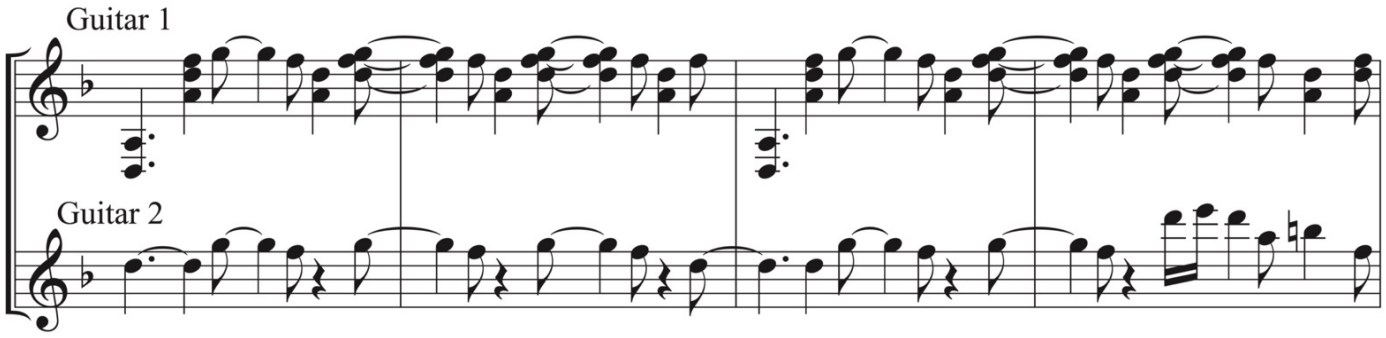
The Tourist (from *OK Computer*, 1997)



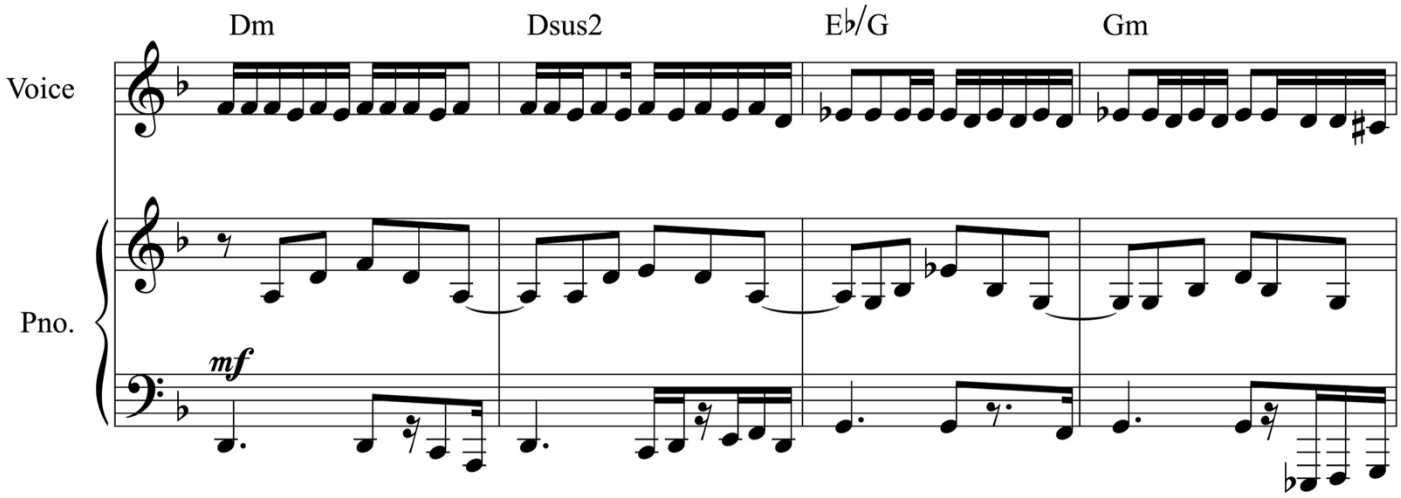
Creep (from *Pablo Honey*)



Electioneering (from *OK Computer*)



Wolf at the Door (from *Hail to the Thief*, 2003)

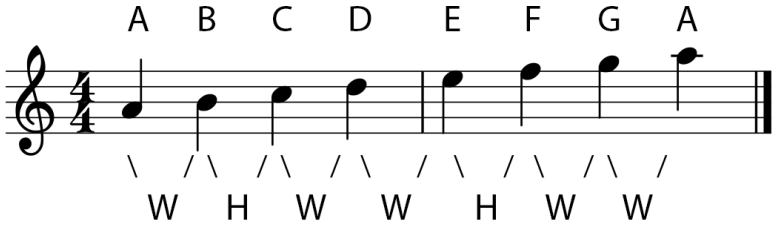


Music Fundamentals – Minor scales and keys

Listen to Haydn's Piano Sonata no. 14, movement 3. This piece is a ternary form (three parts, A, B, A). Where do you hear the B section and how does it contrast? You're right, the key changes from major to minor, in this case from C Major to C minor. This relationship is known as the **parallel minor,** which is when the tonic remains the same and the pitches/scale change (A major to A minor, etc.). **Relative keys** are when the key signatures are the same, though the tonic is different (C major and A minor). This is discussed more below.

Though we will hear a lot about three different minor scales, **we can look at minor keys as having a flexible 6th and 7th note**. We are going to start with the **natural minor scale** as this is a good point of reference. The natural minor scale can be thought about in three ways:

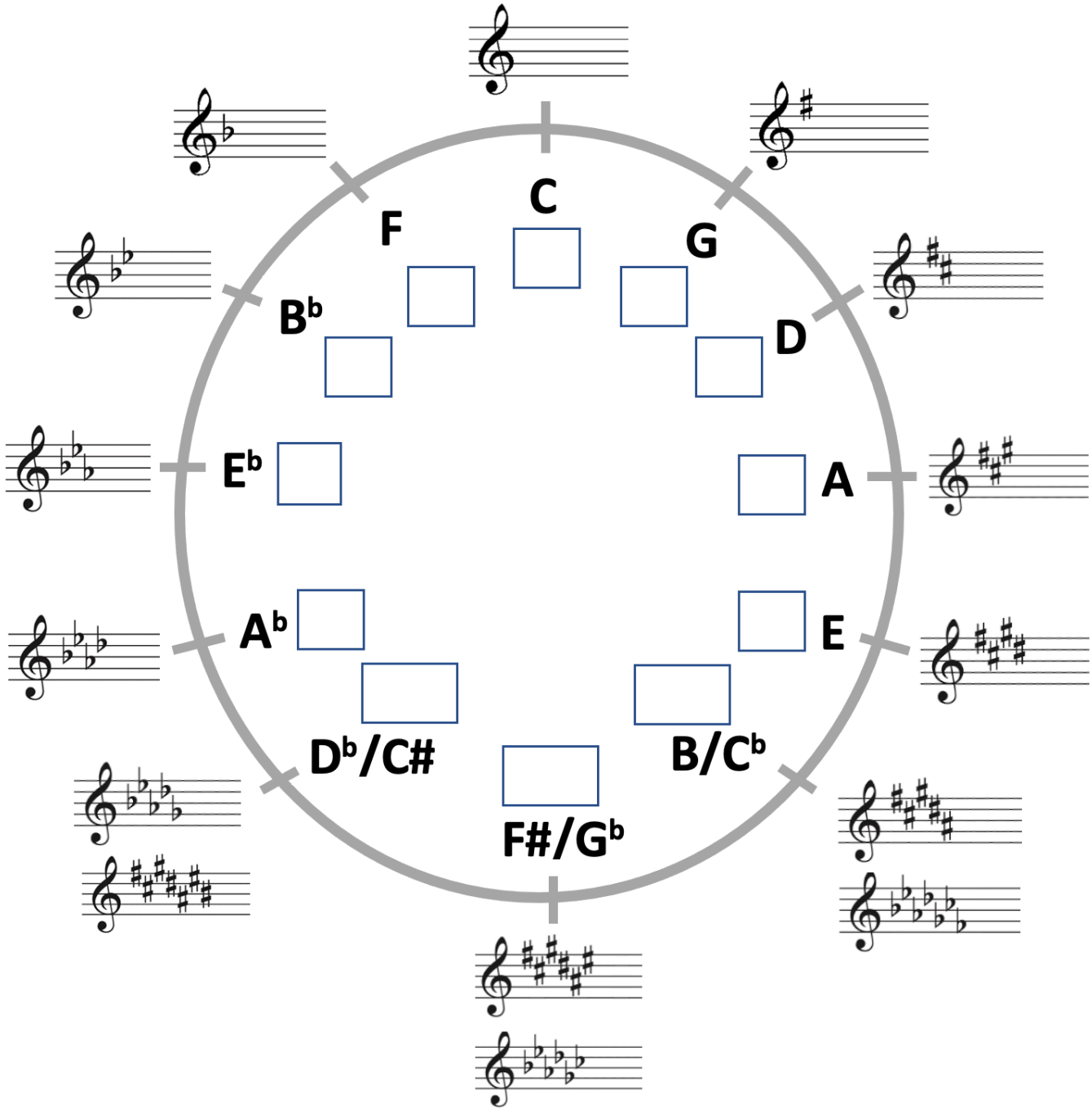
1. Natural minor has a lowered (by half step) $\hat{3}$, $\hat{6}$, and $\hat{7}$ from the major scale. So, if C Major has no sharps or flats, C natural minor would have a lowered $\hat{3}$, $\hat{6}$, and $\hat{7}$ and would be C, D, E♭, F, G, A♭, B♭, C
2. The natural minor scale has the following interval pattern: W H W W H W W



3. Minor key signatures contain the pitches of the natural minor scale. The key signature for A minor has no sharps or flats, so the A natural minor scale would not have any accidentals. The key signature for C minor is 3 flats, so the C natural minor scale would have B♭, E♭, and A♭.

Relative keys: As seen above, C Major and A minor have the same key signature, making them relative keys. To find the relative minor of a major key, go down three half steps, making sure the interval is a 3rd (which spans three notes). You can also think of the 6th scale degree of a major scale to find the relative minor. So, the relative minor of A major is F# minor (F# is down three half steps from A and is the interval of a 3rd, as opposed to G♭ which is the interval of a 2nd). F# is also the 6th note of an A major scale.

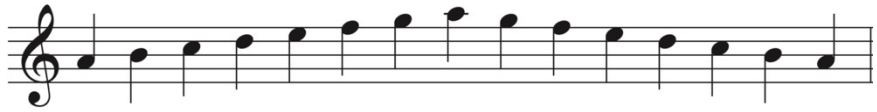
Complete the circle of 5ths below by finding the relative minor keys of each major key, making sure you keep in mind that the distance should span three notes. Check your work on this, on the internet or with your instructor, before using it as a guide.



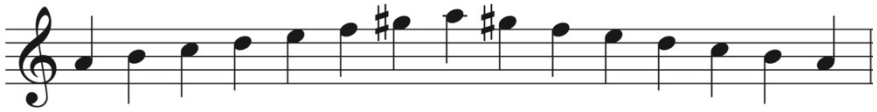
When a composer composes in minor, it is not specifically in natural minor, harmonic minor, or melodic minor, but just **in minor** with some varied use of scale degrees 6 and 7. The reason there are three minor scales is because one form of the scale tends to be used for harmonic purposes (harmonic) and the other follows the tendencies of melodic motion (melodic).

Harmonic minor is like natural minor, except that it has a leading tone. Leading tones are important in minor harmonies as it creates a push towards the tonic chord. To build a harmonic minor scale, build the natural minor scale and add the leading tone.

A natural minor

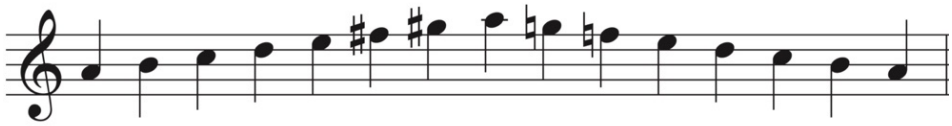


A harmonic minor



In melodies, raised pitches tend to lead upwards and lowered pitches tend to lead downwards. With scale degrees 6 and 7 in minor, the raised form of these two pitches have the sound of leading up to the tonic, while the lowered form of these two pitches have the sound of leading downwards to the dominant. The 3rd always remains lowered in minor. So, to build a melodic minor scale**, the 6th and 7th scale degrees are raised a half step from natural minor when ascending**. So if A natural minor has no sharps or flats, you would raise the 6th and 7th notes to F# and G# on the way up. Notice that this is then like a major scale with a lowered 3rd. **When descending, the melodic minor scale is exactly the same as natural minor**, with the 6th and 7th brought back down. This is the only minor scale that is different ascending and descending. It is rather uncommon to see the harmonic minor scale used melodically, and the augmented 2nd interval (F to G# above) is one that composers often avoided.

A melodic minor

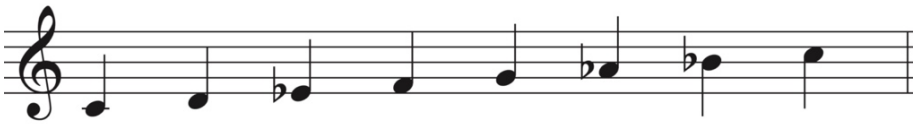


Steps to building a melodic minor scale:

1. Build a natural minor scale ascending and descending.
2. Raise the 6th and 7th scale degrees by half step on the way up.
3. Leave the natural minor just as is on the way down (though I would add courtesy accidentals).

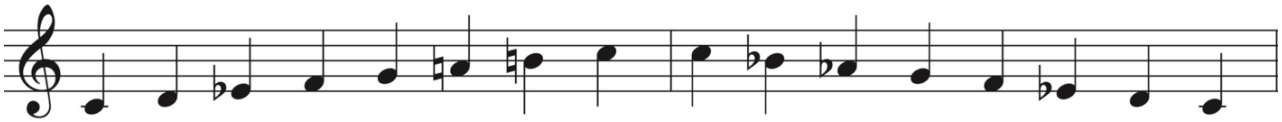
Minor Solfège

Below is the solfège for the natural minor scale. The system we are using is called **'do' based minor** which means that the tonic is always sung as 'do.' The 3rd, 6th, and 7th are sung as 'me', 'le', and 'te.'



Do Re Me Fa Sol Le Te Do

In melodic minor, the syllables 'la' and 'ti' will be used ascending,



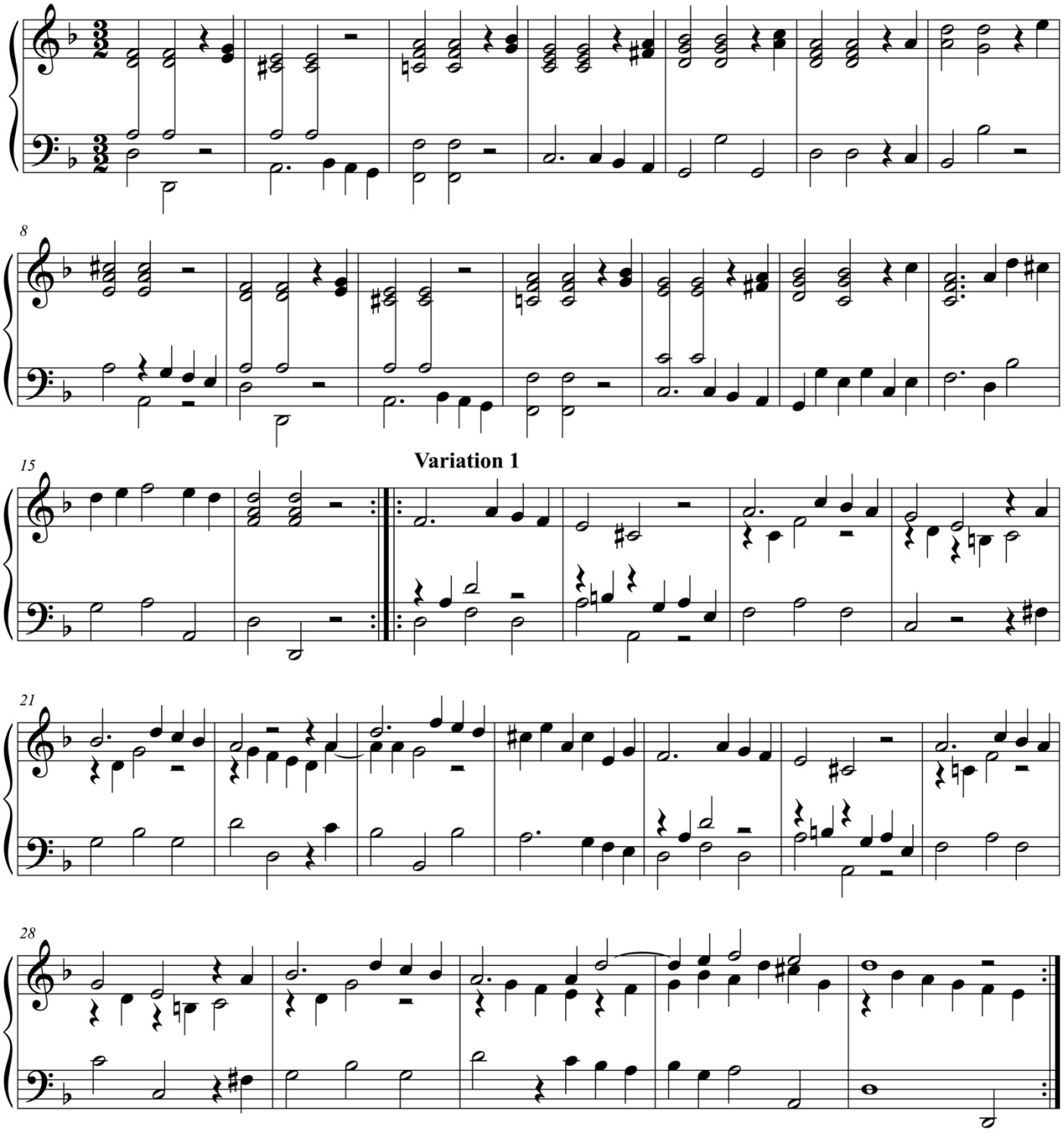
Do Re Me Fa Sol LA TI Do Do Te Le Sol Fa Me Re Do

To hear a clear example of the sound of the upward pulling 'la' and 'ti' vs. the downward pulling 'te' and 'le', listen to the bridge of Peter Gabriel's *Washing of the Water* at 2:27. The bass descends 'do' – 'te' – 'le' and then 'la' – 'ti' – 'do.'

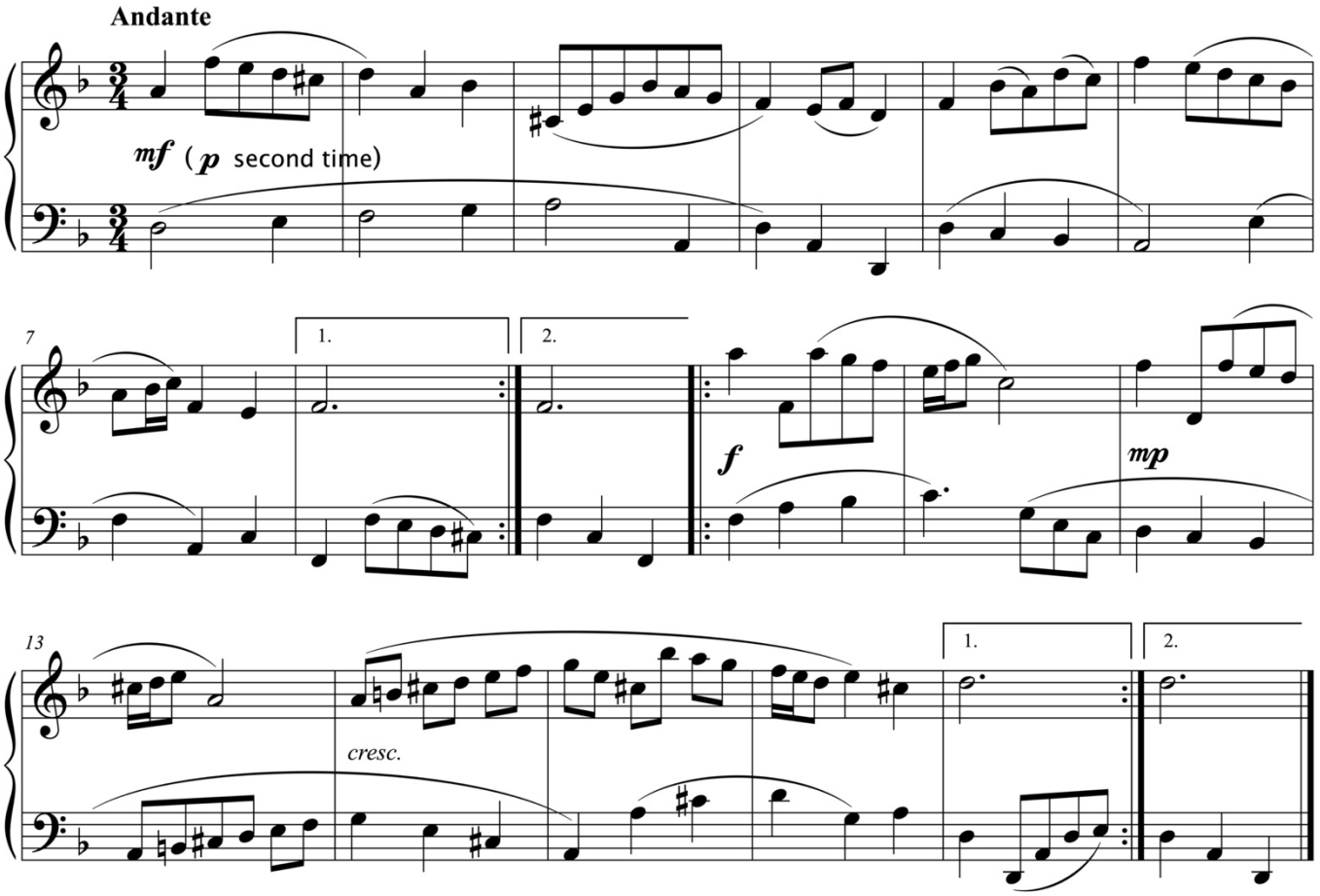
Determing the key

Look closely at the following excerpts from literature. Are they in major or minor? How can you tell? As was discussed, composers vary the 6th and 7th notes of the scale depending on the musical situation, desired sound, etc.. You'll notice that most vertical harmonies have a leading tone (hence the name harmonic minor) and in melodies, raised $\hat{6}$ and $\hat{7}$ often lead up to tonic, with the lowered $\hat{6}$ and $\hat{7}$ leading down to the dominant. Observe the use of scale degrees 6 and 7 for each example in minor. If a passage is in minor, you will almost always see an accidental that will be the leading tone. Also, look for emphasis on the tonic and dominant pitches.

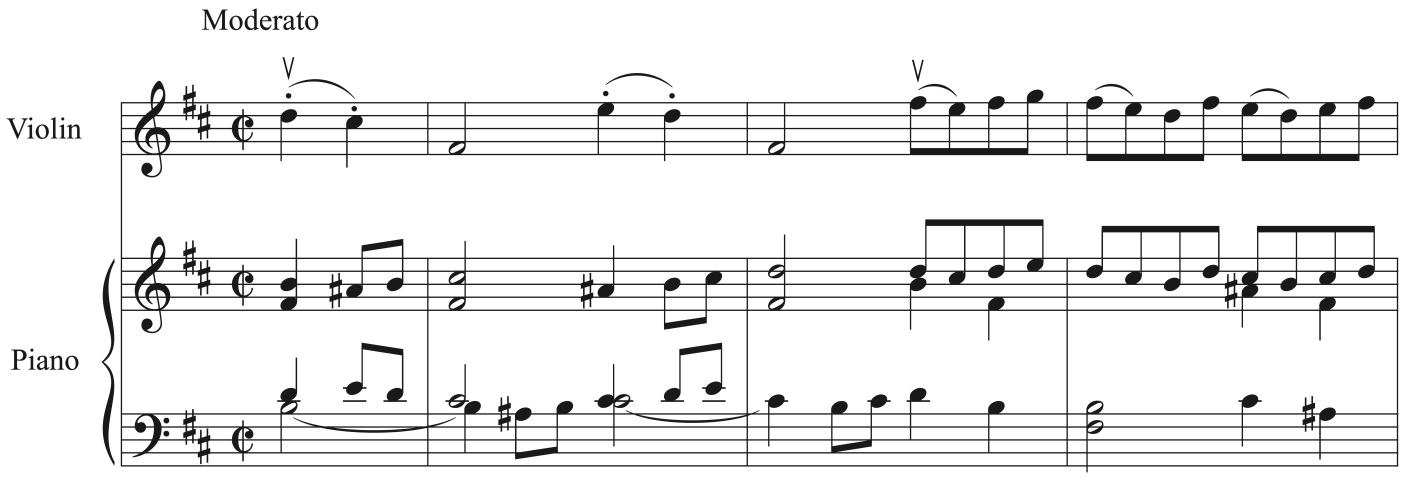
Handel: Sarabande from Keyboard Suite in D minor, HWV 437
Notice the flexible use of the 7th scale degree! In the bass, the lowered 7th ('te') leads downward, while the leading tone ('ti') is used when pulling to the tonic, such as in m.8.



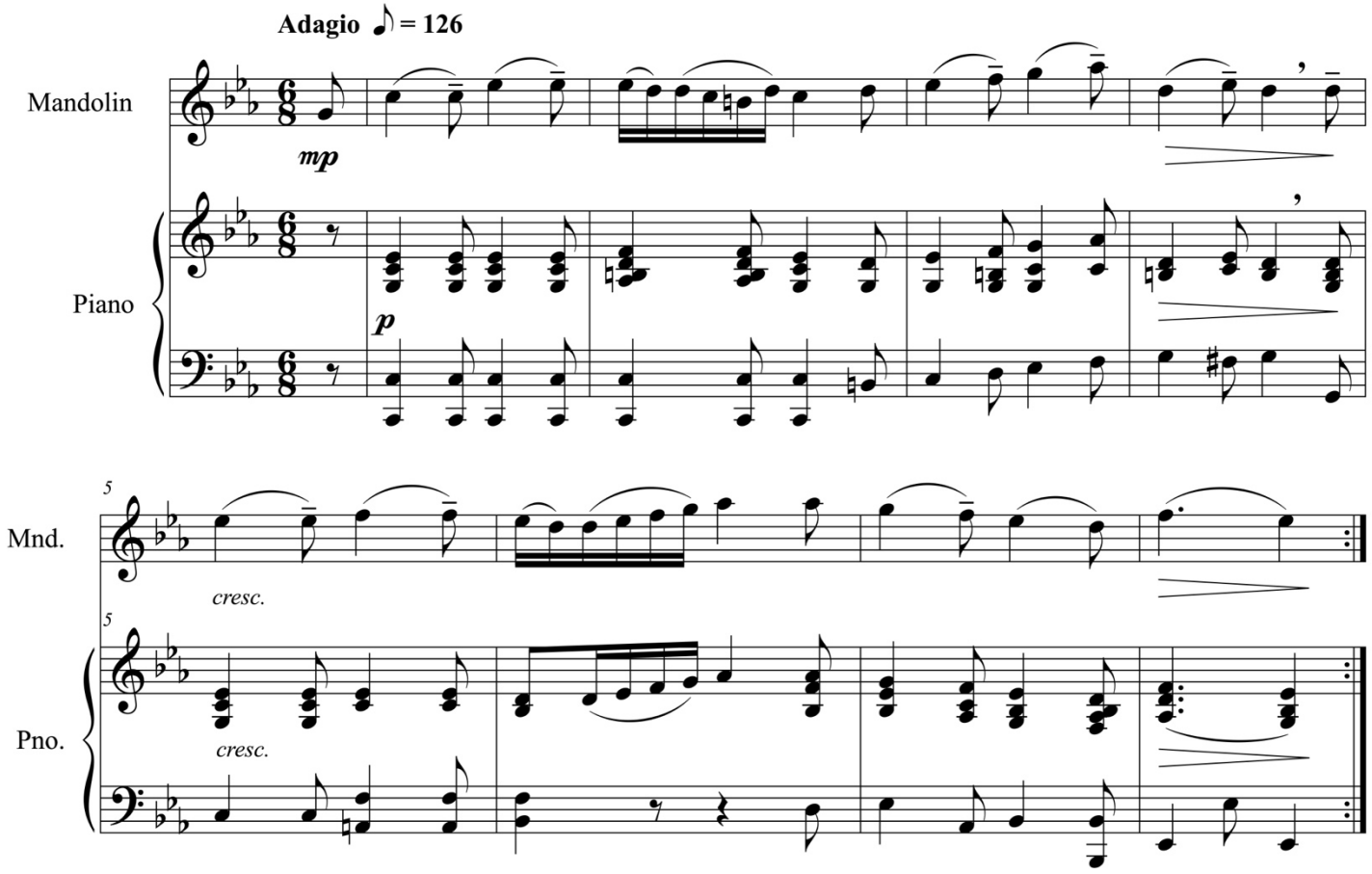
J.S. Bach: Minuet from Notebook for Anna Magdalena, BWV Anh. 132



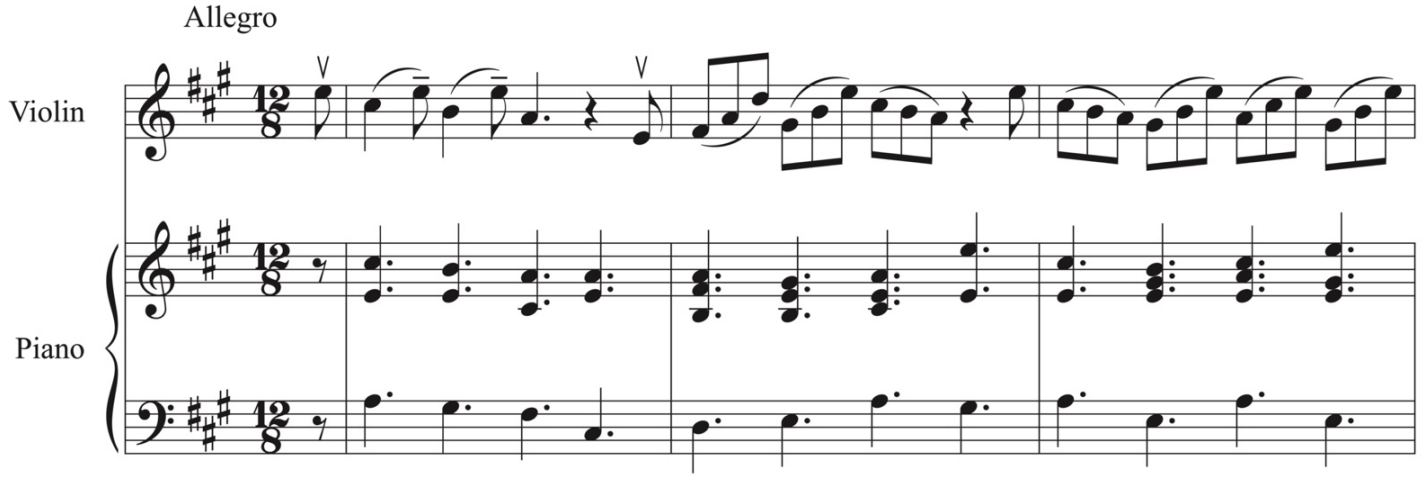
Bach: Rondo from Orchestral Suite, BWV 1067



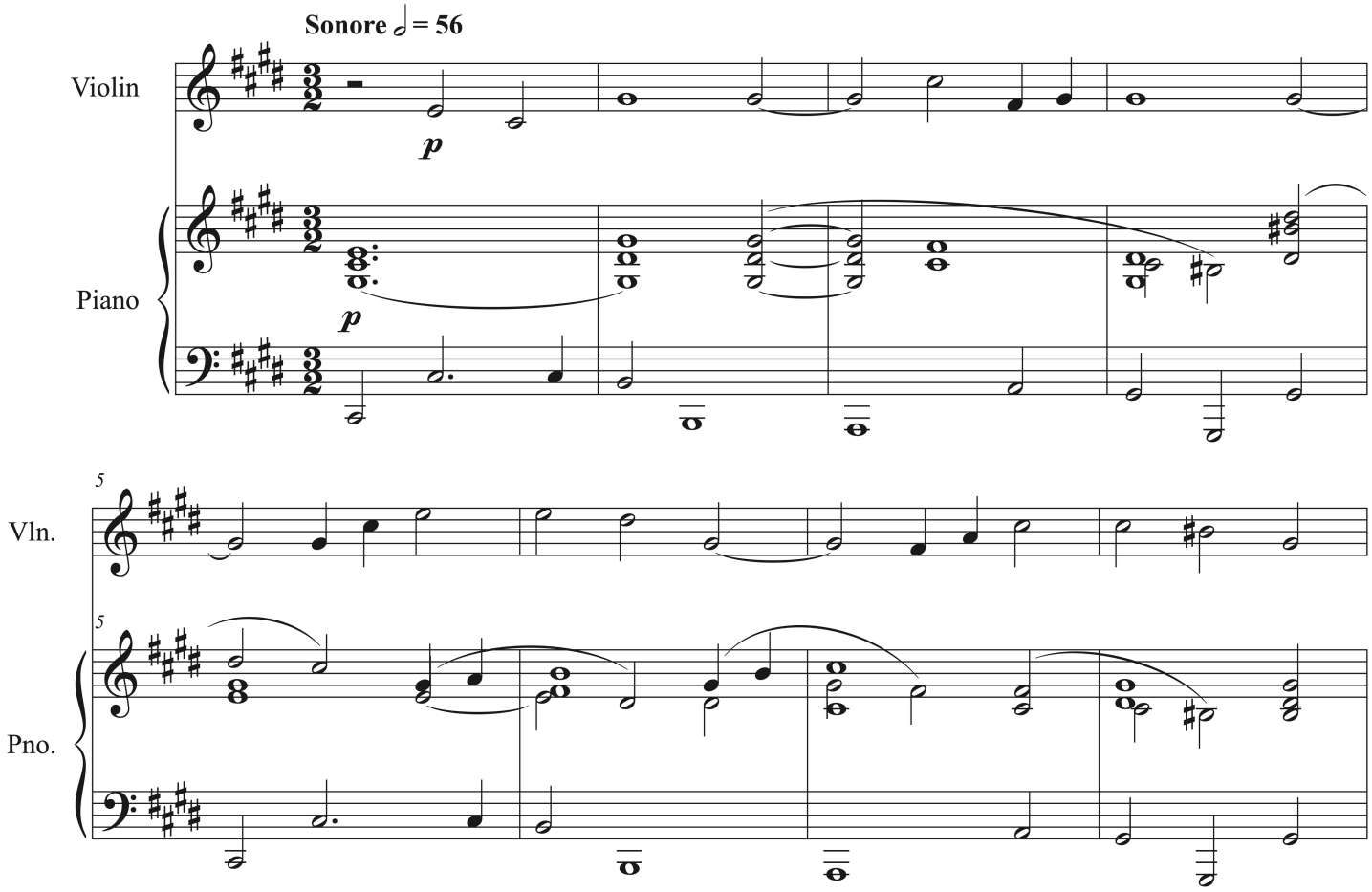
Ludwig van Beethoven: Sonatina for Mandolin and Harpsichord, WoO43 no. 1



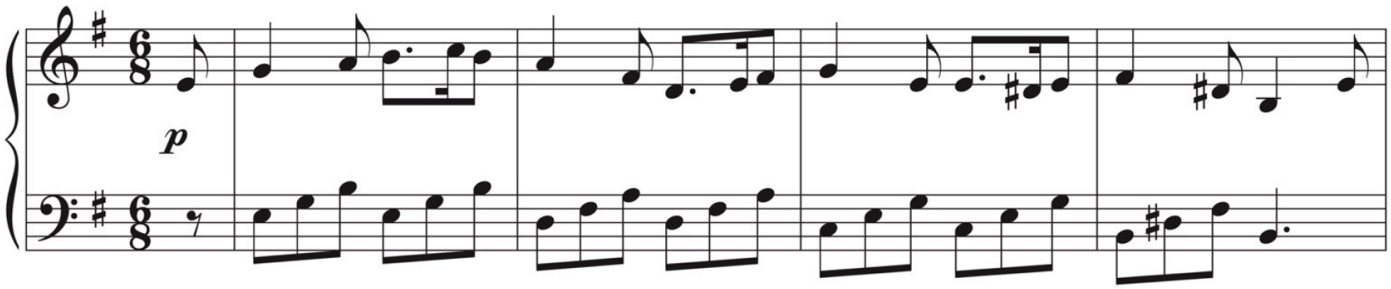
Arcangelo Corelli: Giga from Violin Sonata, op. 5 no. 9

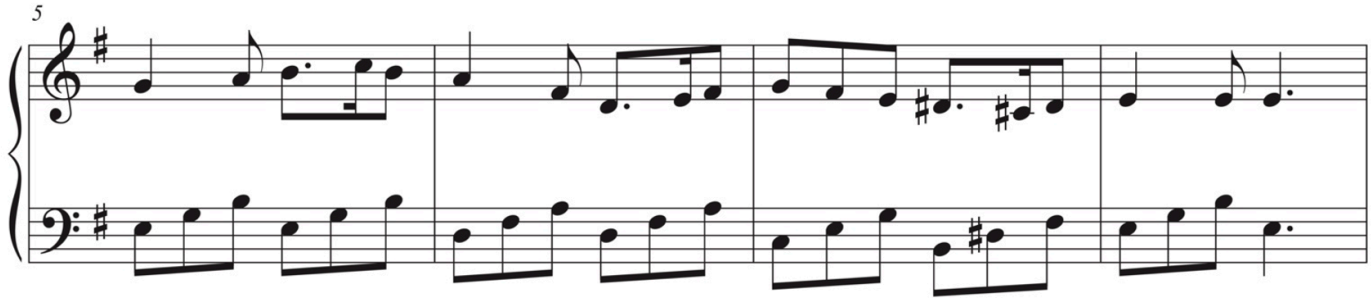


Healey Willan: Sonata for violin #2, HWV 101

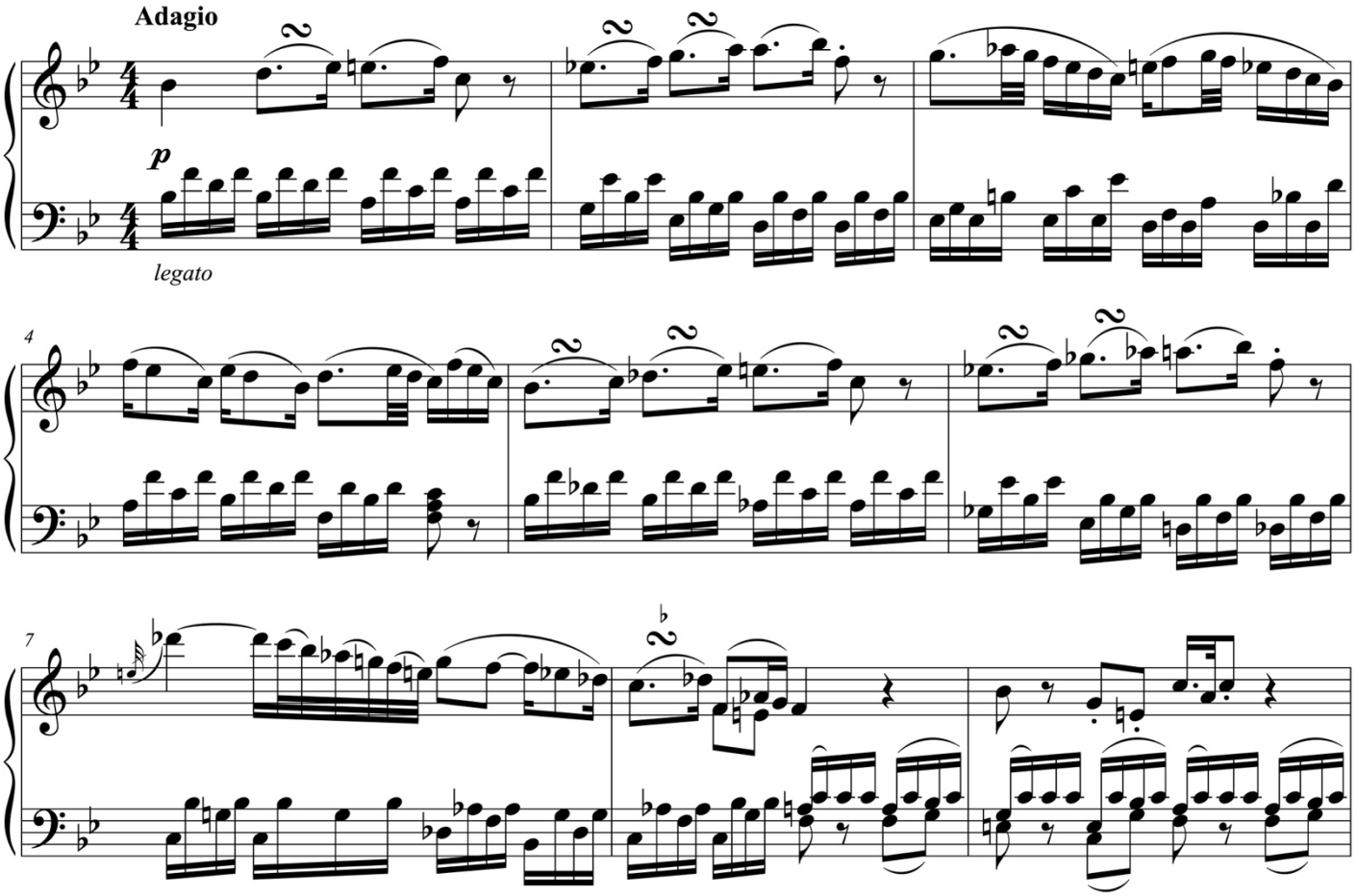


Traditional: Greensleeves



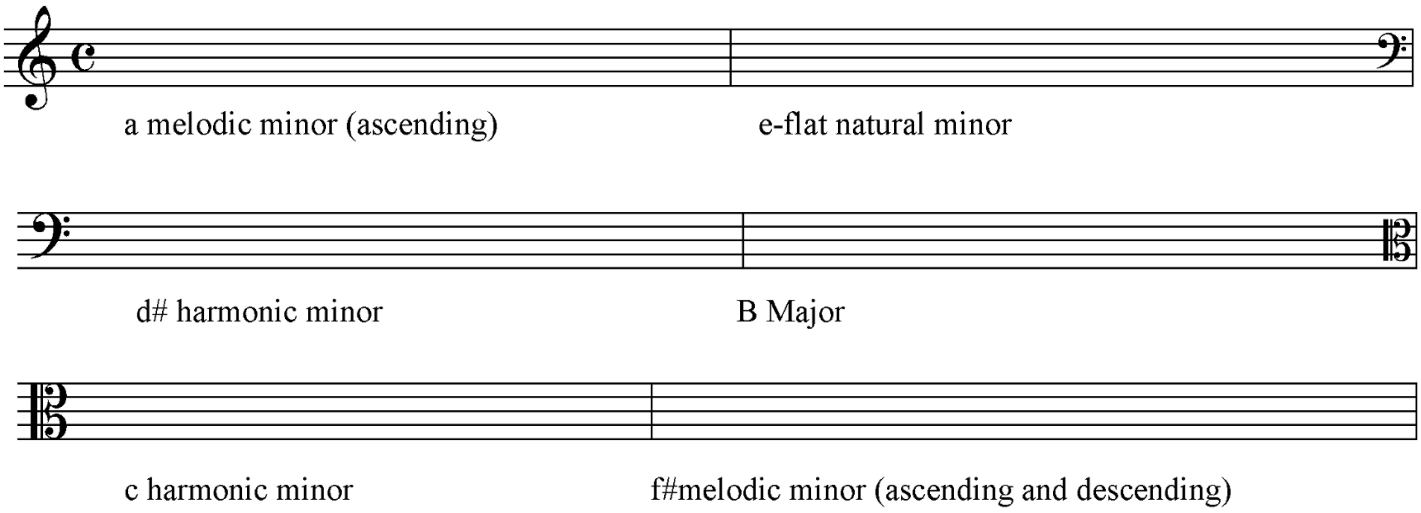


Mozart: Piano Sonata K. 332, mvt. 2
Listen closely, where do you hear a switch from the major scale to minor? Do you hear this foreshadowed anywhere earlier in the excerpt?

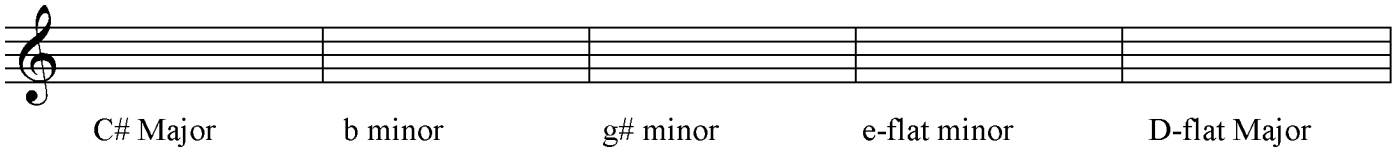


Music Fundamentals Compound Meter, Minor Scale/Key Review

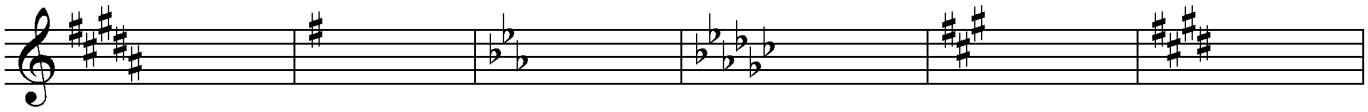
Write the following scales



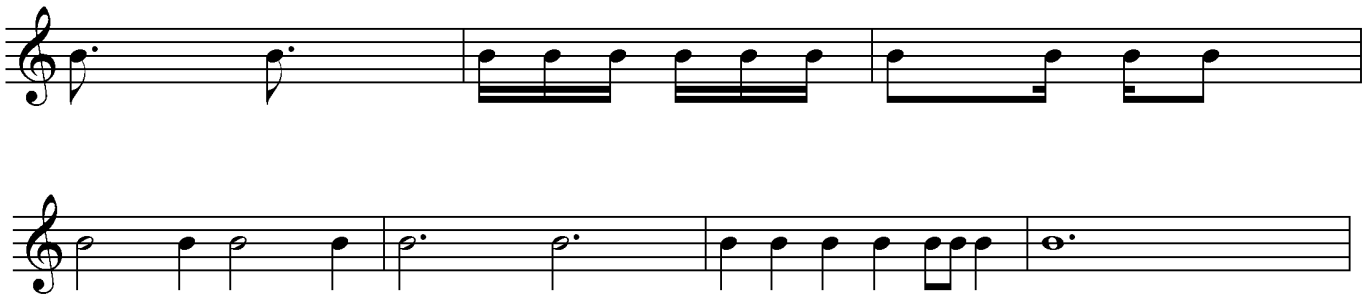
Write the following key signatures

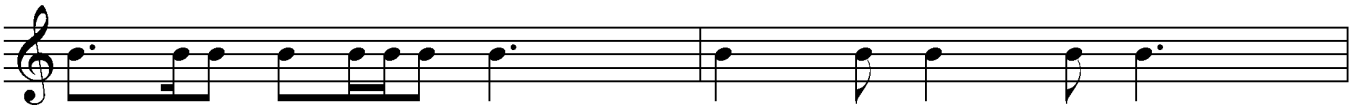


Identify the following key signatures, show both the major and minor key.

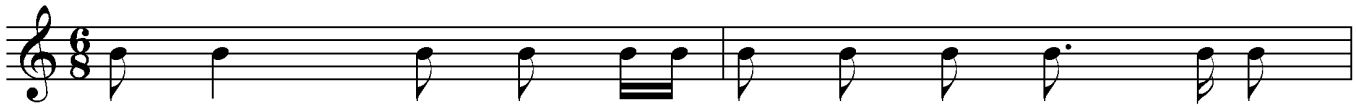


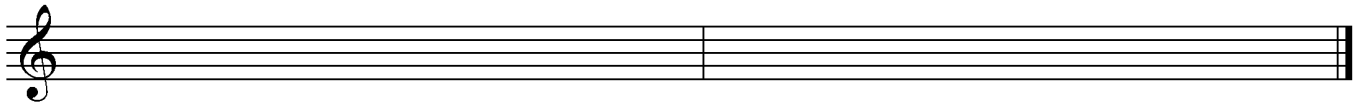
What is the meter of each example.

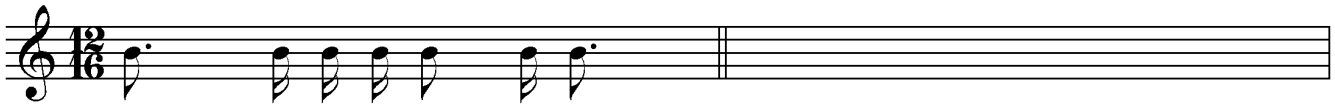




Beam the following rhythms according to the time signature.







Music Fundamentals – Intervals

Intervals are the fundamental reason that music sounds the way it does, and major scales sound different than minor scales because of the pattern of intervals. An interval is simply the distance between two pitches. Some intervals are considered **consonant**, meaning that the intervals have a sound that can be considered at rest and stable. Other intervals are considered **dissonant**, meaning that the intervals have a sound that can be considered unstable, with a degree of tension.

Though there is a chart below with the number of half steps in each interval, I find it much quicker, easier, and intuitive to think of intervals with relation to a major scale, as opposed to counting half steps. **Only major and perfect intervals occur between the first note of a major scale and the other pitches of a major scale**. For instance, G to B is a major 3rd since B is the third note of the G Major scale. G to B-flat would therefore be a minor 3rd since this pitch is a half-step lower than the note of the scale. Only 4ths, 5ths, unisons, and octaves are considered perfect intervals. The term perfect interval is named because of the harmonious sound and because these were the only intervals deemed stable enough to rest on in the Medieval and Renaissance periods. Also, remember that interval names are inclusive of the first and last note! A perfect 5th (often shown as P5) above C is G, counting C as one and G as five. To reach G from C you must move through 7 half-steps, the first being between C and C-sharp/D-flat. Therefore, half-steps are not inclusive of the starting note.

Every interval can be augmented (made larger) by adding one half step to the interval's largest form (perfect for 4ths, 5ths, unisons, octaves, and major for 2nds, 3rds, 6ths, and 7ths). An augmented 4th above C is F-sharp, since a perfect 4th above C is F, and F-sharp is one half step higher. An augmented 3rd above C would be E-sharp, a half step larger than the major third of E. Augmented intervals are often shown with a +.

Every interval can be made diminished by subtracting one half step from its smallest form (perfect for 4ths, 5ths, unisons, octaves, and major for 2nds, 3rds, 6ths, and 7ths). A diminished 5th above C would be G-flat, since C to G is a perfect 5th, and G-flat is one half step lower. Diminished intervals are often shown with a ^{o} symbol.

When writing any interval, always write the notehead first (above or below) and then worry about the interval quality. If writing a major 6th above A, make sure you have your notehead on F. Then you should consider the interval quality and accidental, which in this case is an F-sharp. You could have figured this by thinking that F-sharp is in the A Major scale, or that F-sharp is 9 half-steps above A.

When figuring out larger intervals, you may find it easier to work from a Perfect 5th as a reference. A minor 6th is one half step above a Perfect 5th, a Major 6th is two half steps away. You may also find it easier to work backwards from the octave when thinking of 7ths. A major 7th is one half step below the octave, a minor 7th is two half steps below the octave,

and a diminished 7th is three half steps below. For instance, a Major 7th above E would be one half step below the octave, yielding D-sharp.

When dealing with sharp or flat pitches, you might find it helpful to "block out" the sharp or flat and add it later. For instance, if you were to find a perfect 5th above D-sharp, you might find it easiest to find a perfect 5th above D (which is A) and then to sharp it (A-sharp). Another example would be a major 3rd above E-double flat. A major 3rd above E-flat is G, therefore a major 3rd above E-double flat is G-flat.

Interval inversion: If you "flip" an interval, this is called the interval inversion. So the inversion of D up to G would be G up to D. The magic number for inversions is 9, so the inversion of a 7th inverts to a 2nd, the inversion of a 3rd is a 6th, etc.. The inversion of a major interval is minor and vice versa. The inversion of a Perfect interval is still Perfect. The inversion of a diminished interval is augmented and vice versa. The inversion of a diminished 5th is therefore an augmented 4th, the inversion of a P4th is a P5th, etc..

Below is a chart showing the number of half steps for each interval. While counting half steps will get you the answer (though be careful of enharmonic spelling!), it is rather laborious, slow, and prone to errors, and I advise thinking of the major scale which is quicker and will develop your music theory skills. If asked for the interval between F and E♭, you can quickly deduce that F to E is a major 7th (E is in the key of F major), therefore F to E♭ is a minor 7th. Much quicker thank counting half steps! * If a space is blank in the chart below, then that interval does not exist. There is no such thing as a perfect 2nd, minor 5th, major octave, etc.!*

The tritone: The interval of an augmented 4th or diminished 5th is known as a tritone. This interval divides the octave in half and is a dissonant and striking interval. In the Medieval period, the interval was considered the *diabolus in musica* (the devil in music) and was avoided. While in notation you will want to be specific as to whether an interval is a +4 or °5th, it is common to use the term tritone when discussing the interval aurally.

Interval Name	**minor**	**Major**	**Perfect**
2nd	1 hs	2 hs	
3rd	3 hs	4 hs	
4th			5 hs
5th			7 hs
6th	8 hs	9 hs	
7th	10 hs	11 hs	
8ve			12 hs

Music Fundamentals – Interval song examples

As you begin listening to intervals, you may find it helpful to think of intervals within the context of a key, like thinking of a P5 as 'Do' to 'Sol,' a M6 as 'Sol' to 'Mi,' etc.. Our ears will naturally make these associations, since 'Do' to 'Sol' is one of the primary contexts in which we're so used to hearing P5^{ths}, etc.. These common uses are shown below. Another helpful way to begin hearing intervals is to learn examples of each interval in the context of a well-known song. When listening, try singing between the pitches by step. Here are a few examples for each interval:

Minor Second: ***Often heard as ti-do***
Jaws theme
I'm Dreaming of a White Christmas
Fur Elise (descending)

Major second: ***Often heard as do-re and the start of a scale, or sol-la***
Happy Birthday
Silent Night
Yesterday (descending)

Minor Third: ***Often heard as do-me (or sometimes mi-sol)***
What Child Is This?
Brahms Lullaby (*Go to sleep*)
Georgia On My Mind (mi-sol)
Katniss and Rue's whistle in the Hunger Games
Poker Face (Lady Gaga) (*Can't read my, can't read* ***my poker*** *face)*
Hey Jude (descending)

Major Third: ***Often heard as do-mi***
Kumbaya
When The Saints Go Marching In
Morning Has Broken
Summertime (descending)

Perfect Fourth: ***Often seen/heard as sol-do, with the higher note sounding like the tonic***
Here Comes The Bride
Amazing Grace
Auld Lang Sine
Harry Potter theme
O' Christmas Tree
O' Come all ye faithful (Descending)

Tritone: ***Often heard as ti-fa, listen for the strong desire to resolve***
The Simpsons theme
Maria (West side story)
YYZ (instrumental by the band Rush)

Perfect Fifth: ***Often heard as do-sol (the bottom note sounds like tonic)***
Twinkle, Twinkle Little Star
Star Wars theme (and many other John Williams themes)
Scarborough Fair
My Favorite Things
(I Can't help) Falling in Love With You (***Wise men*** *say*)
The Flintstones theme (descending)

Minor Sixth: ***Often heard as mi-sol, sol-me, or do-le***
In My Life (Beatles)
The Entertainer
We Are Young by Fun (*so let's set the world on* ***fire)***

Major 6th: ***Often heard as sol-mi or do-la***
My Bonnie Lies Over The Ocean
NBC theme
For He's a Jolly Good Fellow
Call Me Maybe – Carly Rae Jepsen (*Hey I just met you, and this* ***is cra****zy)*
Nobody Knows The Trouble I've Seen (descending)
Man In The Mirror (descending)

Minor Seventh: ***Often heard as sol-fa. A minor 7th is the outer interval of a dominant 7th chord and the upper note has a strong tendency to resolve down.***
Somewhere (*There's a place for us*) - from West Side Story
"Have you driven a Ford" commercial
Star Trek original theme

Major Seventh: ***Often heard as do-ti with a strong tendency to resolve up the half step to the octave***
Take On Me (A-ha)
Superman theme
Don't Know Why – Norah Jones (***I wait****ed 'til I saw the sun)*
Pure Imagination from Willy Wonka (*Come with me and you'll be in* ***a world*** *of pure imagination)*

Octave:
Somewhere Over The Rainbow
Let It Snow

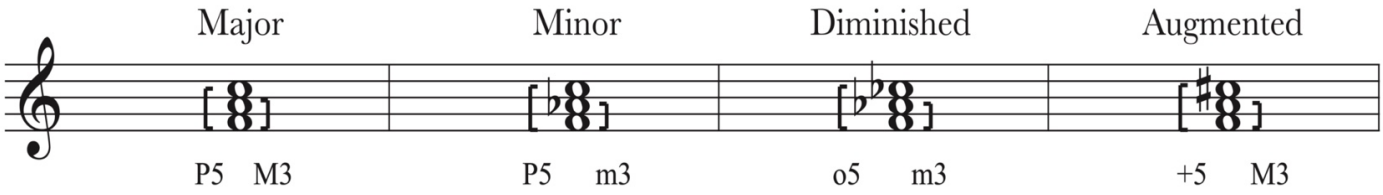
It can be helpful when starting to listen to intervals to use some process of elimination. I might first ask, is the interval consonant or dissonant? Then, is it small, medium, or large? If a consonant interval, does the interval sound like a perfect consonance?

- Consonance intervals: sounds that suggest lack of tension, are harmonious, stable, more suitable for conclusion. **Perfect consonances are P4, P5, and P8. Imperfect consonances are 3rds and 6ths.**
- Dissonance: sounds that suggest tension, unrest, are active, and less suitable for conclusion in most contexts. **These include 2nds, the TT, and 7ths.**
- The 5^{th} is the most stable interval (other than the octave) and has a harmonious sound.

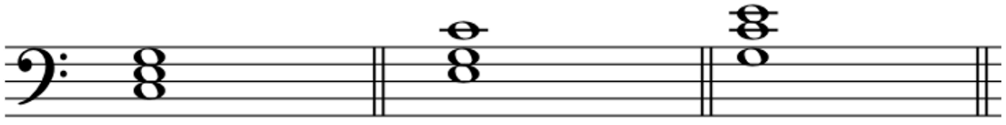
Music Fundamentals – Triads

Harmony is the result of pitches sounding together and as we know, this is the vertical aspect of music (with melody being the horizontal aspect). A chord is typically defined as being three or more notes played simultaneously (two notes would be an interval, though there can be two note harmonies) and we will begin our study of harmony with the most common type, the **tertian harmony.** Tertian harmonies are chords built in 3rds and most of the music we know and love, from Mozart to Led Zeppelin to George Gershwin, utilize tertian harmonies. In later chapters we will discuss chords built in fourths, fifths, and seconds, though we will spend a considerable amount of time on tertian harmony since it is far and away the most prevalent. We will start with our primary tertian chord which is a 3-note chord called a **triad**. Triads are the basic building block of tonal harmony.

If a tertian triad is built in stacked 3rds, the root of a triad will be the bottom note of this stack. The note a 3rd above the root is called the **third** of the triad and the note a 5th above the root is called the **fifth** of the triad. We will identify our triad types by looking at the intervals formed between the root/3rd and root/5th of a triad. The interval content of our four triad types are below.



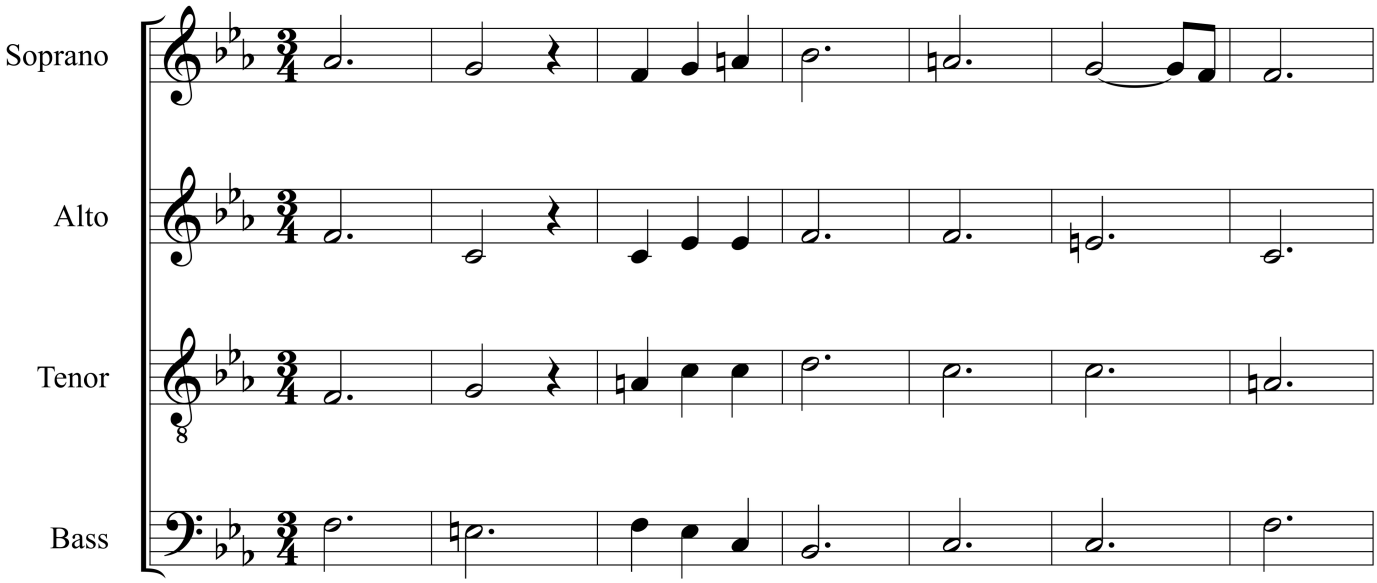
When the root of the chord is the bass note (the lowest note), the chord is in **root position.** If there is a bass note other than the root, the chord will be in inversion; in **1st inversion** the 3rd of the chord is in the bass, in **2nd inversion**, the 5th of the chord is in the bass. The topic of chord inversions will be covered in detail later in the book. The shorthand way to show inversion is based on the intervals above the bass in the given inversion. **For a first inversion triad, the shorthand is the number 6. For 2nd inversion chords, the shorthand is the numbers 6/4.** *The Roman Numeral below designates a triad on the tonic scale degree and Roman Numerals are covered a few chapters down the line.*



C: I I6 I6/4

Root position *1st inversion* *2nd inversion*

What is the root, quality, and inversion of each of the chords below?

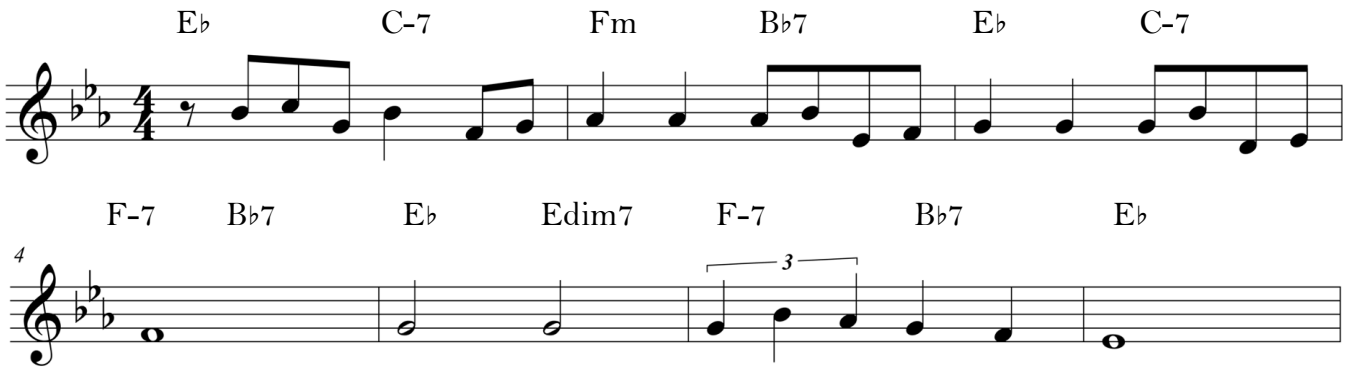


Jazz and pop musicians often read from a **lead sheet** that shows melody and lyrics together with the harmony. Lead sheets are a framework and performers add their own touch, style, personality, and even harmonic differences. It is likely that twenty jazz musicians playing from a lead sheet would play something twenty different ways. It is also common that musicians will add to chords (change inversion, add 7^{ths}, etc.). A collection of lead sheets is called a **fake book** or **real book,** and many jazz combo performances feature jazz musicians playing from these popular and commonly owned collections. Different fake and real books have different ways of showing chords, so we will look at several ways these are shown in triads, with 7th chords covered later. Here are the common ways to notate the four triad types.

Major: just the root
Minor: m (lowercase), min (Cm), or – (C-)
Diminished: dim or circle
Augmented: + or Aug

Below is an example of the beginning of a popular song (can you name it?) as would be seen in a lead sheet. 7th chords will be discussed later.

How to show inversions with lead sheet chord notation
While the inversion symbols 6 and 6/4 are used in analysis, these are not used in lead sheets. Instead, inversions are shown as so: C/E, D/F#, etc.. The chord is shown first, with the bass note indicated after the bracket.

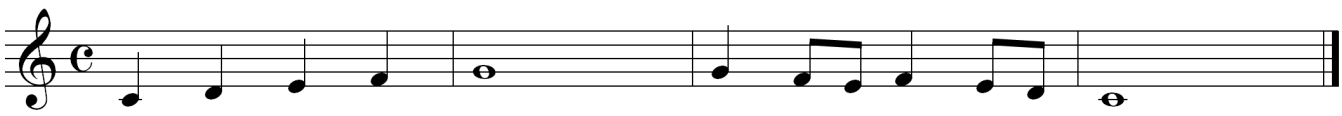


Root Position Triad listening

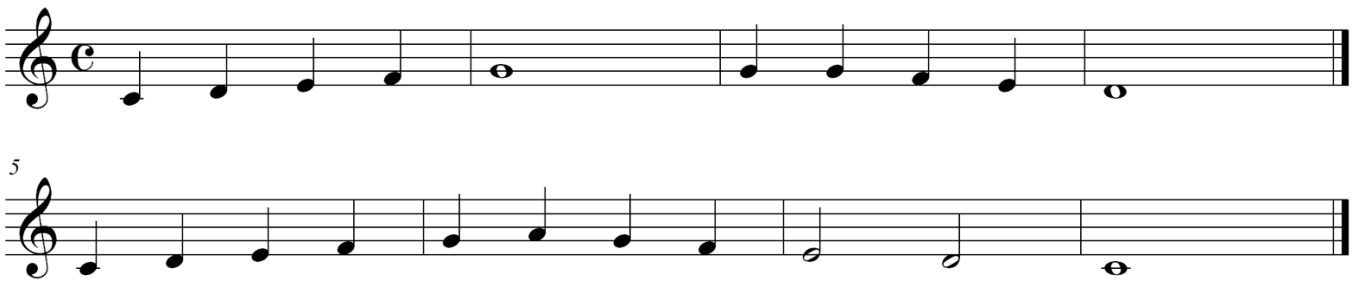
Major and minor triads can be tonic chords and out of context, they often sound stable and resolved. They can be sung as do-mi-sol and do-me-sol. Both have a P5th above the root and we want to listen for whether we have a major or minor 3rd. The diminished triad often occurs on the leading tone with the solfège of ti-re-fa. The diminished triad will sound like it wants to resolve inward, with the leading tone (the bass) resolving up and the 5th resolving down. In augmented chords, the augmented 5th tends to resolve out and you should hear the chord want to resolve/expand outward (the top note resolving up). While isolated triad inversion listening is common and can be useful, it is more useful, in my opinion, to work at hearing triad inversions in context.

Sight Singing Melodies

1)



2)



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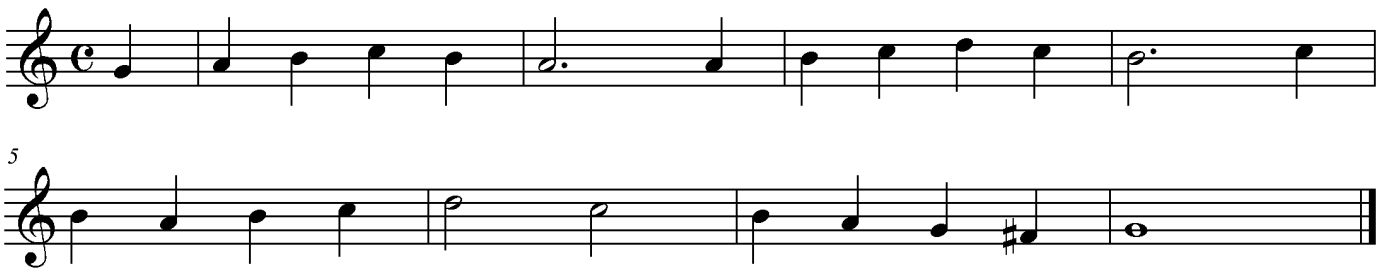
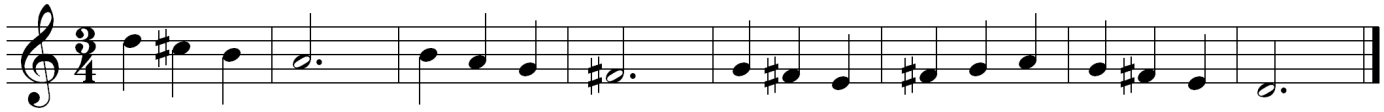


4)

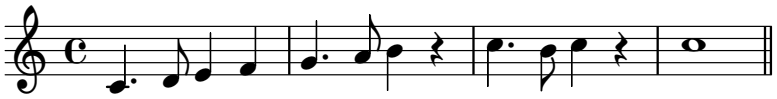


The following taken from Eyes and Ears by Benjamin Crowell

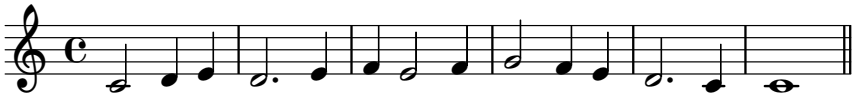
II-2 Melodies Containing Only Steps

In each example, start by identifying which line or space on the staff represents 'do,' the tonic. If you have an instrument at hand, play the tonic, and then sing enough notes from the tonic chord to bracket the range of the melody, e.g., 'do mi so do' for the octave spanned by the first example. If an instrument is not available, pick a note for 'do' that will put the melody in the most comfortable part of your vocal range. Locate the notes of the tonic chord on the staff to use as reference points.

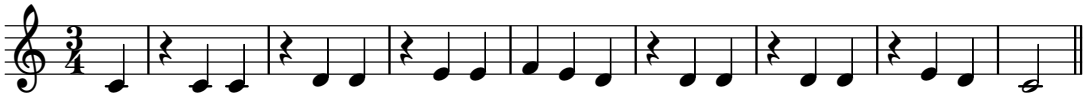
27



28

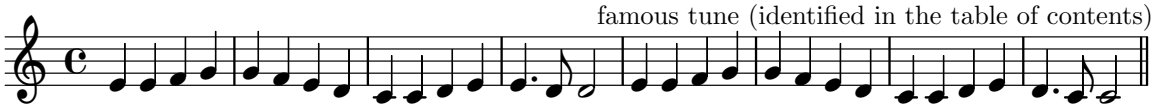


29



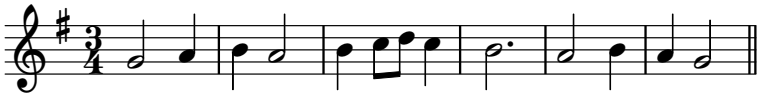
30

famous tune (identified in the table of contents)

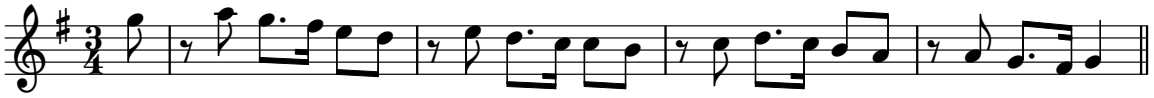


The following example is in a new key: its 'do' is the former 'so.' If you have trouble convincing your brain to switch keys, try singing 'do re mi fa so' in the old key, then repeating the last note as 'do,' and finally singing 'do ti do' — with authority!

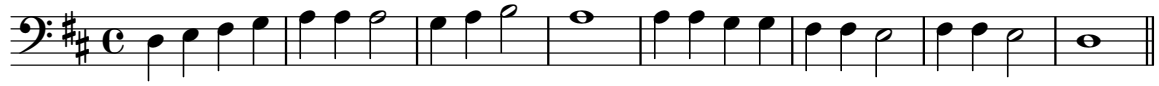
31



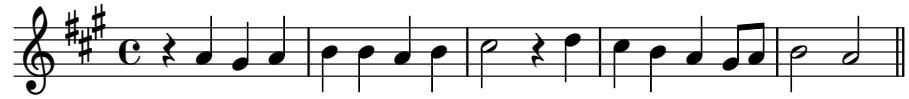
32



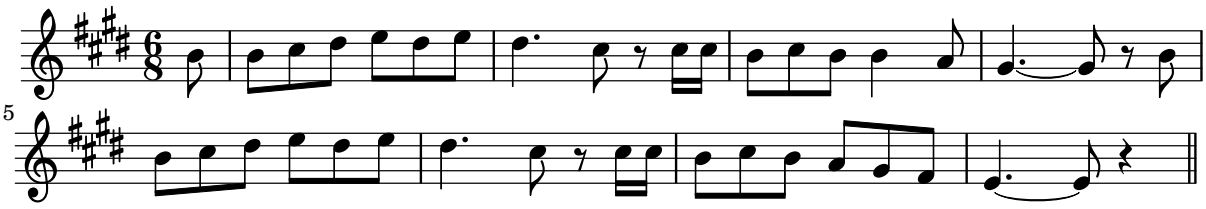
33



34

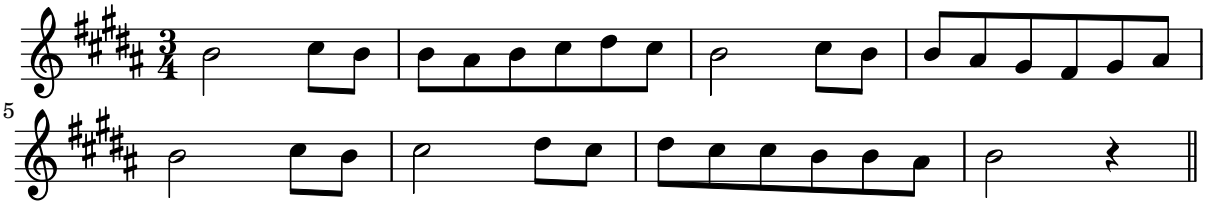


35 Moderato

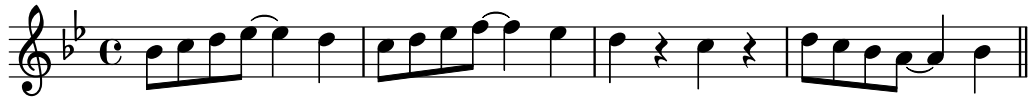


Note that the following two examples both have the tonic on the line at the center of the staff, so the one with five sharps actually isn't any more difficult to read.

36

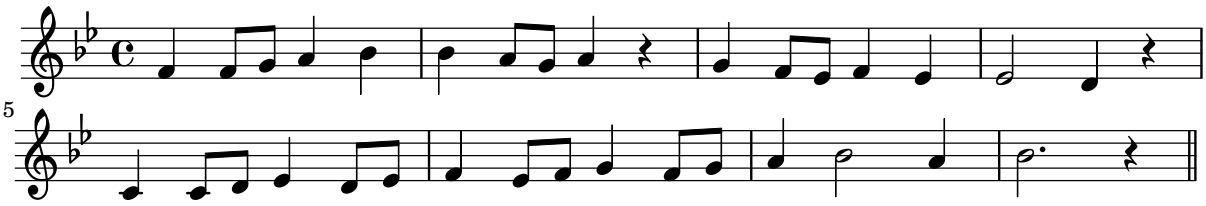


37



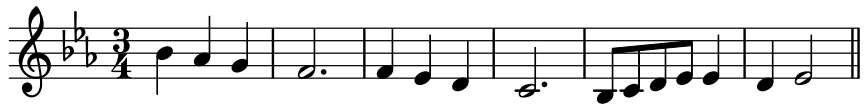
The following five melodies all begin on 'so.'

38



We now begin moving around the circle of fifths in the opposite direction. 'Ti' in the previous key is flattened, and becomes 'fa' of the new key. If you're singing the new, flattened version of the note correctly, you should be able to hear its strong tendency to resolve down to 'mi.'

39



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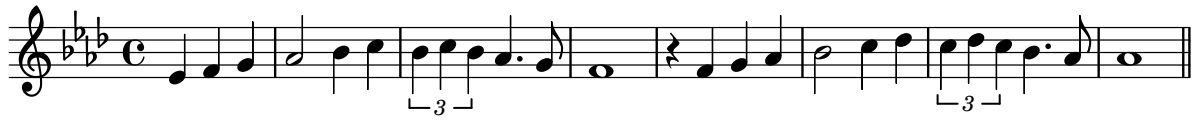
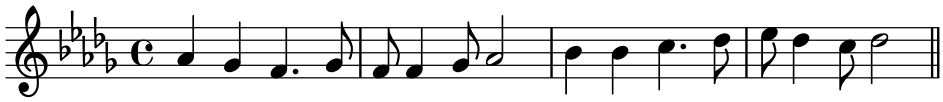
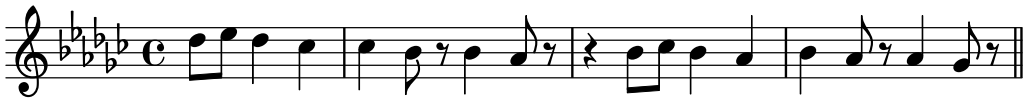
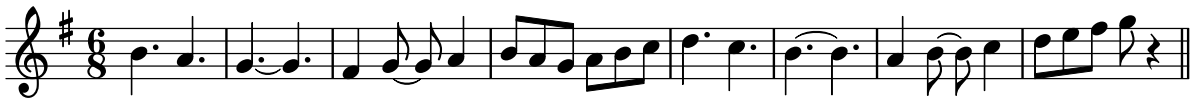


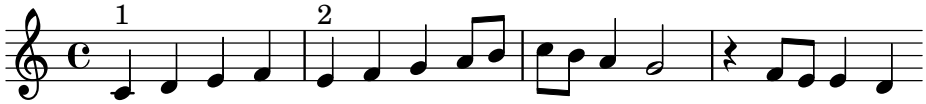
41 

The following two melodies both have the tonic at the same place on the staff.

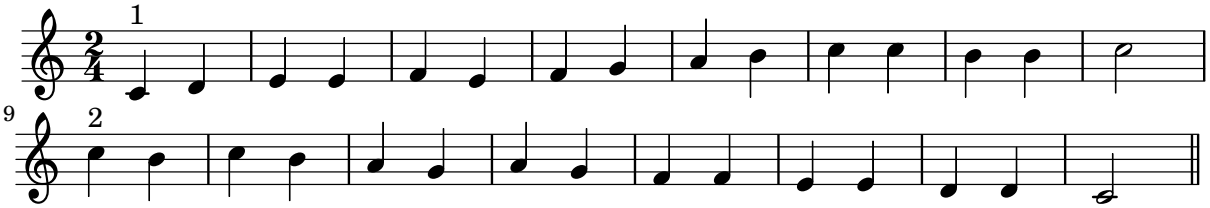
42 

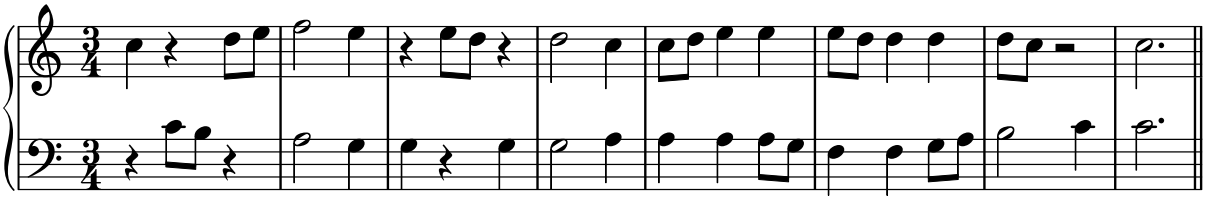
43 

Canon for two voices:

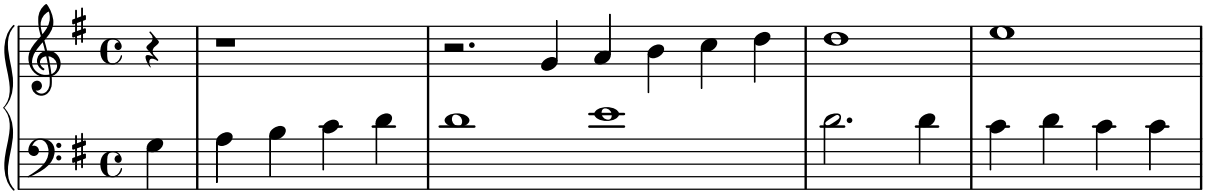
44 

Canon for two voices:

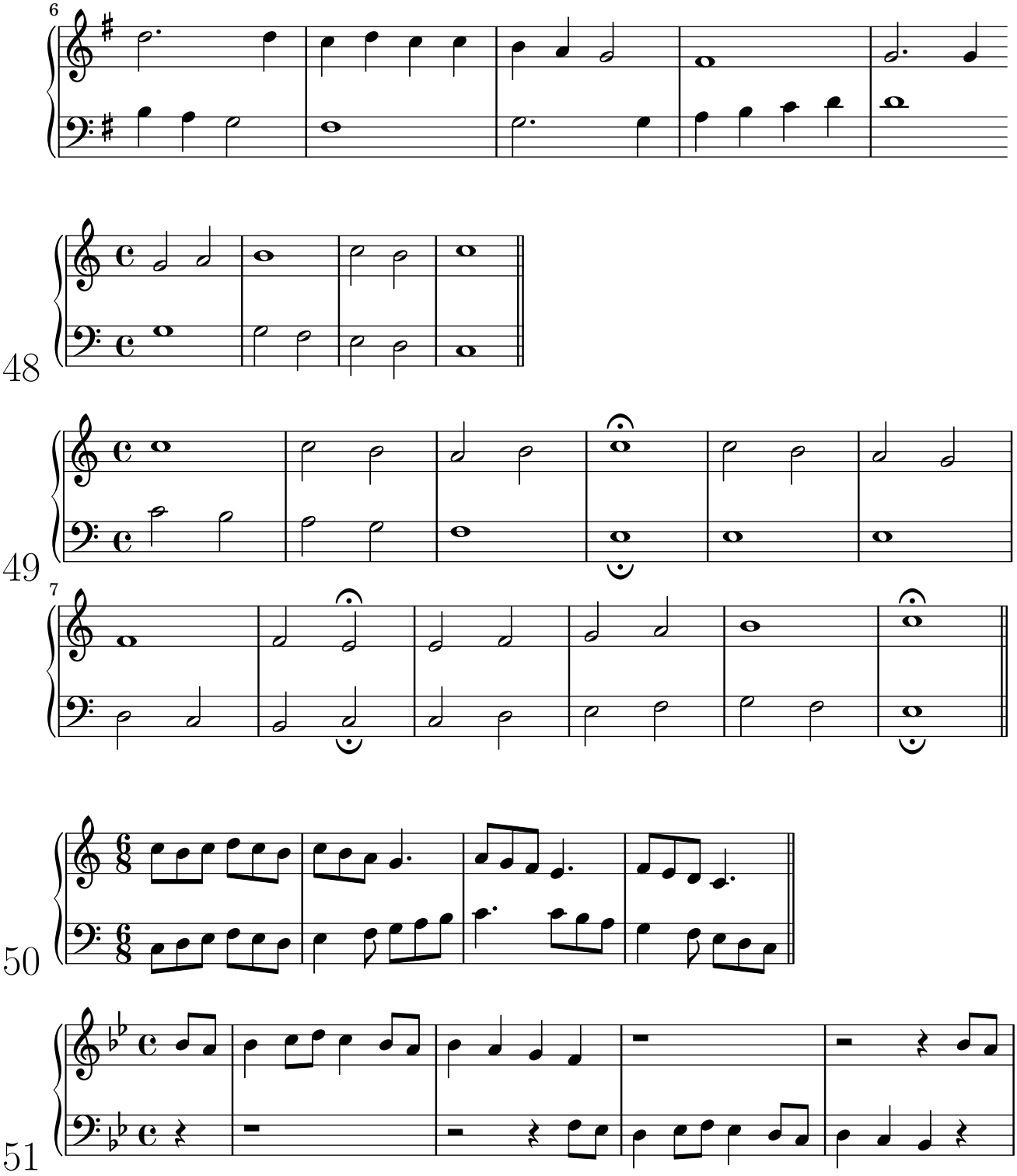
45 

46 

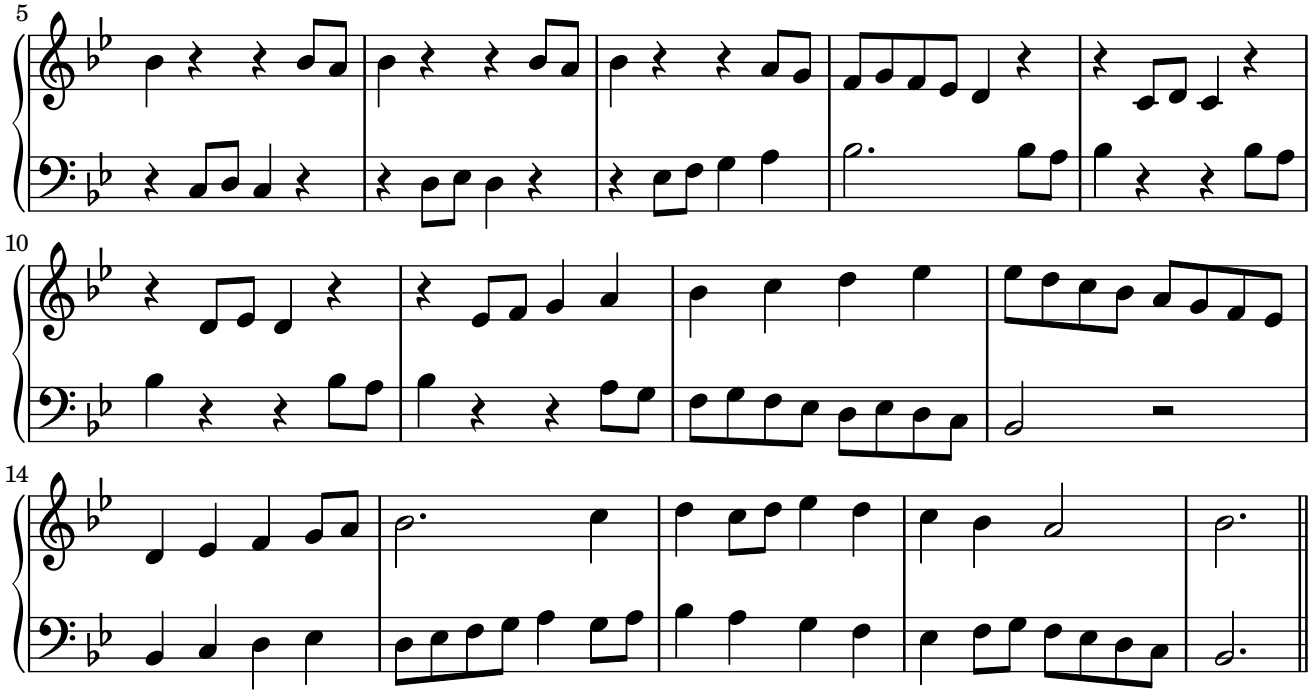
Canon for two voices:

47 

[45] L.O. Emerson, *Whither Through the Meadow?*



[48] L.R. Lewis [49] L.R. Lewis [50] L.R. Lewis [51] L.R. Lewis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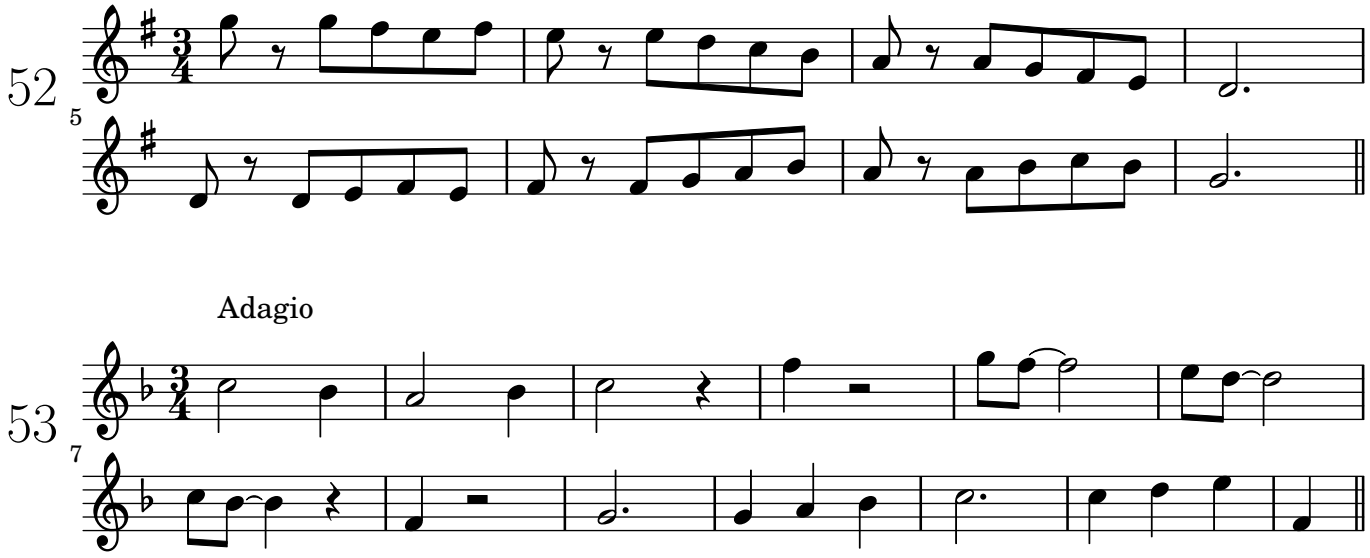
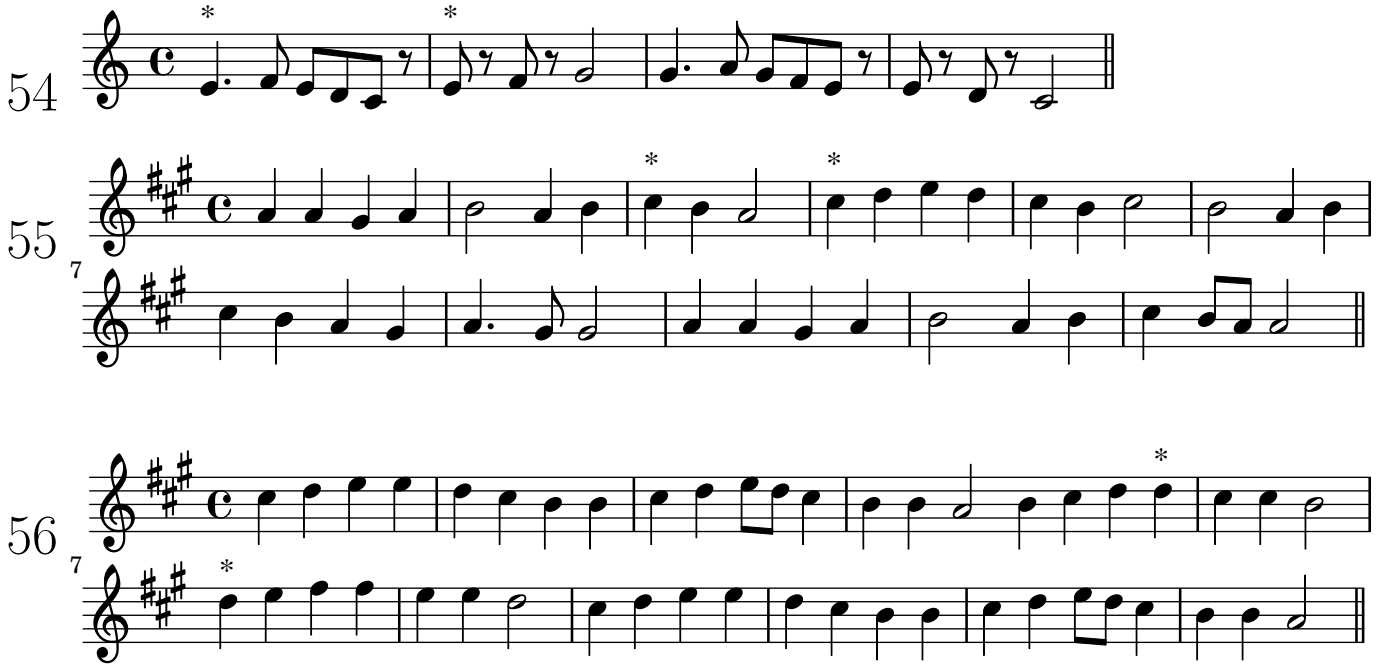
10
14

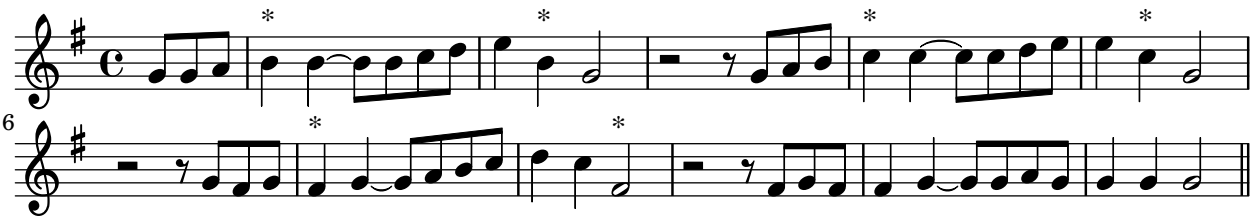
II-3 Leaps to 'Do'



II-4 Leaps Back to Remembered Notes

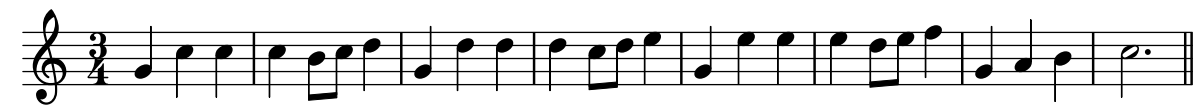


57



The next tune is easier than it appears, because you only need to return to the same note after each low G.

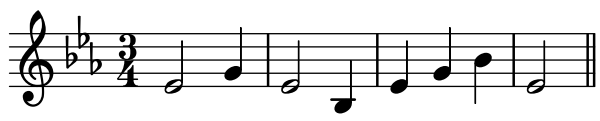
58



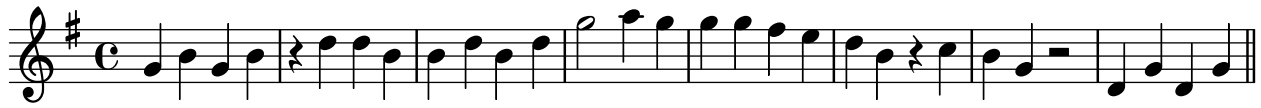
II-5 Easy Leaps Within the Tonic Triad

This section introduces leaps of a third, a fourth, and an octave within the tonic triad.

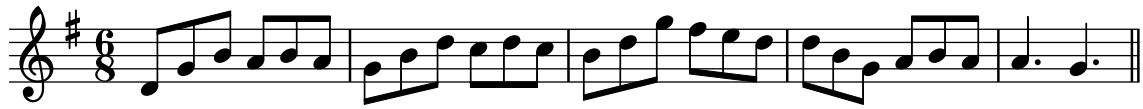
59 famous tune (identified in the table of contents)



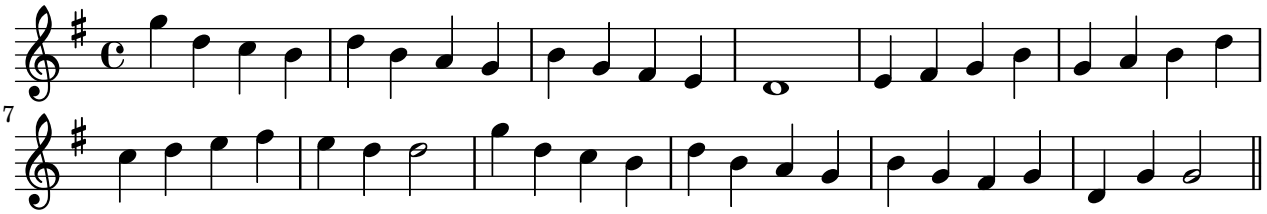
60



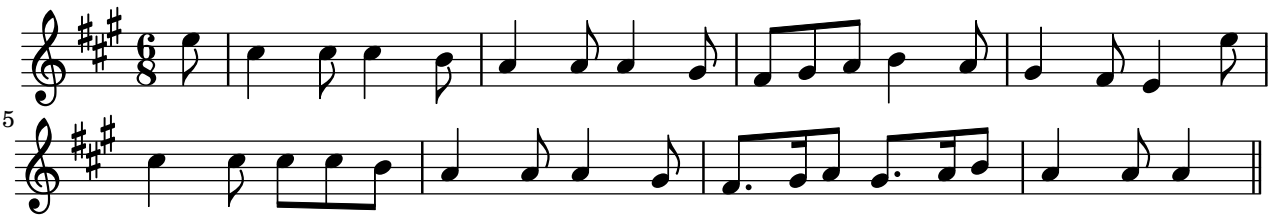
61



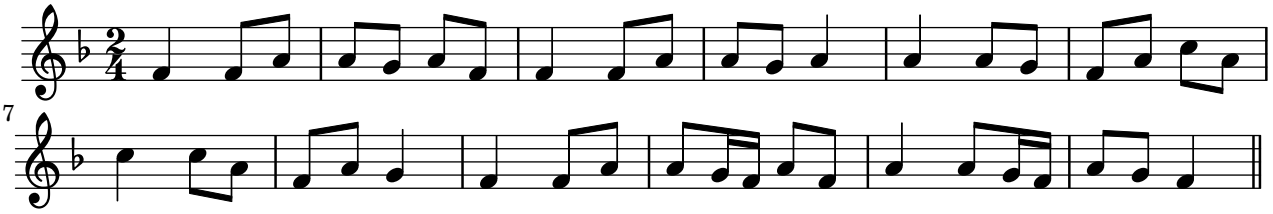
62

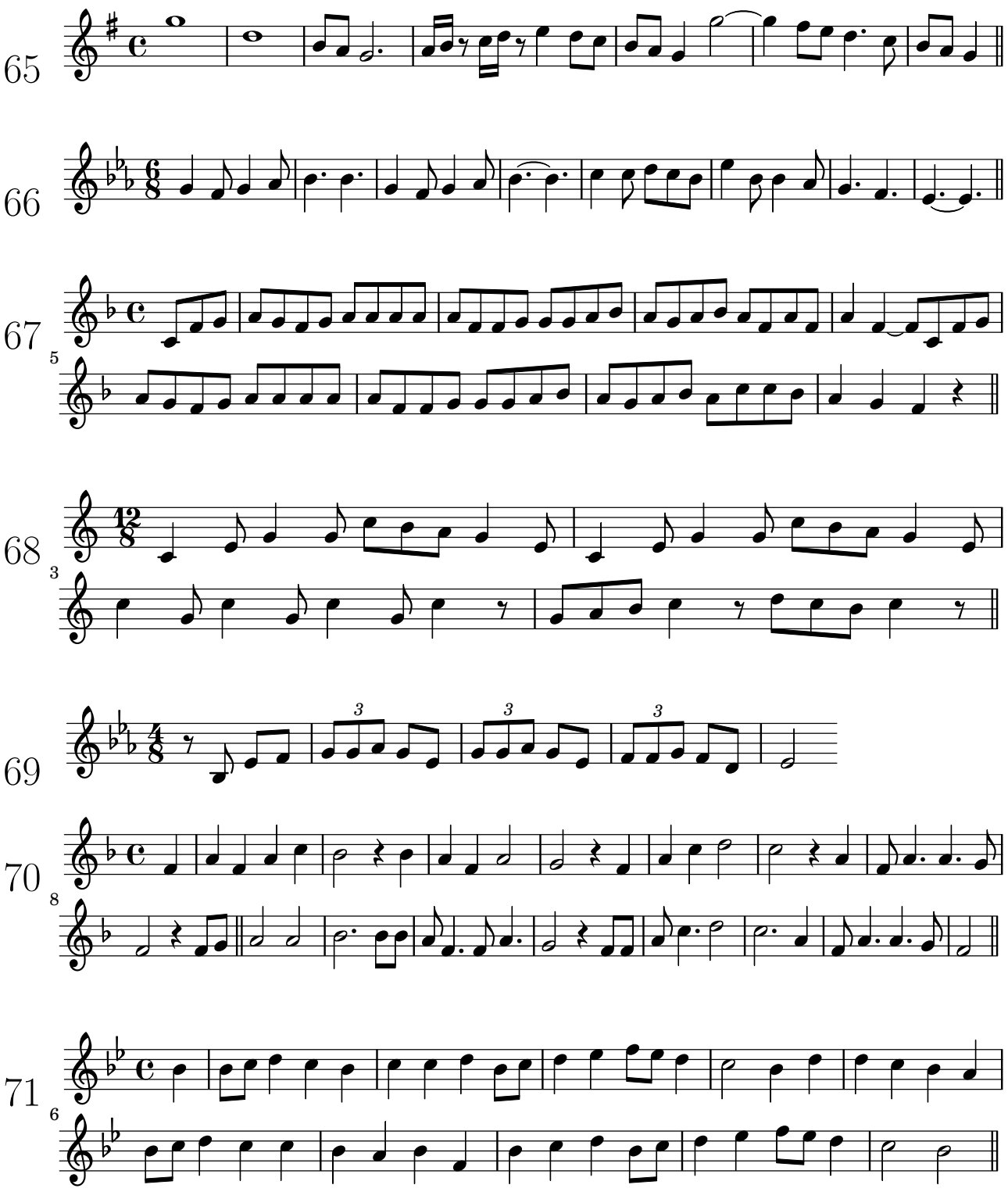


63 Allegretto

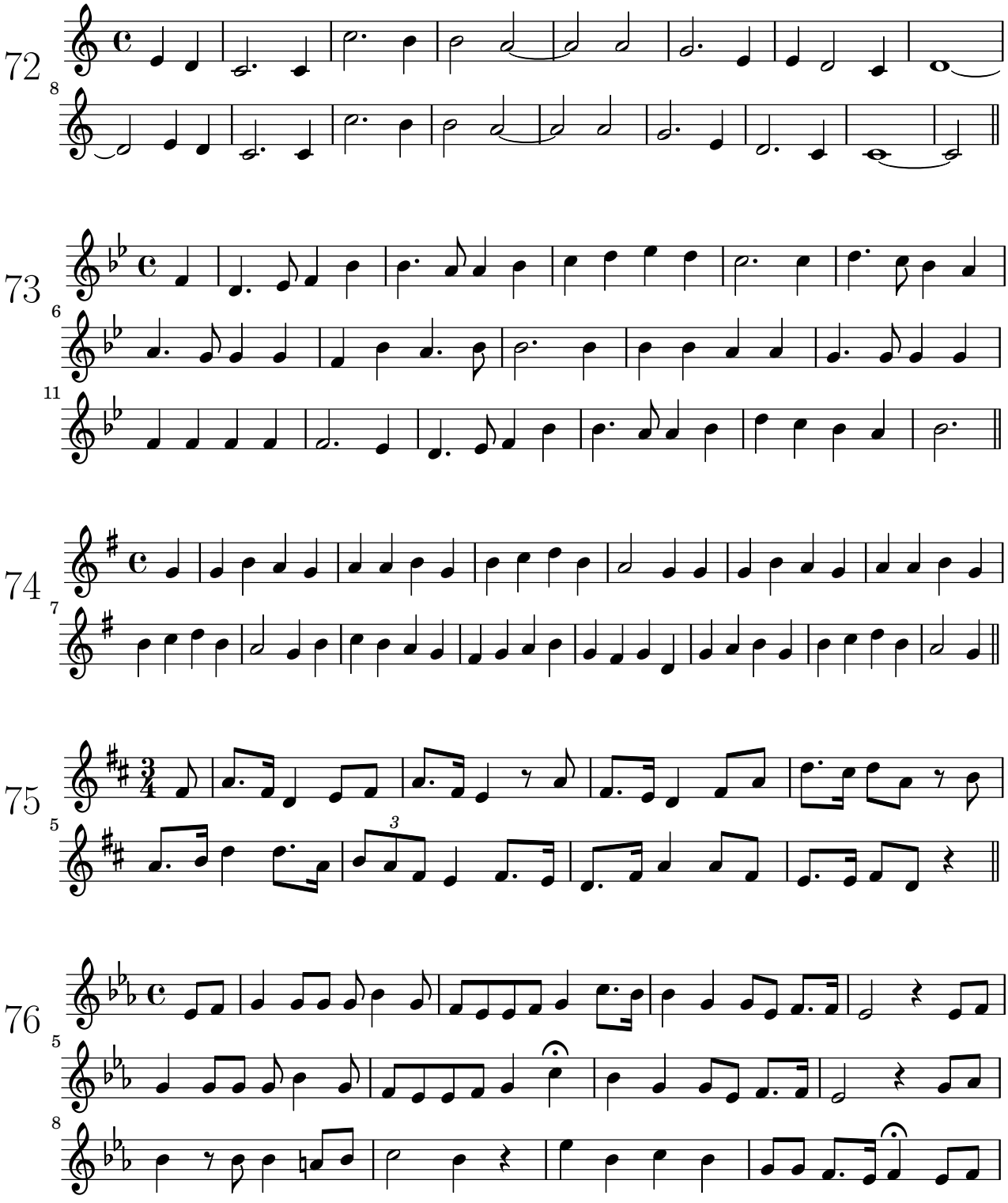


64 Allegro

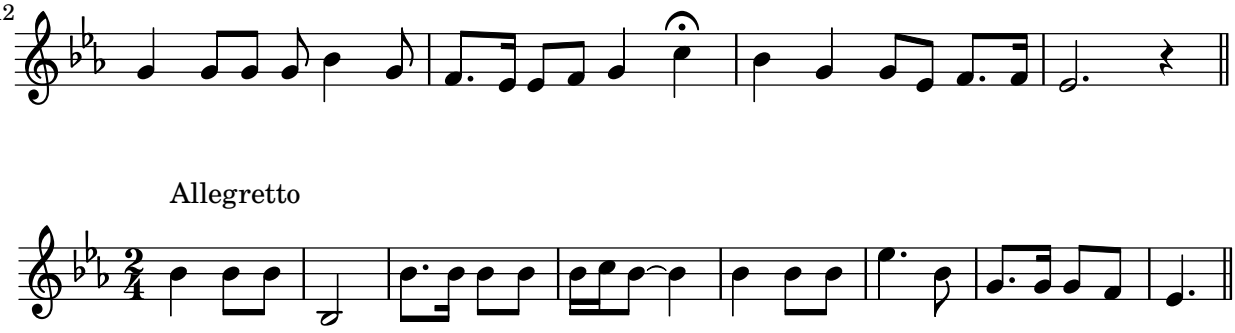




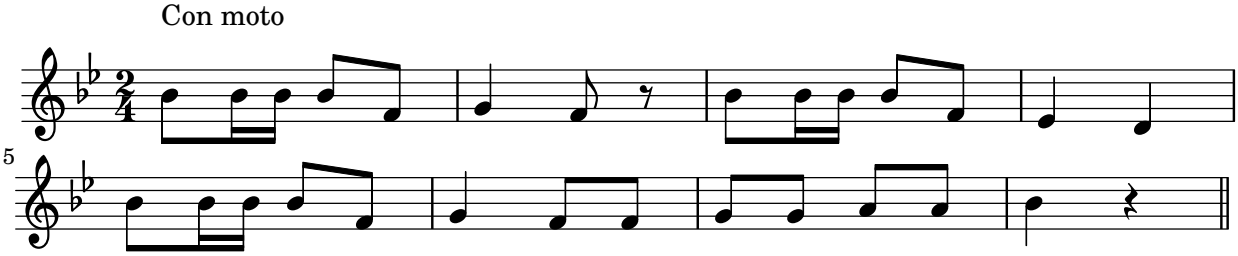
[65] Giovanni Battista Pergolesi, *aria 'Sancta Mater' from Stabat Mater* [66] A.S. Sullivan [67] anonymous, *A Recouvrance (France)* [68] Froebel, *Pat-a-Cake* [69] anonymous, *Carmela (Mexico)* [70] anonymous, *My Father, How Long? (Florida)* [71] J.S. Bach, *Chorale, 'Es ist gewisslich an der Zeit'*



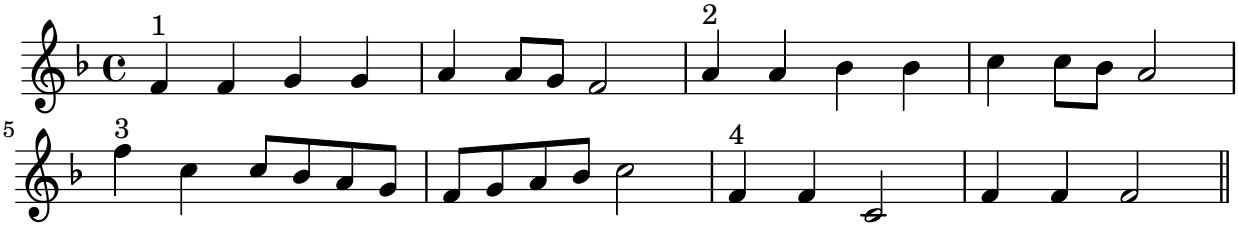
[72] anonymous, *Annie Laurie* [73] H.S. Cutler, *The Son of God Goes Forth to War* [74] Martin Luther, *We Come Unto Our Father's God* [75] anonymous, *Lawlan' Jenny (Scotland)* [76] Stephen Foster, *Hard Times Come Again No More*



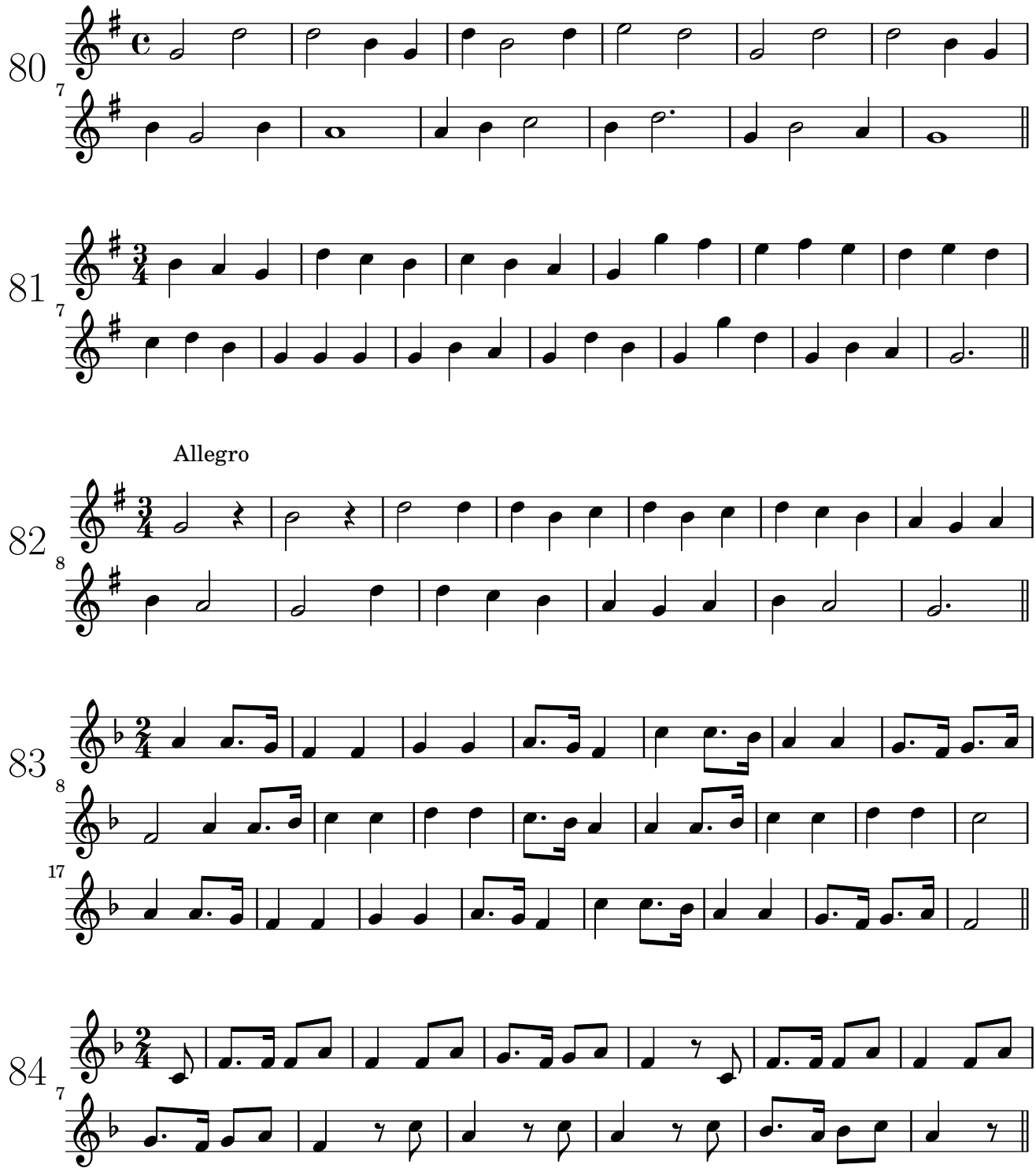
The following example includes a leap of a sixth, but it's an easy leap back to 'do.'



This four-part canon includes a leap of a sixth to 'do.'

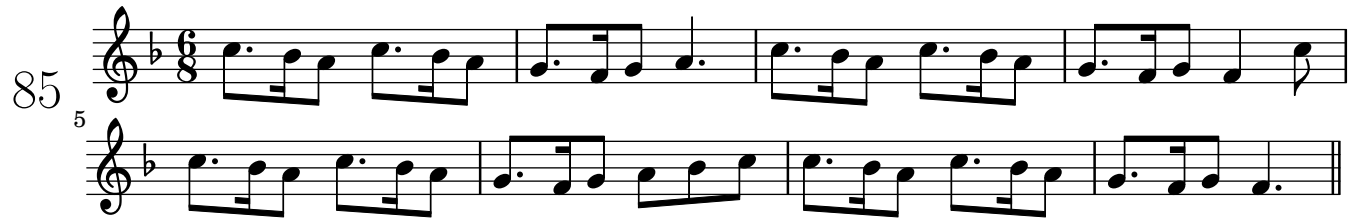


II-6 The Leap of a Fifth Within the Tonic Triad

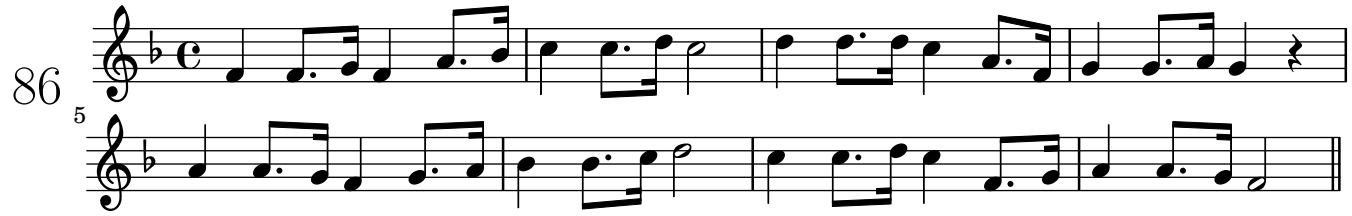


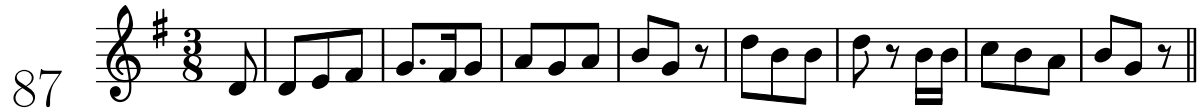
[82] Alessandro Scarlatti, *Su, Venite a Consiglio* [83] J.J. Rousseau, *Hush, My Babe* [84] anonymous, *Dans la Forêt Lointaine (France)*

Grazioso

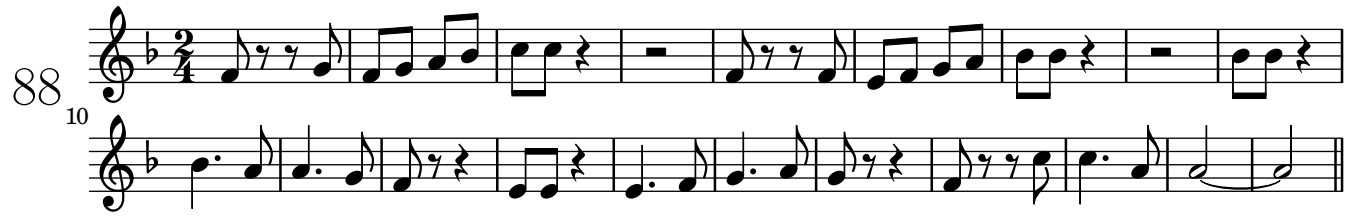


Moderato





Andante



[85] anonymous, *The Beggar Girl (England)* [86] Alice Hawthorne, *Home, By and By* [87] Froebel, *Beckoning the Pigeons*

II-7 Leaps of a Sixth Within the Tonic Triad

89

90

91

5

Allegro vivace

92

7

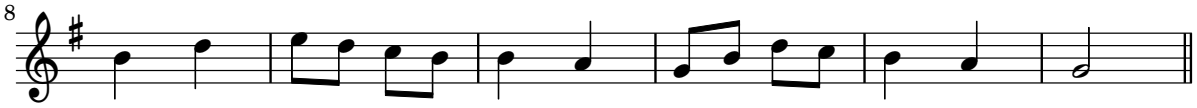
93

5

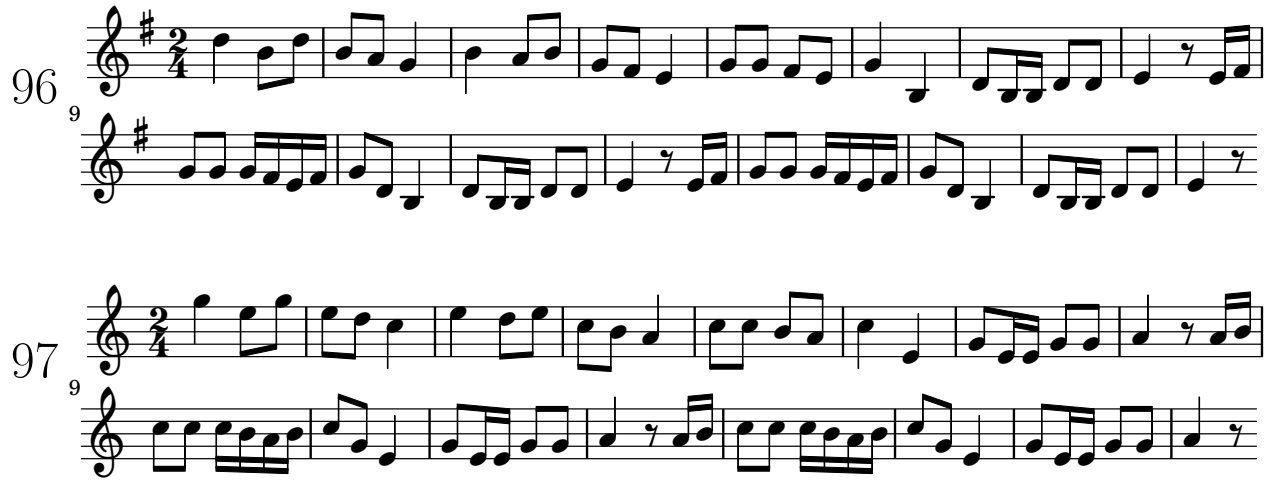
94

95

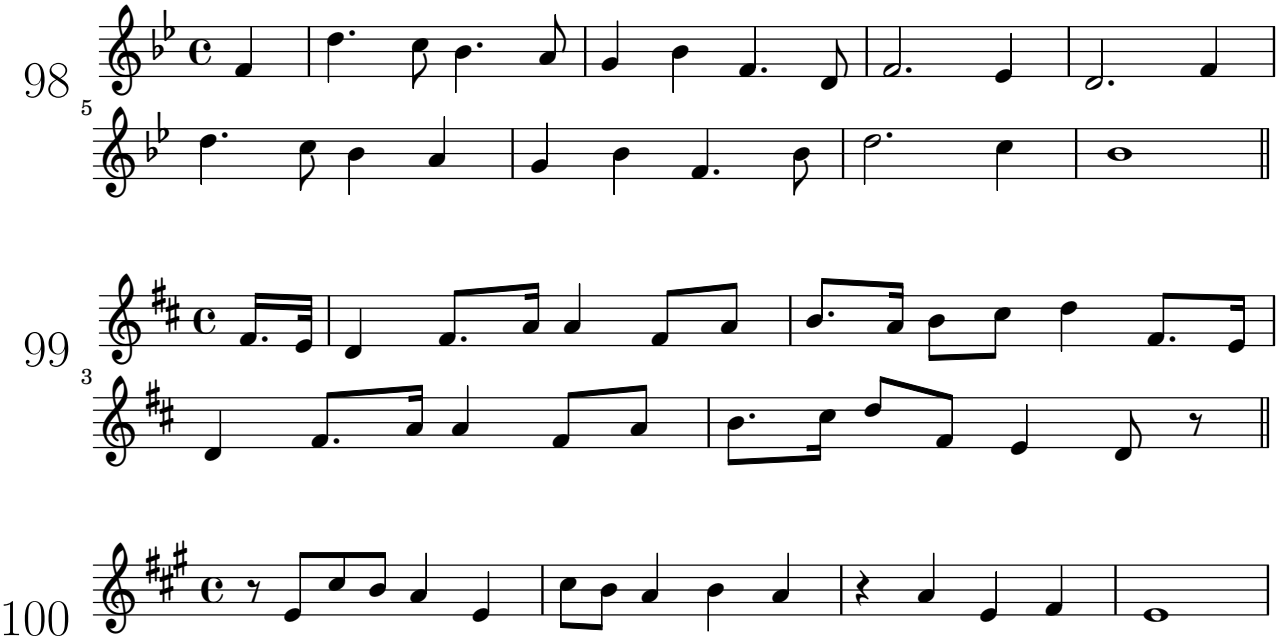
[91] Franz Wohlfahrt [92] anonymous, *As-Tu Vu la Casquette? (France)* [93] anonymous, *Praise, Member (South Carolina)*
[94] Froebel, *Beckoning the Chickens* [95] folk song



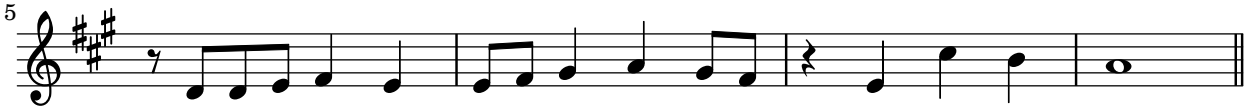
The next example includes both leaps within the tonic triad and leaps to 'do.' Because of its wide range, it is given in two keys; make sure to choose a key in which you can actually reach all the notes!



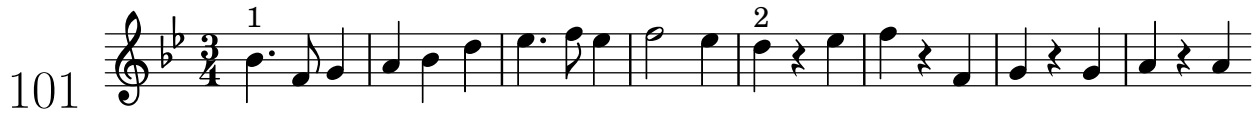
Another example that includes leaps to 'do.'



[96] anonymous, *Poor Rosy (South Carolina)* [97] anonymous, *Poor Rosy (South Carolina)* [98] W.T. Wrighton, *The Dearest Spot on Earth* [99] anonymous, *Absent Davie (Scotland)*

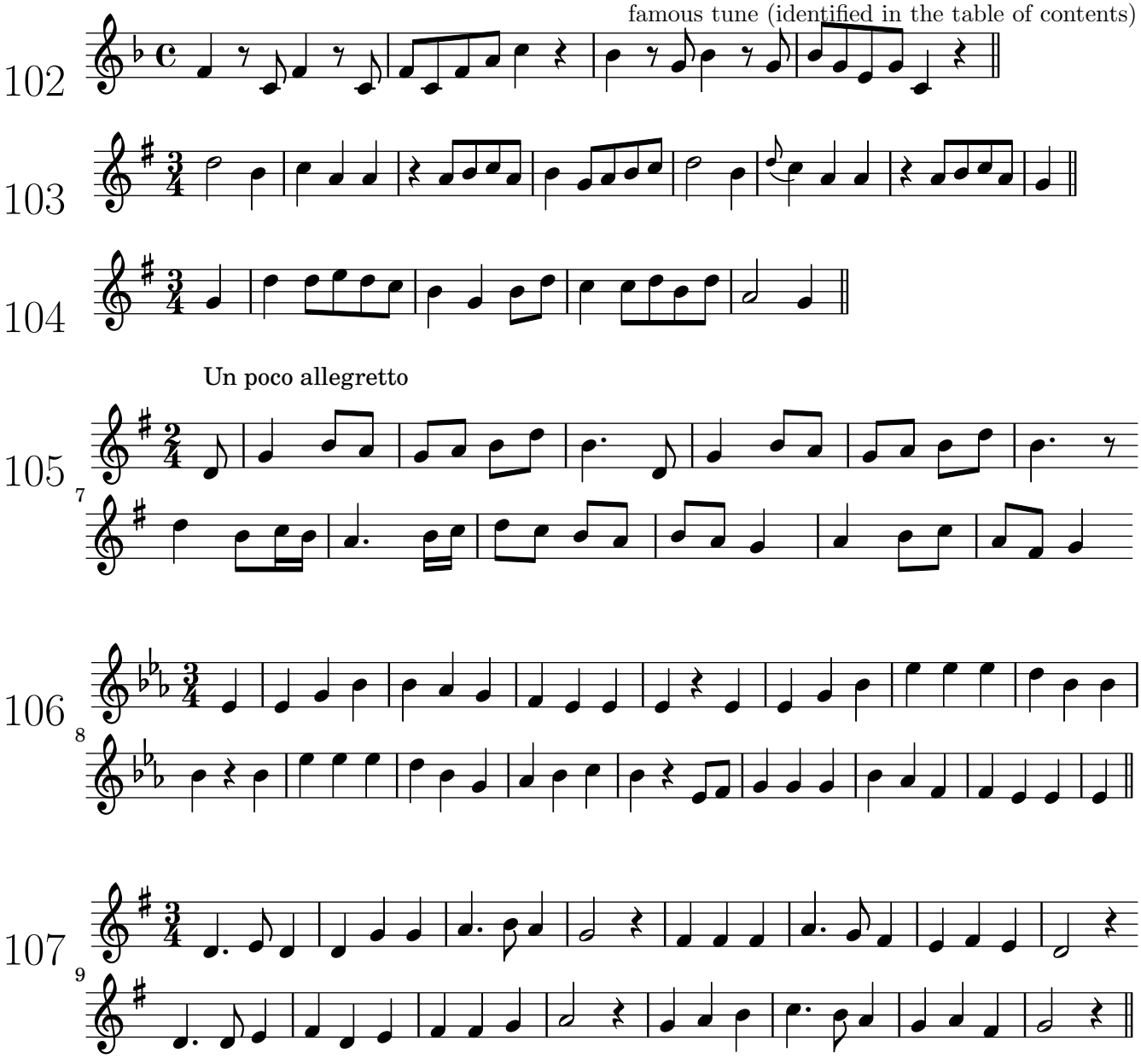


Canon for two voices:

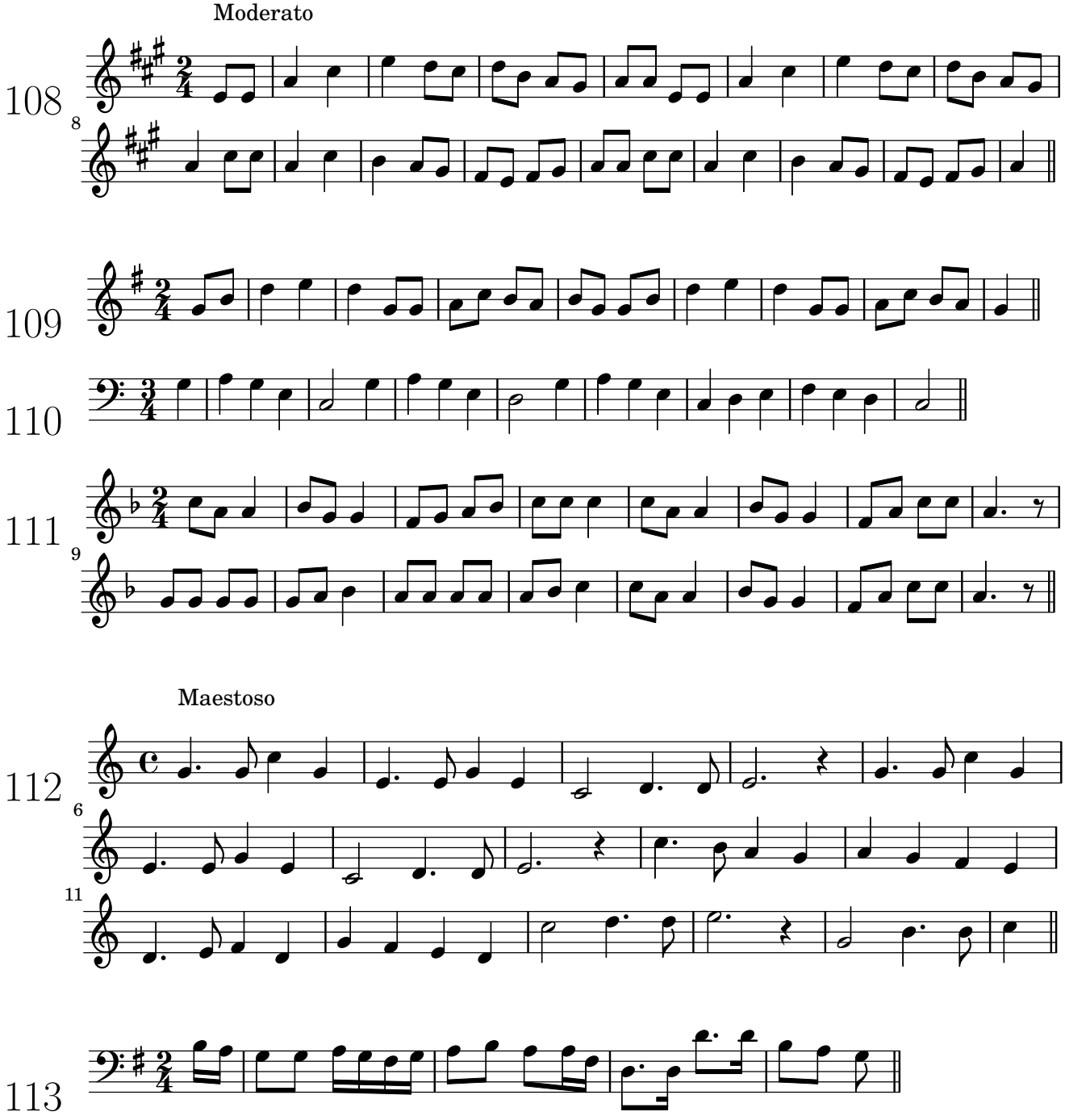


II-8 Leaps Within the Dominant

This section introduces leaps of a third within the dominant. Fourths, fifths, and sixths are included in section II-9, and leaps of a seventh within the dominant chord are deferred until section IV-5.



[103] W.A. Mozart, *Duet No. 2, Menuet, from 12 Duets, K.V. 487* [104] folk song [105] anonymous, *Derrièr' Chez Nous il y a Trois Fleurs (France)* [106] John Parry, *Villikins and His Dinah* [107] anonymous, *Ännchen von Tharau (Germany)*



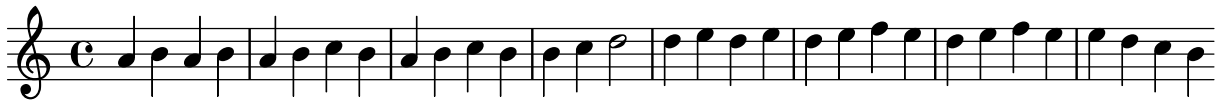
[108] anonymous, *Ah! Mon Beau Château! (France)* [109] anonymous, *Ainsi Font, Font, Font (France)* [110] John Husband, *Revive Us Again* [111] anonymous, *Lightly Row (Spain)* [112] anonymous, *God Speed the Right (Germany)* [113] W.A. Mozart, *aria (Papageno) from 'The Magic Flute'*

III-2 Steps

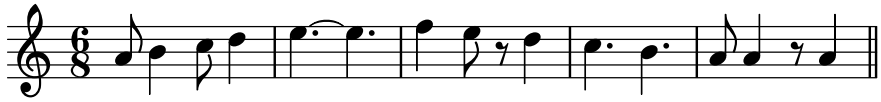
The purpose of the first exercise is to get used to the solfeggio syllables used in minor.

Poco a poco accelerando

170

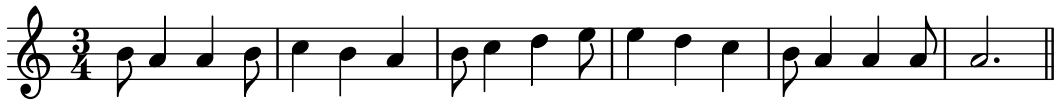


171



Largo

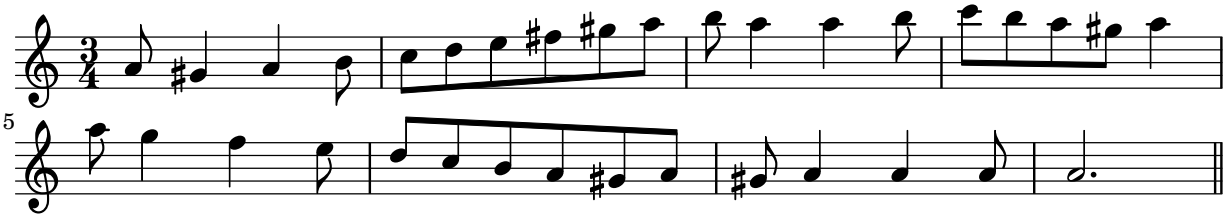
172



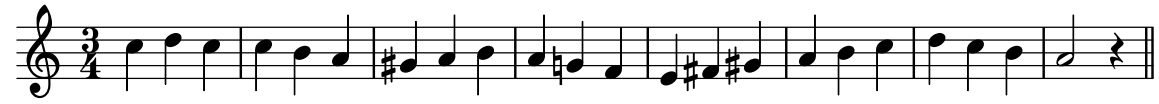
This melody introduces the use of the ascending and descending forms of the melodic minor scale. The rhythmic figure is the same as in the preceding tune.

Largo

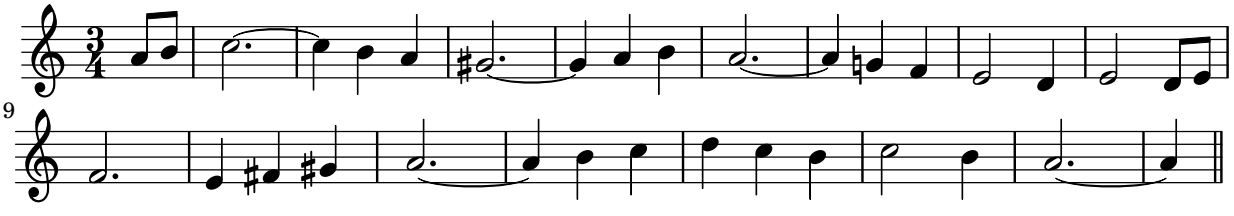
173



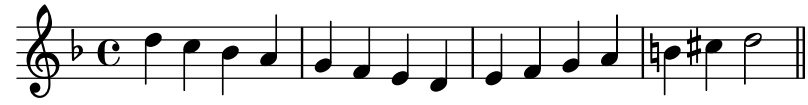
174



175

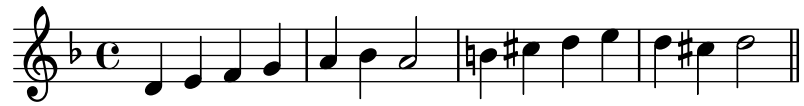


176

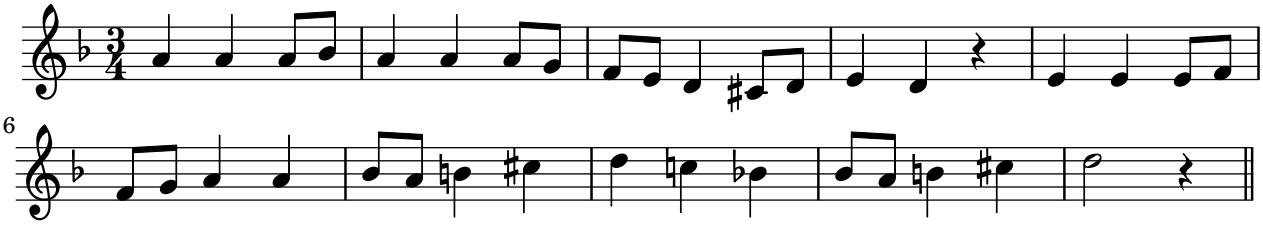


[174] L.R. Lewis [175] L.R. Lewis [176] L.R. Lewis

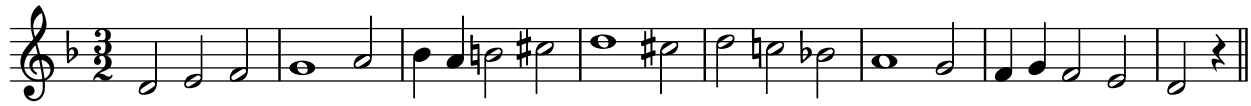
177



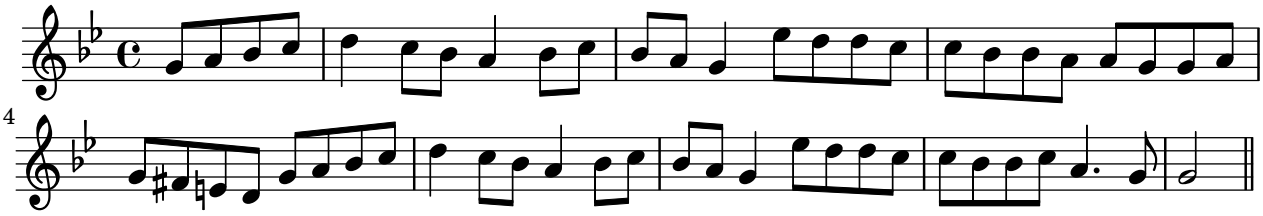
178



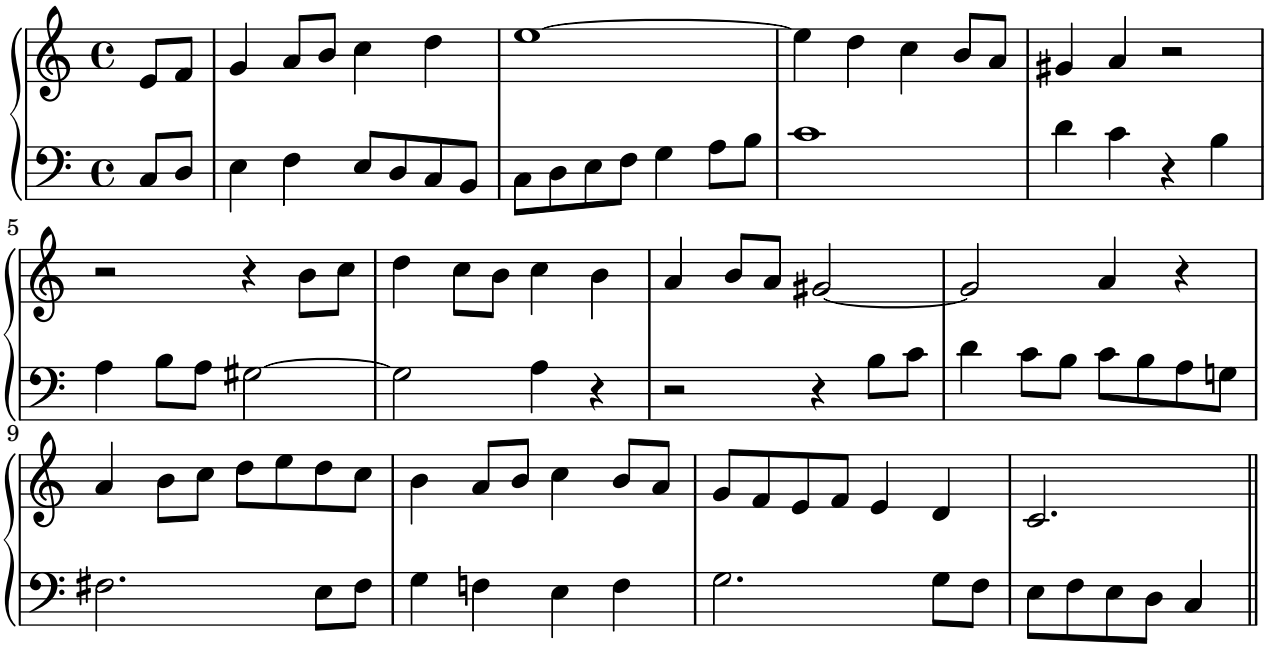
179



180

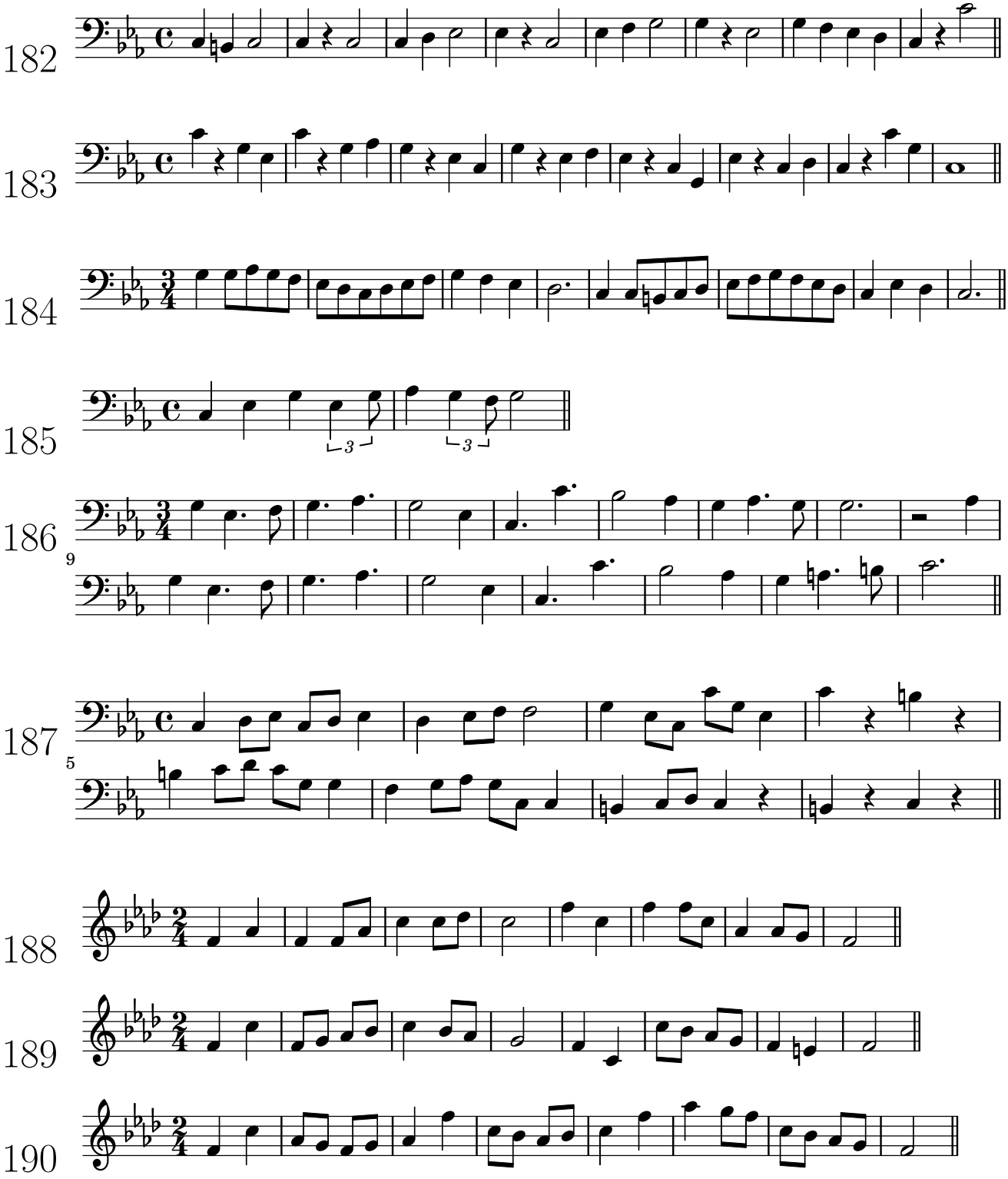


181



[177] L.R. Lewis [178] L.R. Lewis [179] L.R. Lewis [180] J.S. Bach, *gavotte in G minor* [181] L.R. Lewis

III-3 Leaps Within the Tonic Triad



[184] G.A. Wedge [185] Who Got Dirt on the Carpet Again? [188] G.A. Wedge [189] G.A. Wedge [190] G.A. Wedge

191

192

193

194

195

famous tune (identified in the table of contents)

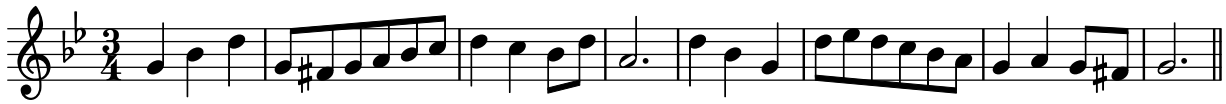
196

Round:

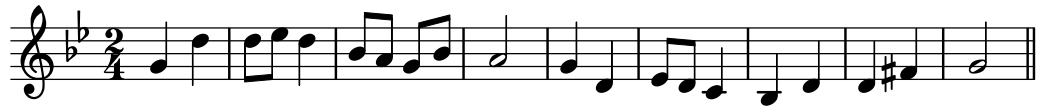
[192] J.S. Bach, *Chorale, 'Herr, nun lass in Friede'* [193] anonymous, *Every Hour in the Day (Georgia)* [194] anonymous, *Forget na', dear Lassie (Scotland)* [195] J.S. Bach, *Chorale, 'Es steh'n vor Gottes Throne'*

III-4 Leaps Within the Dominant

198



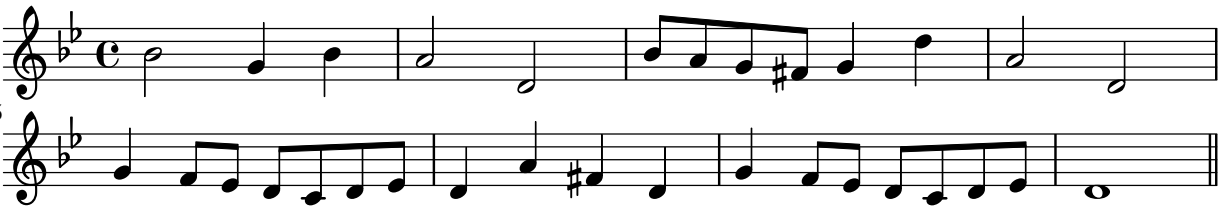
199



Andante

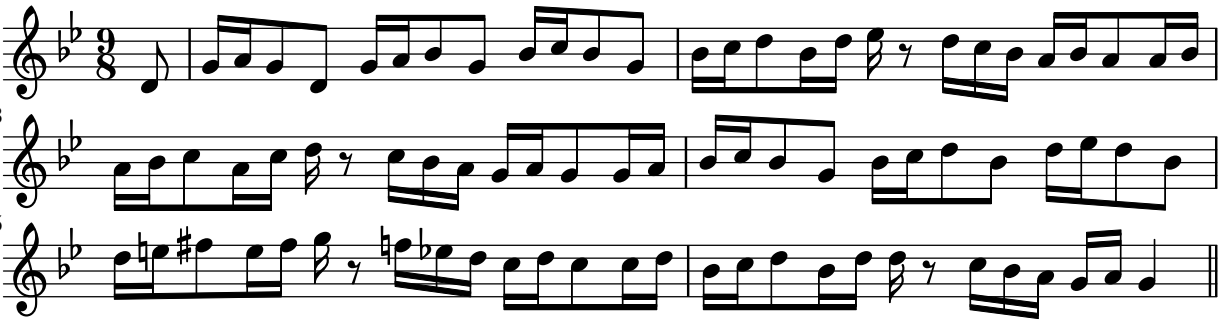
famous tune (identified in the table of contents)

200

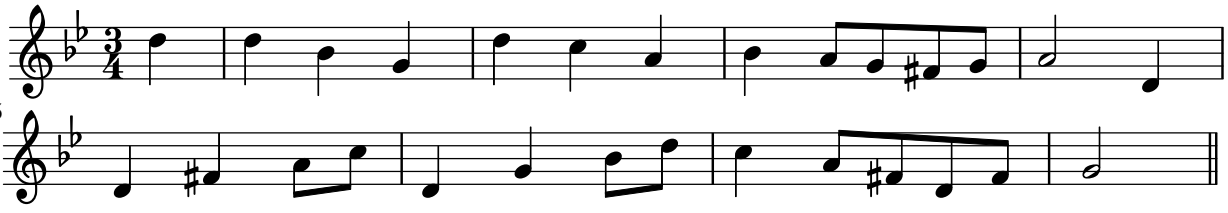


Vivace

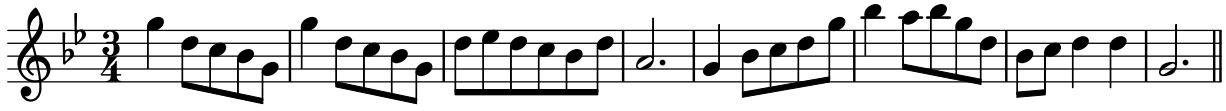
201



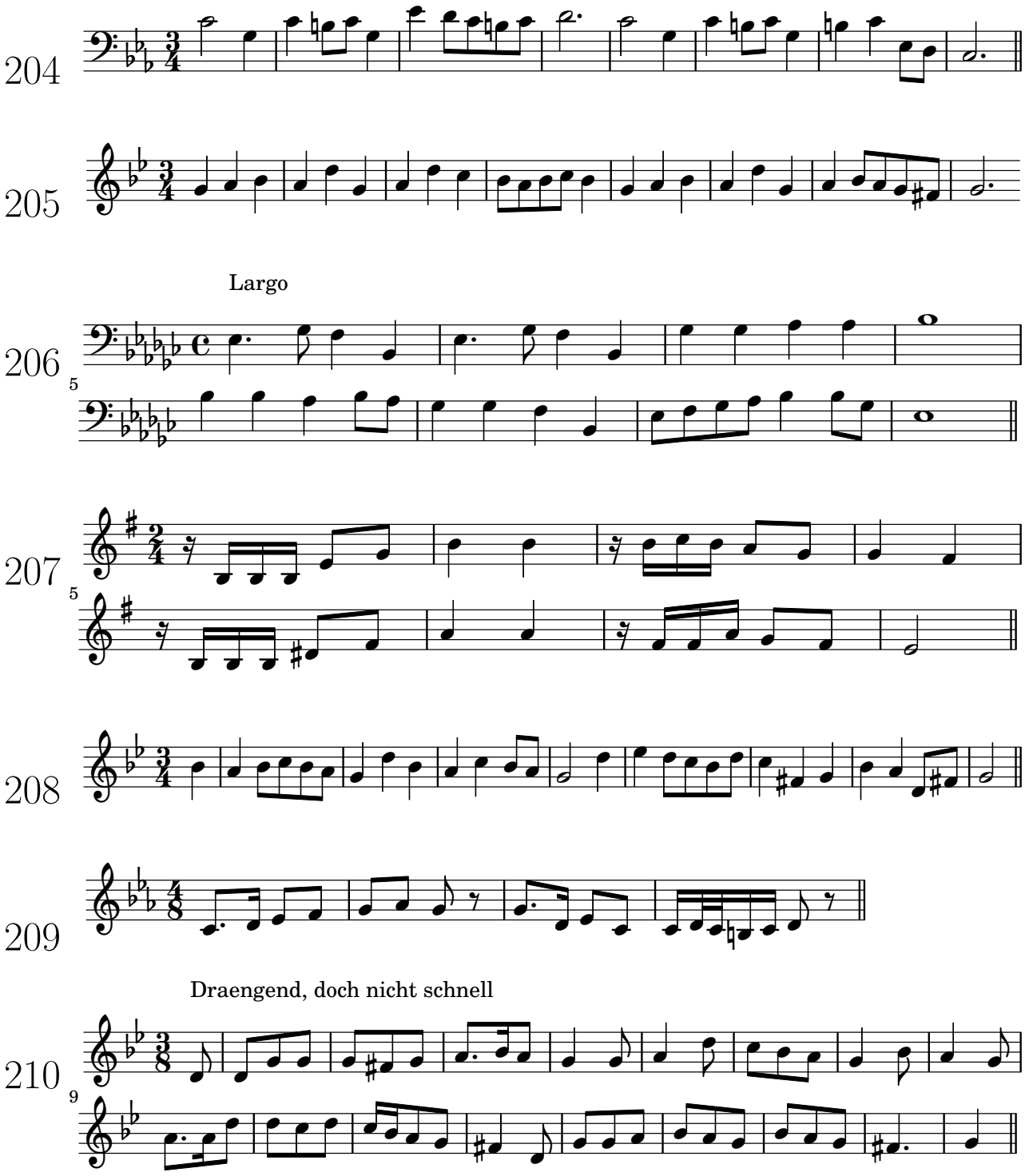
202



203



[198] G.A. Wedge [199] G.A. Wedge [202] G.A. Wedge [203] G.A. Wedge

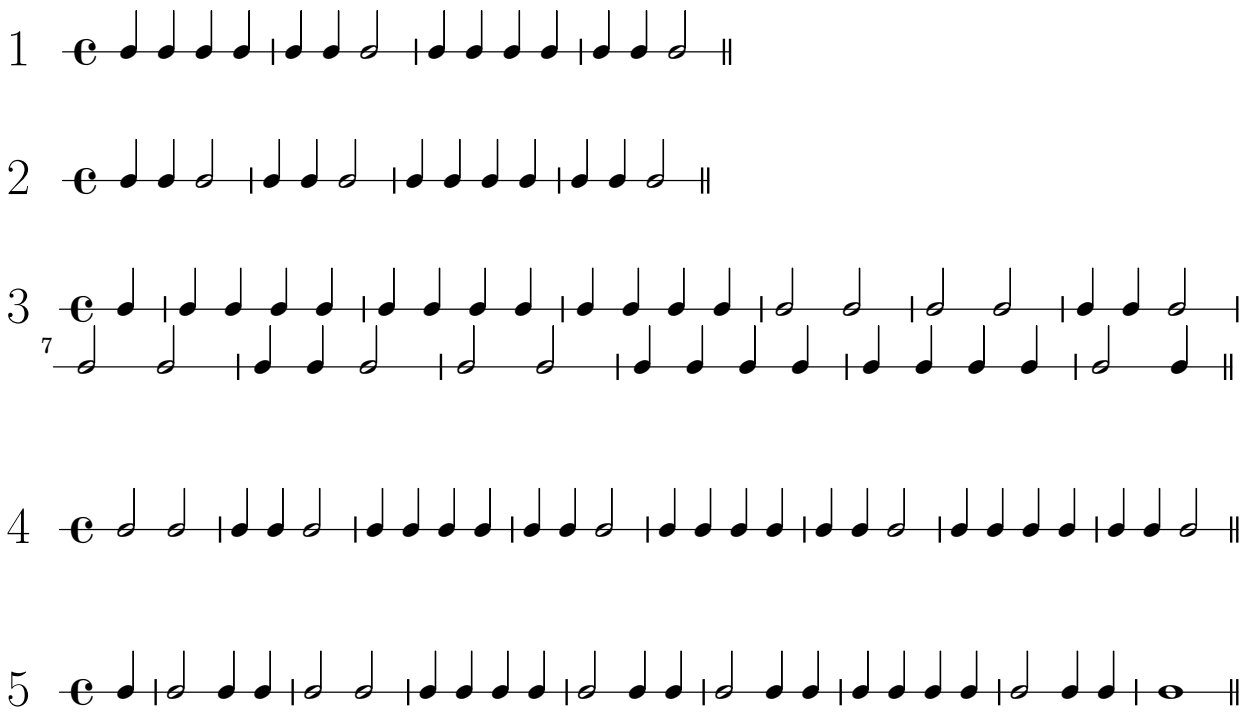


[204] G.A. Wedge [205] J.S. Bach, *melody from the notebook for Anna Magdalena* [206] anonymous, *lullabye (Russia)* [207] anonymous, *Las Tristes Horas* [208] G.A. Wedge [209] Froebel, *The Wolf* [210] anonymous, *Guten Abend*

Rhythm

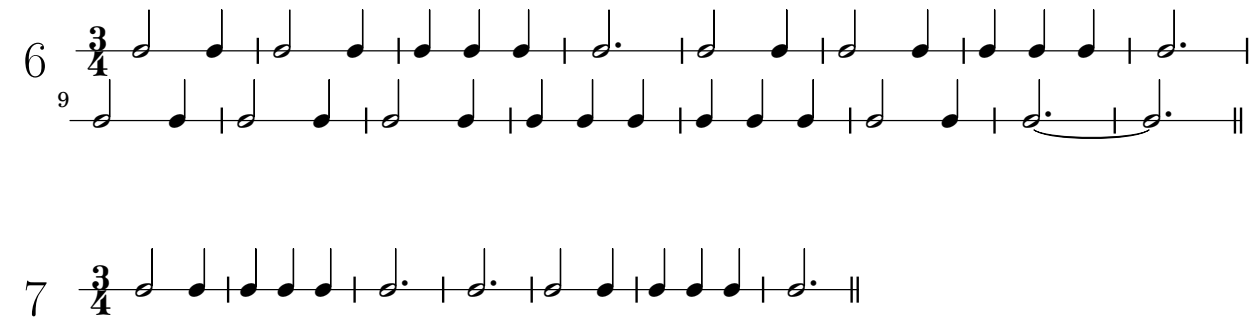
The rhythms in this chapter all come from well-known tunes. After reading them, you may want to look at the titles, which are given in the table of contents. If you're working with a teacher, you may wish to clap the rhythm twice, with the teacher counting beats the first time, and singing the tune the second time.

I-1 Whole, Half, and Quarter Notes

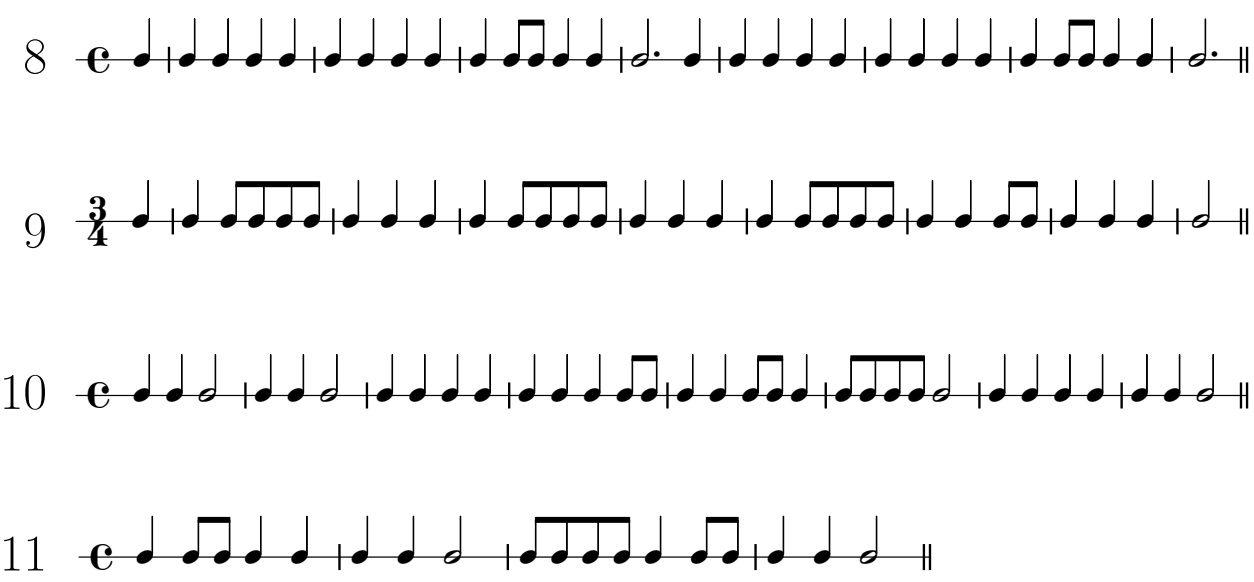


[1] , *rhythm of Twinkle Twinkle, Little Star* [2] , *rhythm of Little Brown Jug* [3] , *rhythm of Bingo* [4] , *rhythm of Rain, Rain, Go Away* [5] , *rhythm of O Come, All Ye Faithful*

I-2 3/4 Time, and Dotted Half-Notes

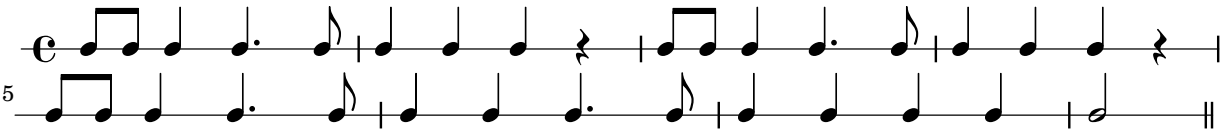


I-3 Eighth Notes

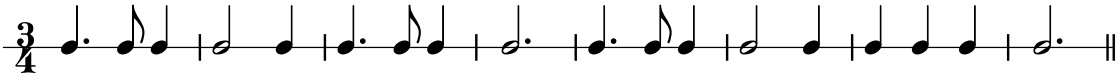


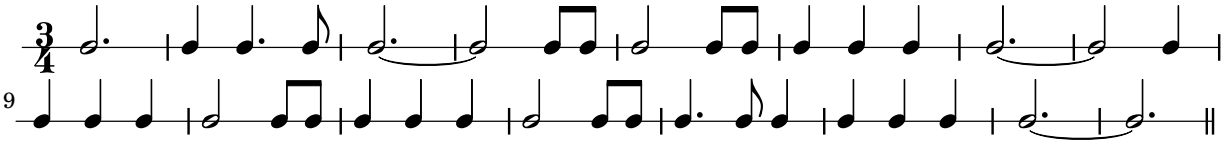
I-4 Dotted Quarter Notes

[6] , *rhythm of We Three Kings* [7] , *rhythm of Take Me Out to the Ball Game* [8] , *rhythm of O Little Town of Bethlehem* [9] , *rhythm of We Wish You a Merry Christmas* [10] , *rhythm of This Old Man* [11] , *rhythm of Hush Little Baby* [12] , *rhythm of Jingle Bells*

13 

14 

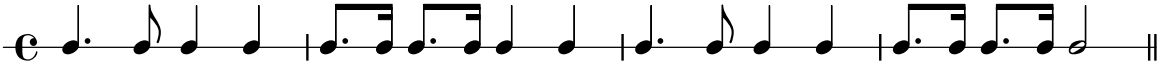
15 

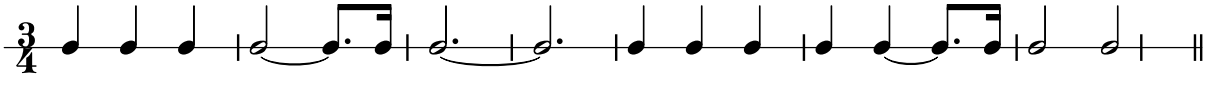
16 

I-5 Sixteenth Notes

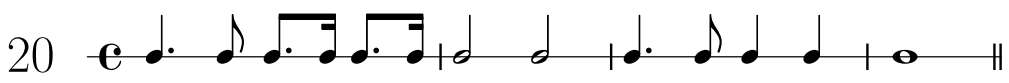
17 

I-6 Dotted Eighth Notes

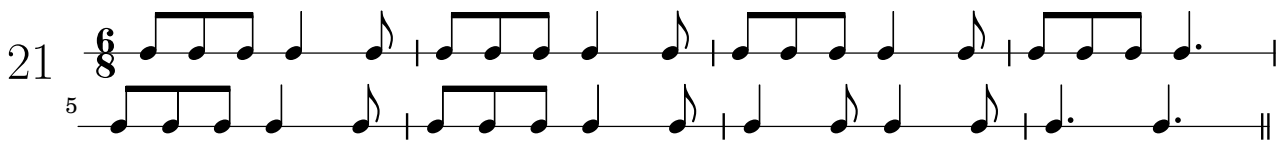
18 

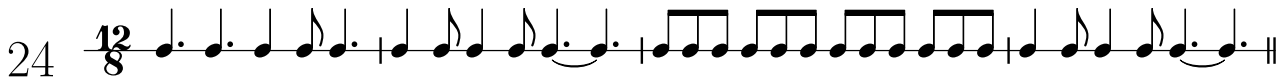
19 

[13] , *rhythm of Jimmy Crack Corn* [14] , *rhythm of Away in a Manger* [15] , *rhythm of Rockabye Baby* [16] , *rhythm of Home On the Range* [17] P.I. Tchaikovsky, *rhythm of trepak from The Nutcracker* [18] , *rhythm of Alouette* [19] P.I. Tchaikovsky, *rhythm of waltz of the flowers from The Nutcracker*



I-7 Compound Time



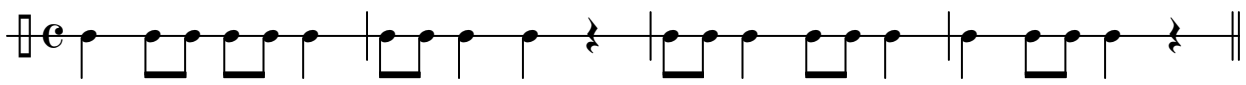


I-8 Syncopation

Rhythms from Dave Smey

A. Mostly quarter notes and eighth notes

1.



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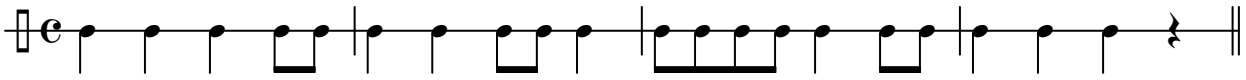

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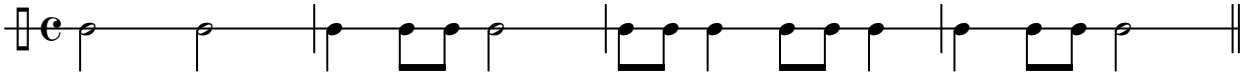

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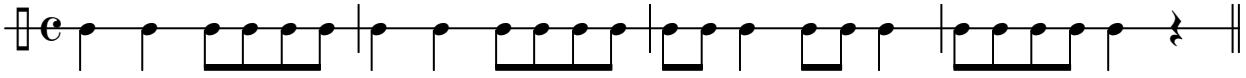

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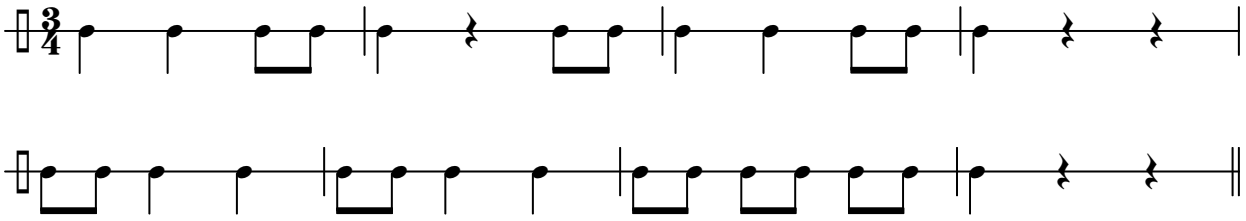

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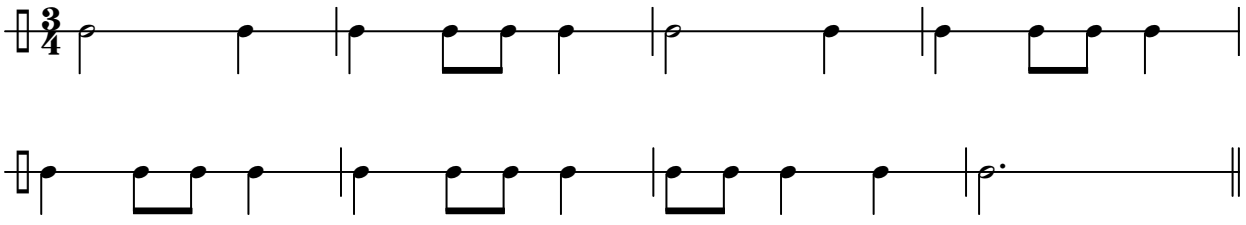

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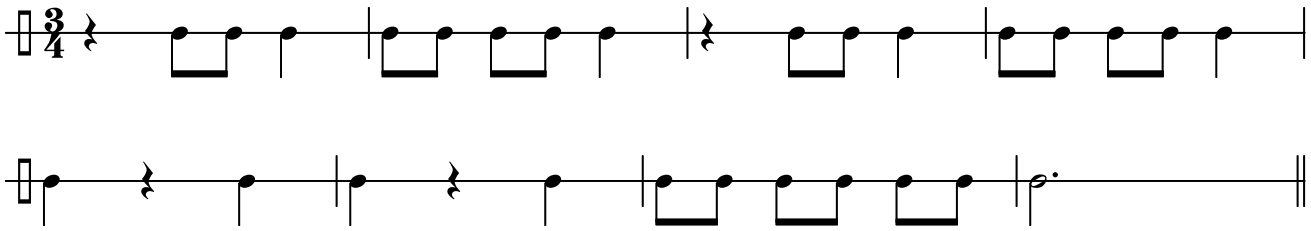
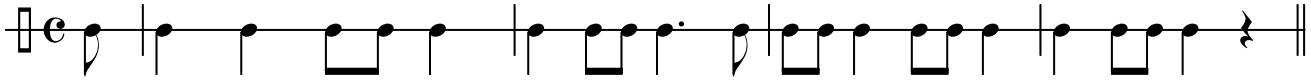


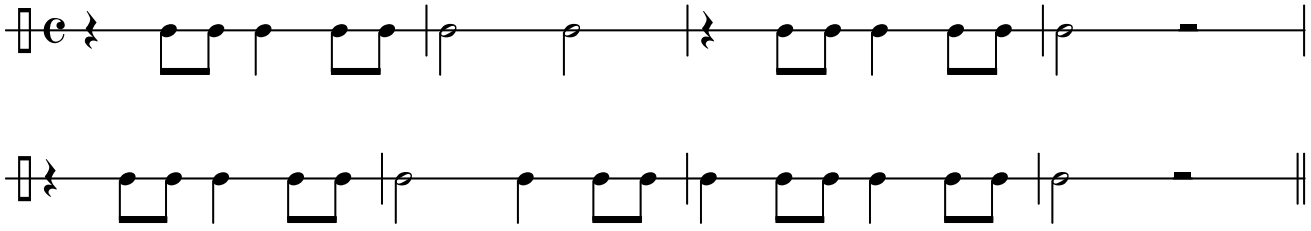
(pickups and upbeats)

8.

9.

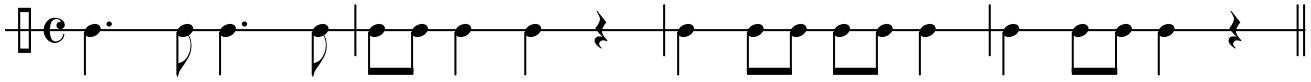


10.



(dotted figures)

11.



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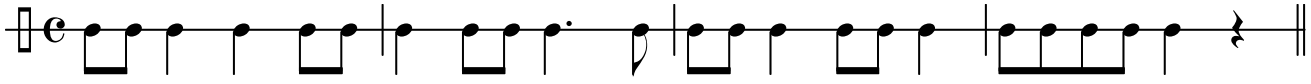

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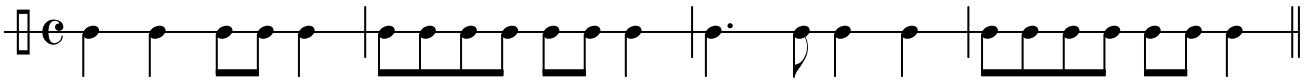
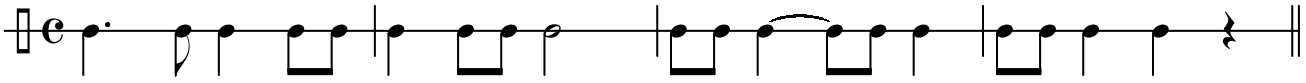


14.



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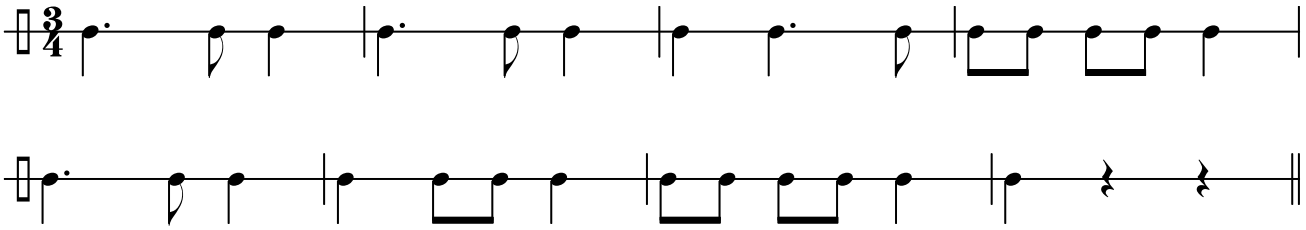

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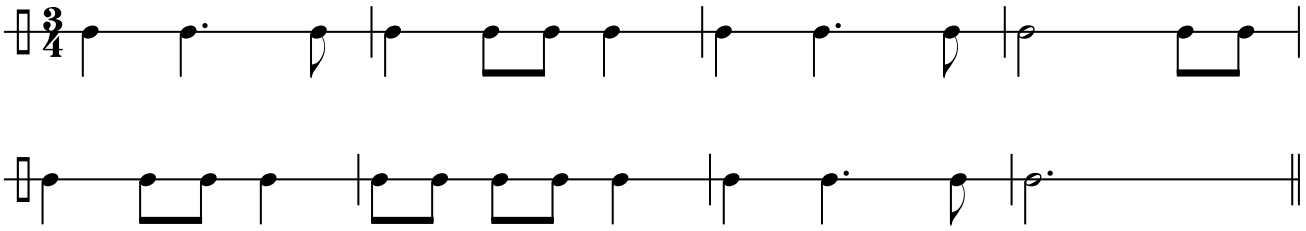
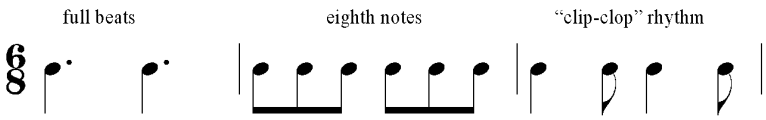


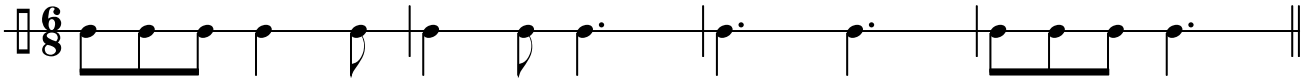
B. 6/8 and 9/8

Remember that these 6/8 rhythms are built of a few basic units:



If you can do these, you can do any of the following passages!

17.



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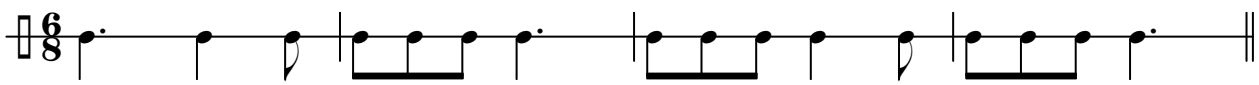

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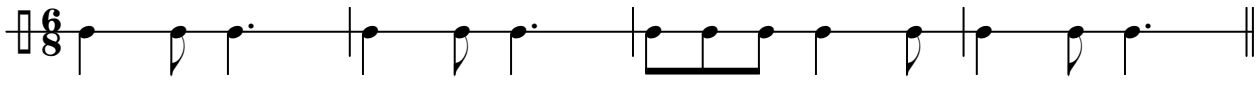

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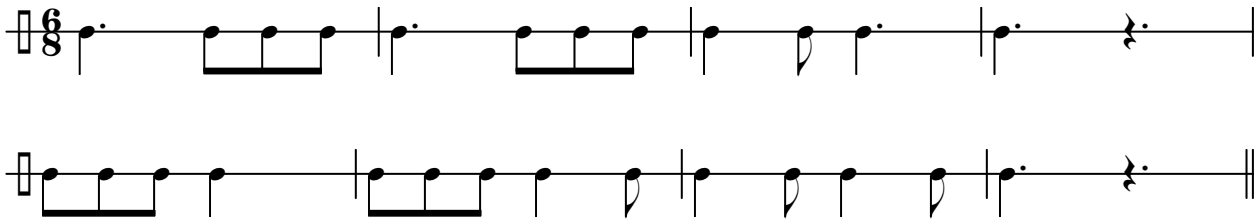

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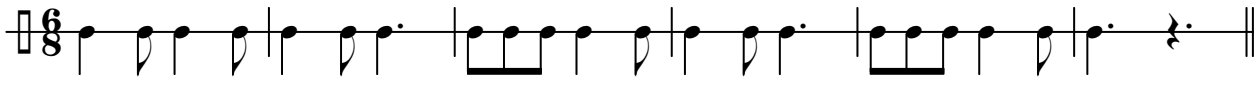

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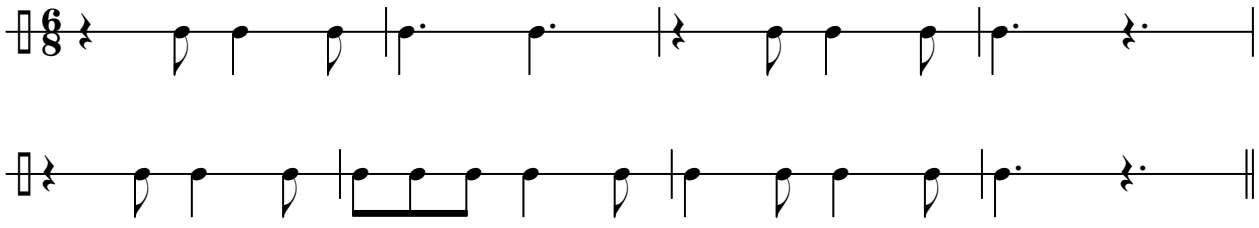

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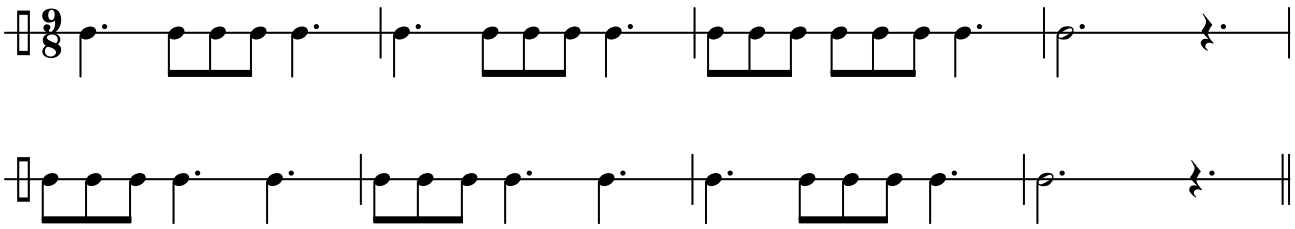

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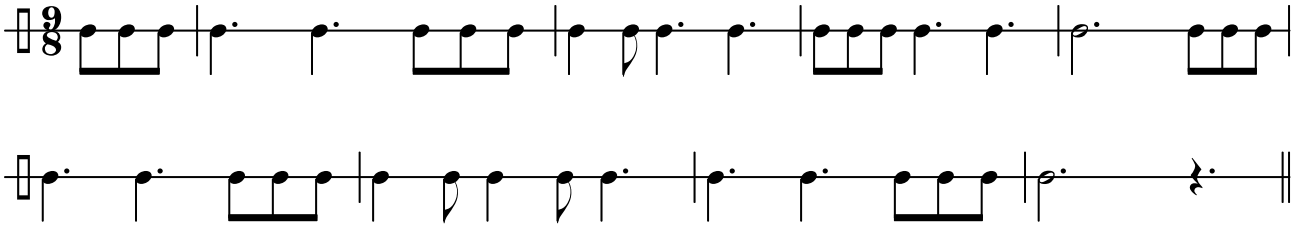

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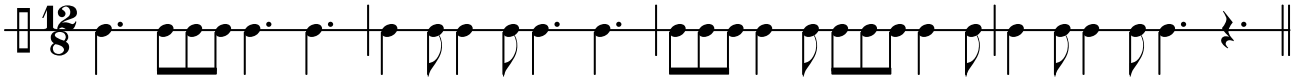

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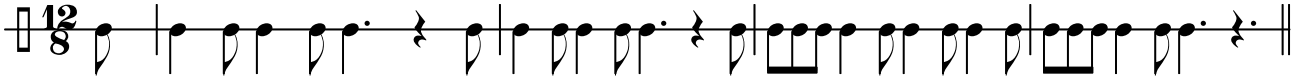


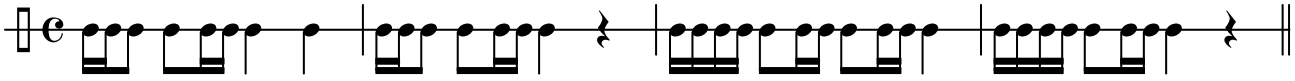
C. Using 16th notes

Once again these passages are all built of a few simple rhythmic cells. I'll even assign them silly "word cues" for easy reference.

"baker" "grasshopper" "peanutbutter" "telephone"

(these particular cues are borrowed from Kazez, *Rhythm Reading*)

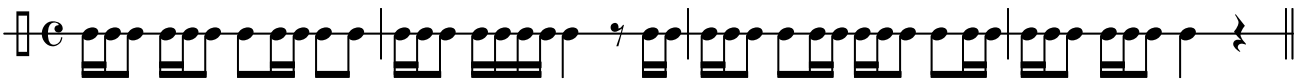
28.



29.

30.

31.



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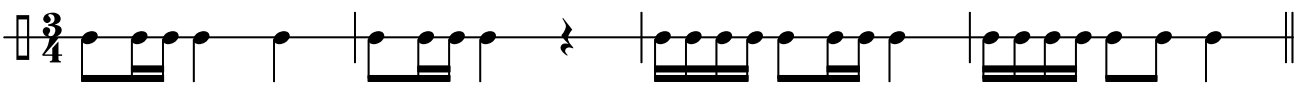

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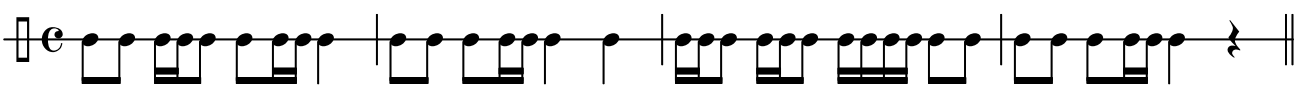

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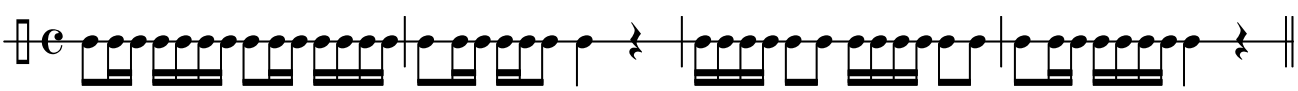
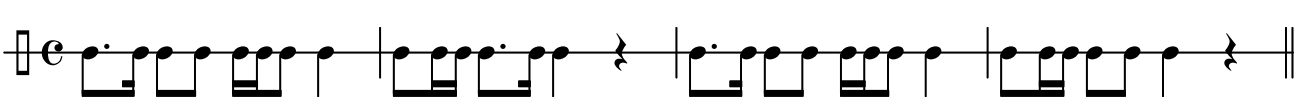


(introducing the dotted-eighth-note figure)

35.



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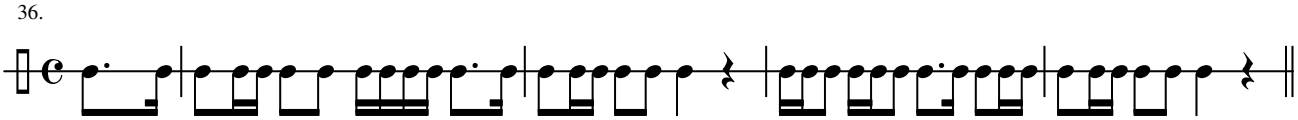

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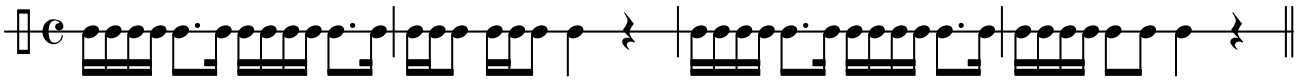

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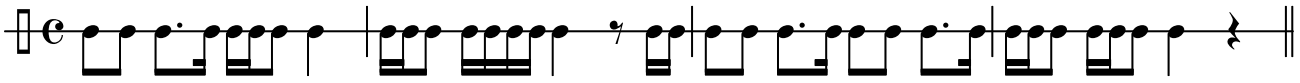

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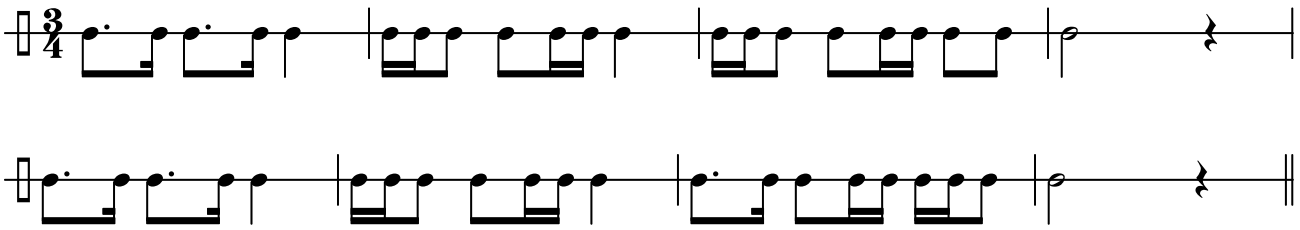
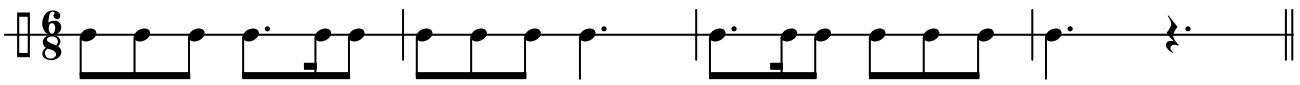


D. Return to 6/8 - adding a very graceful dotted figure

40.



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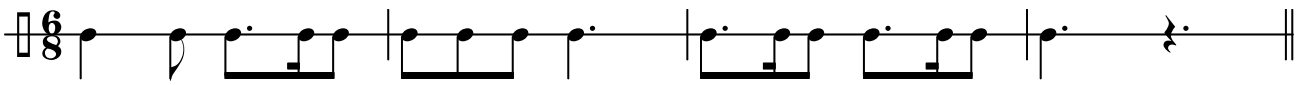
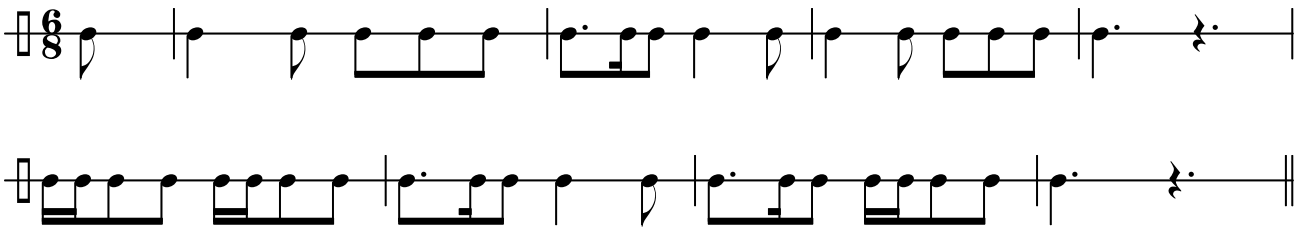


(adding yet another rhythmic cell with sixteenth notes)

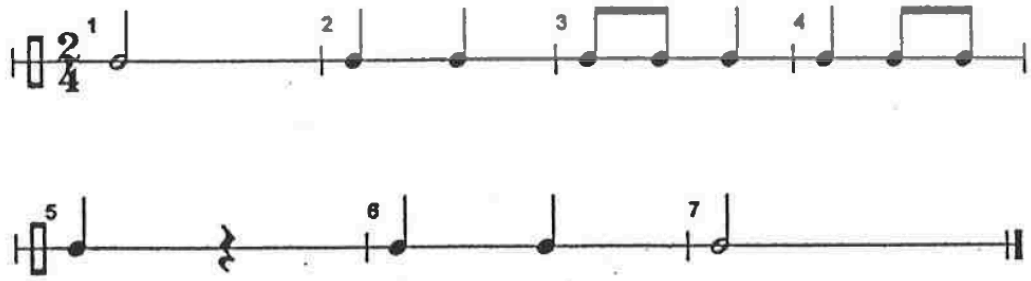
42.



Rhythms from Learning To Listen (from Kent State University)

Simple Meter

#1



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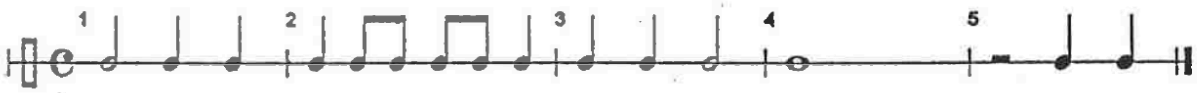

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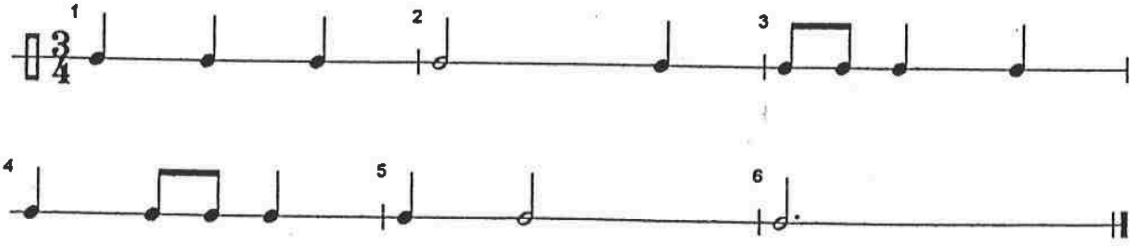

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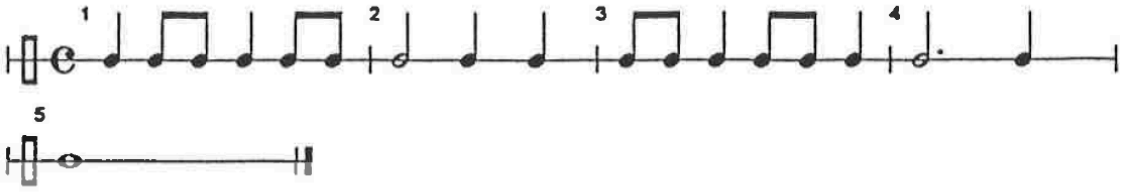

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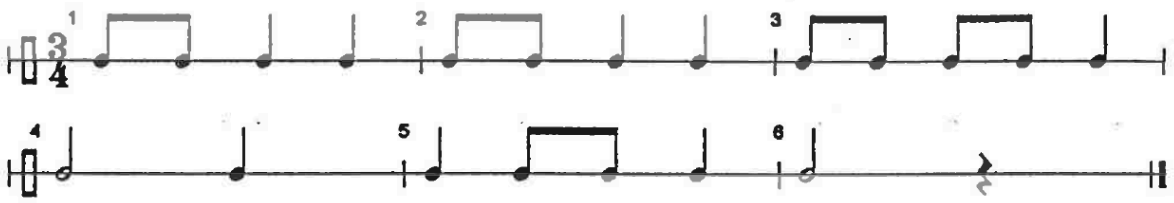
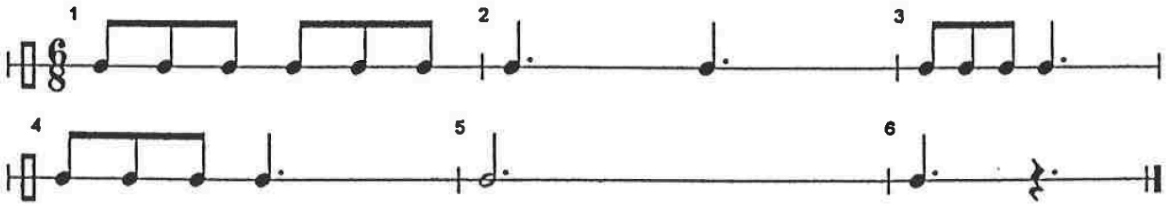


Compound Meter

#6



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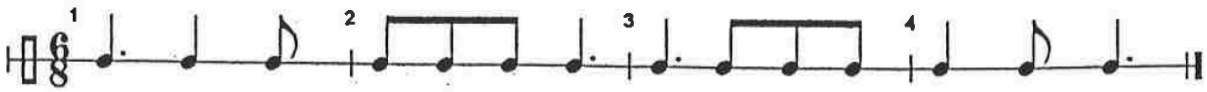

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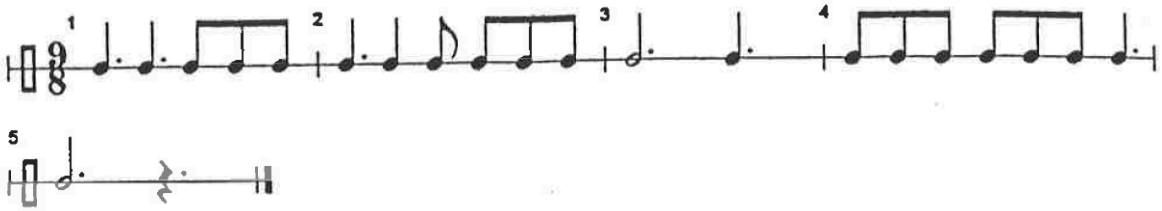

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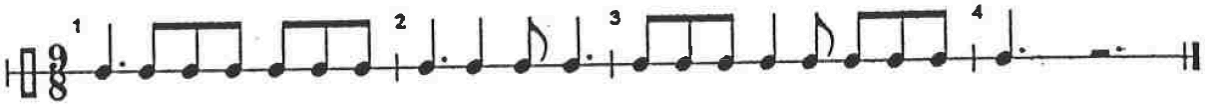

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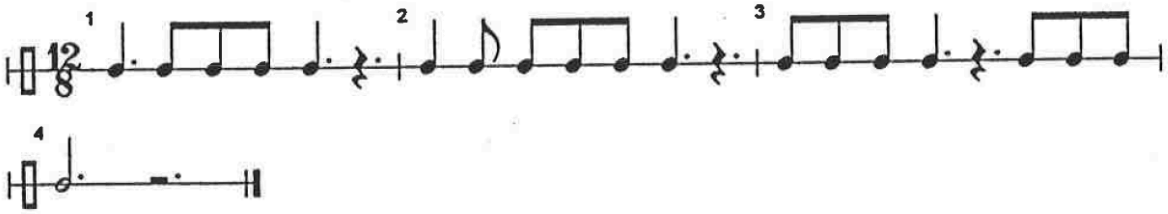
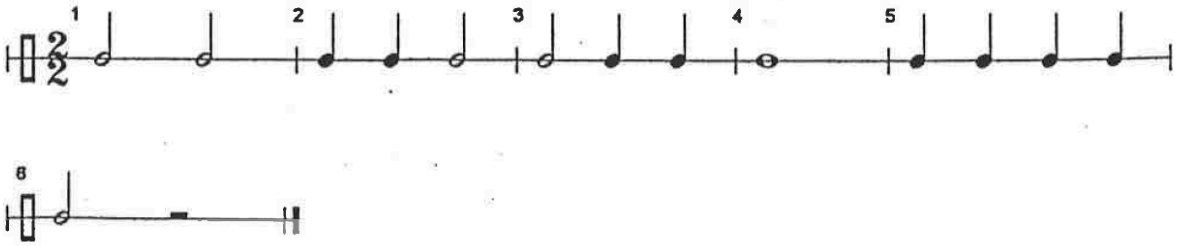


Other meters and subdivisions

#11



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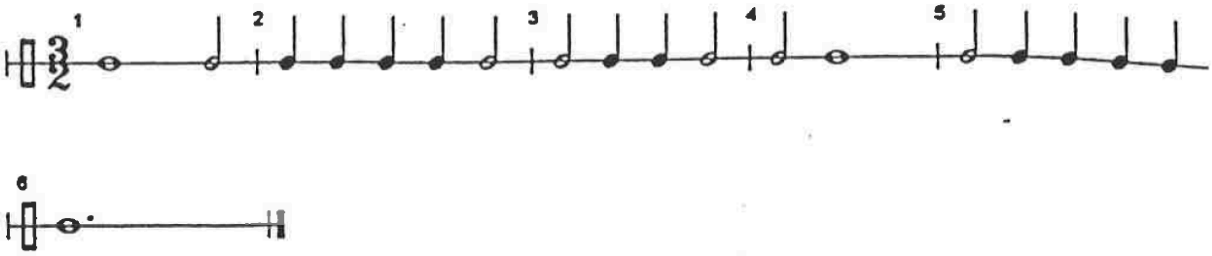

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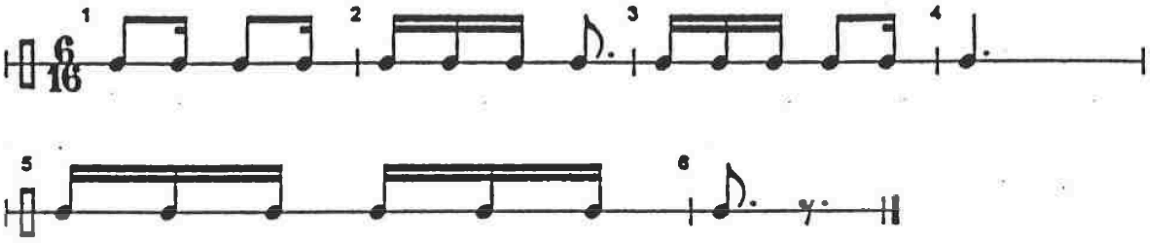

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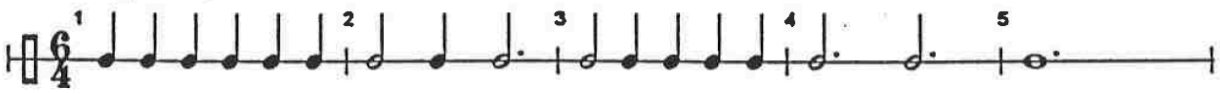

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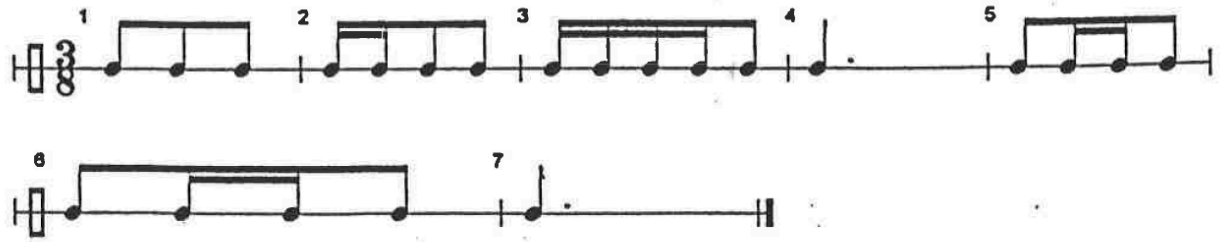

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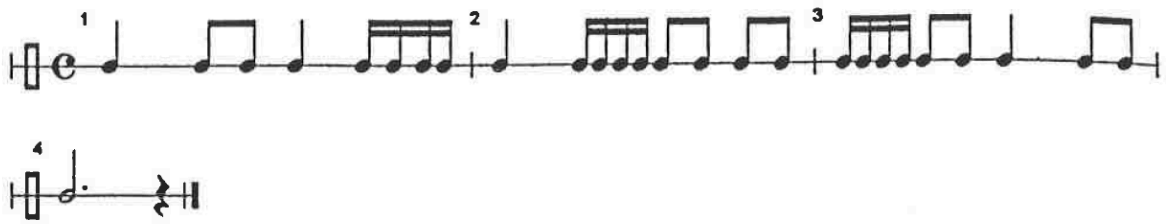

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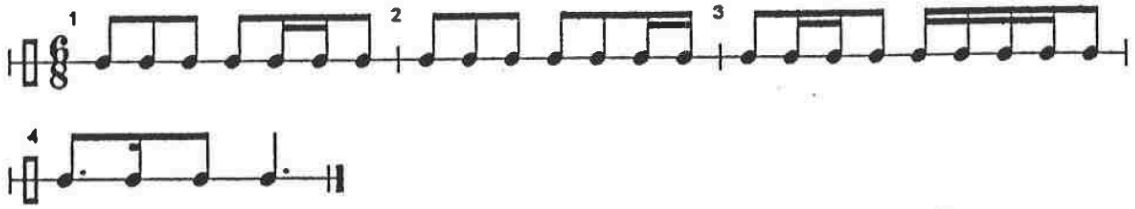

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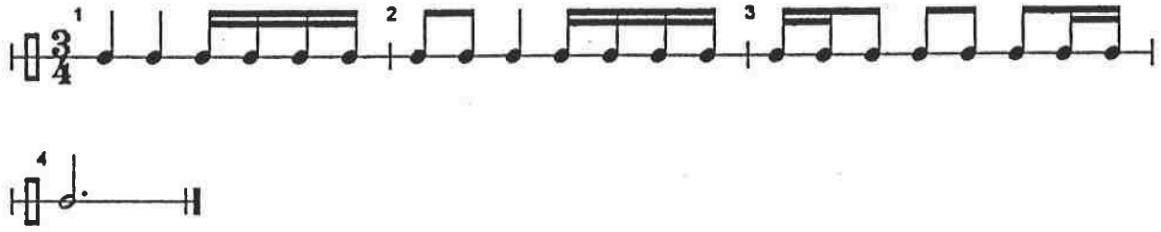

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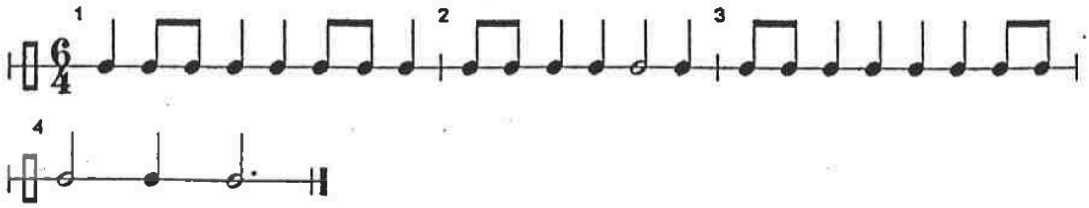
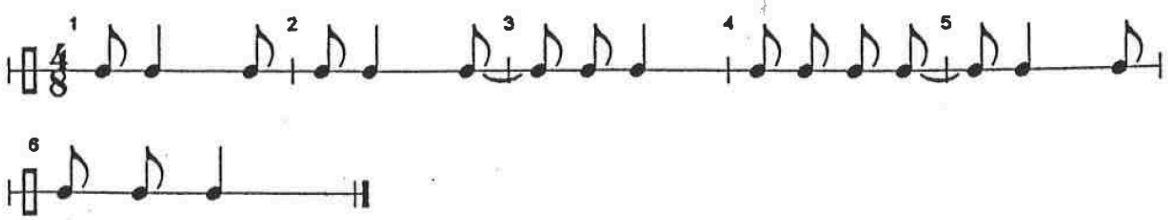


Agogic accent/syncopation

#23



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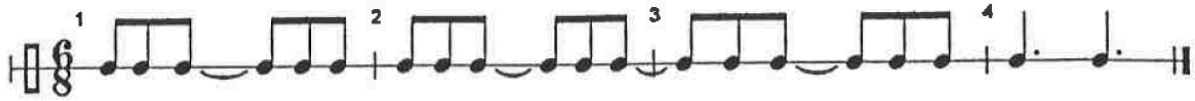
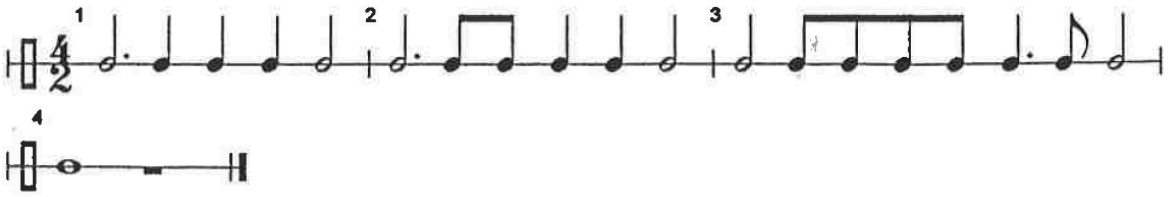


#26

#27



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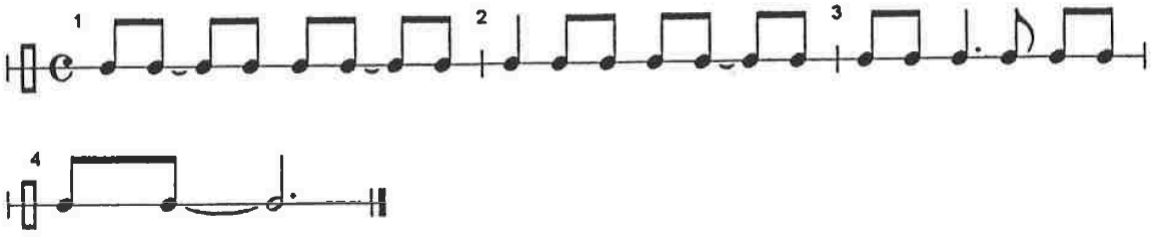

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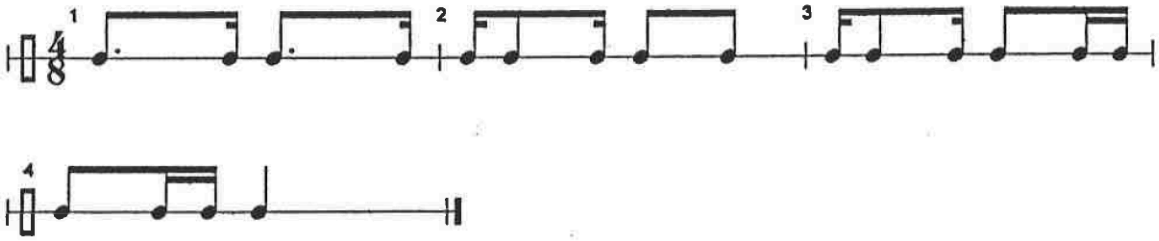

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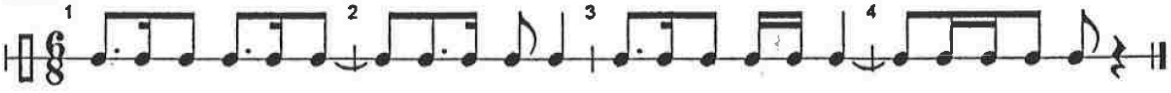

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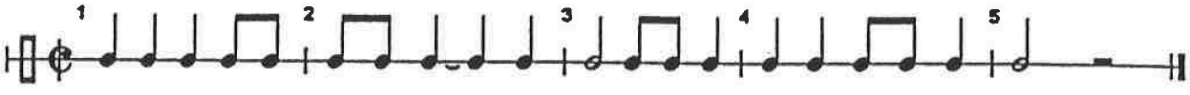

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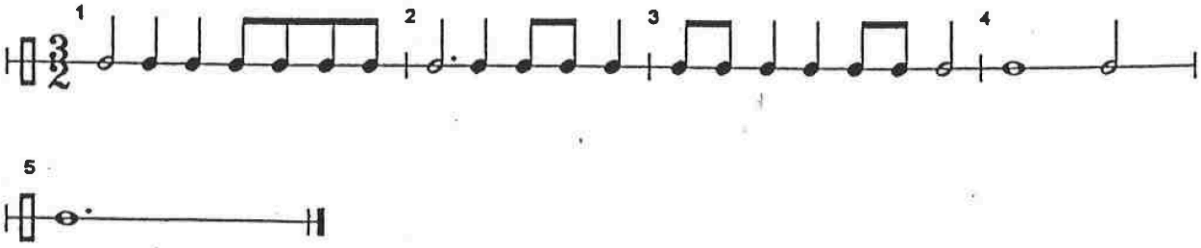

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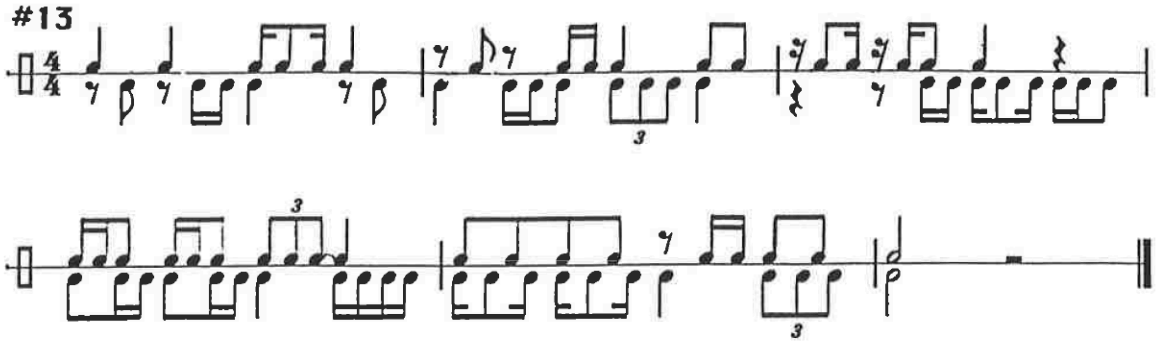

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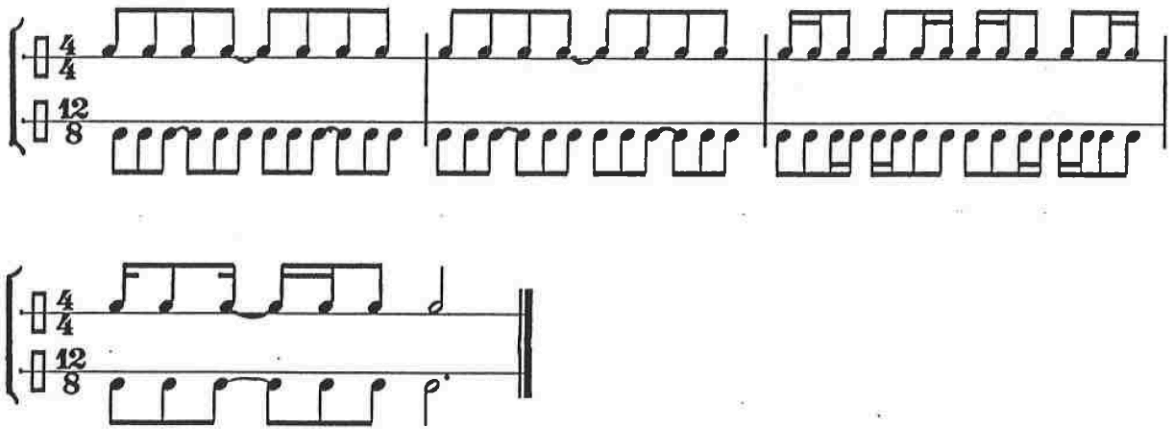
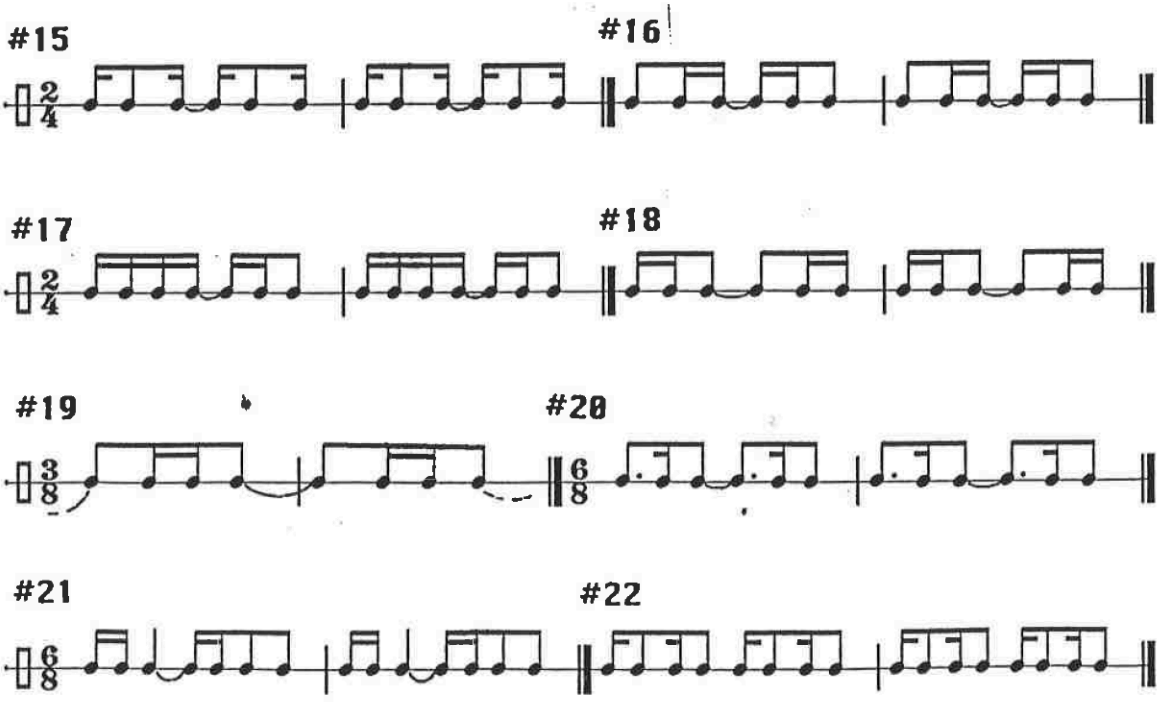
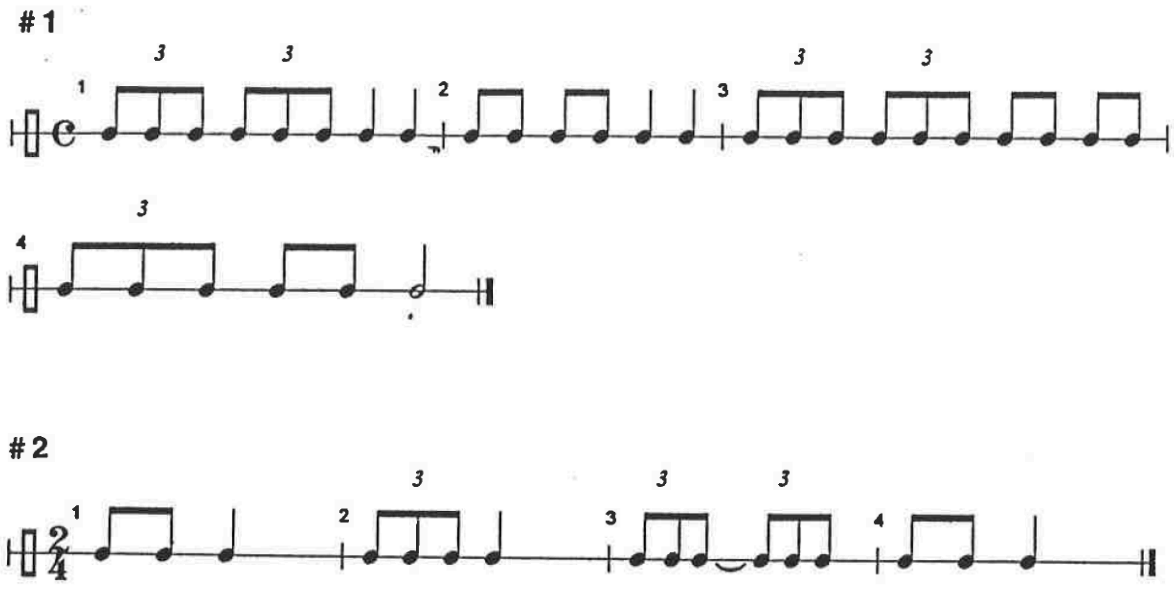


Rhythmic Vocabulary



Triplet divisions



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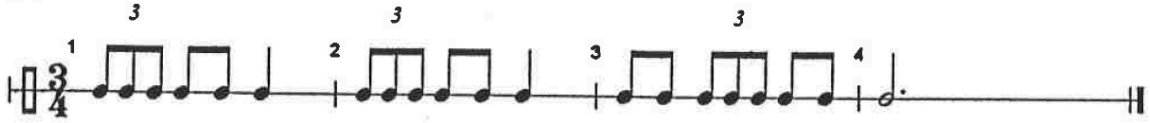

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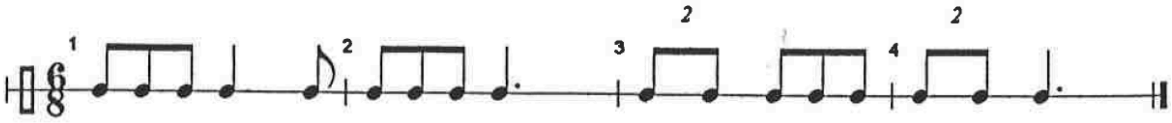

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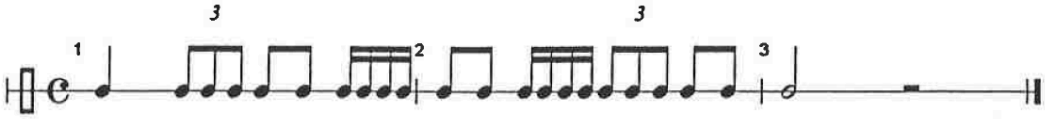

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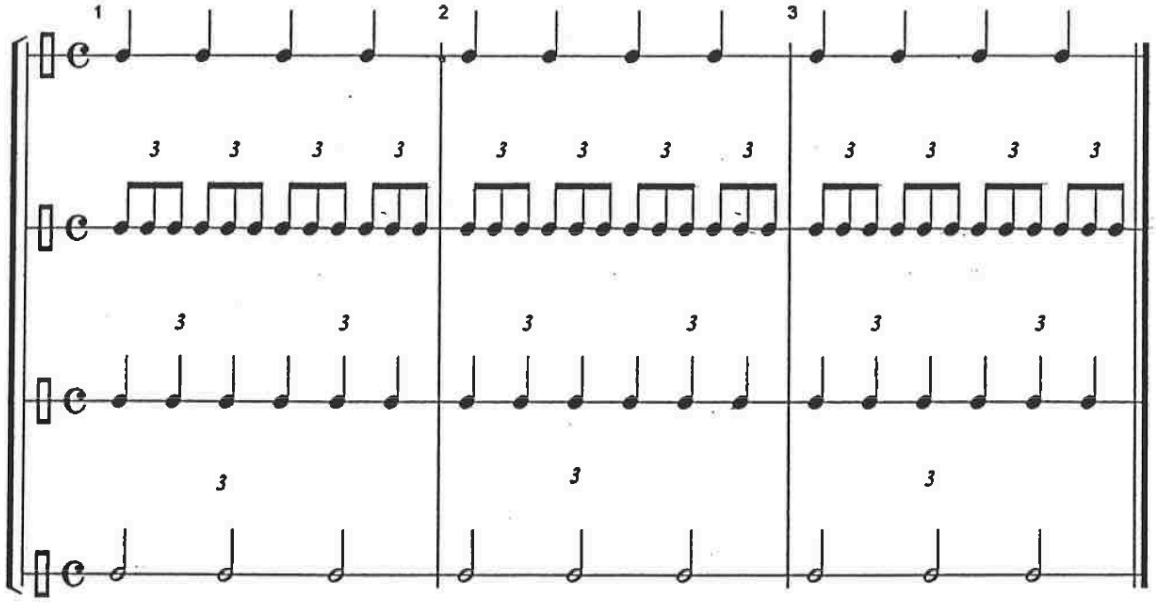

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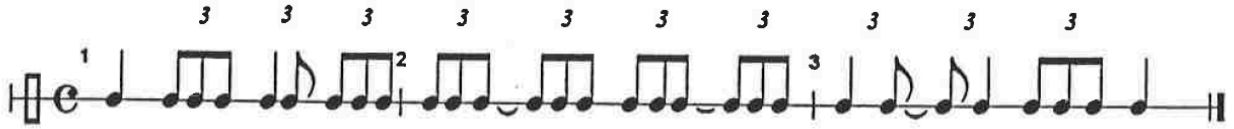

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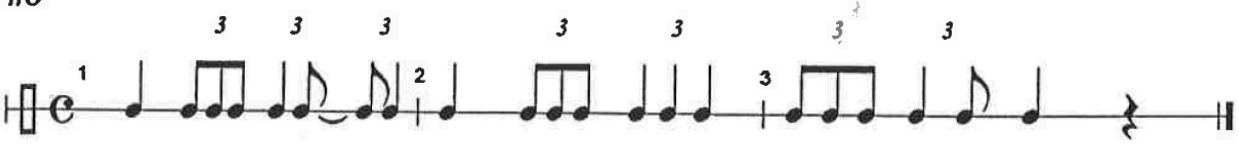
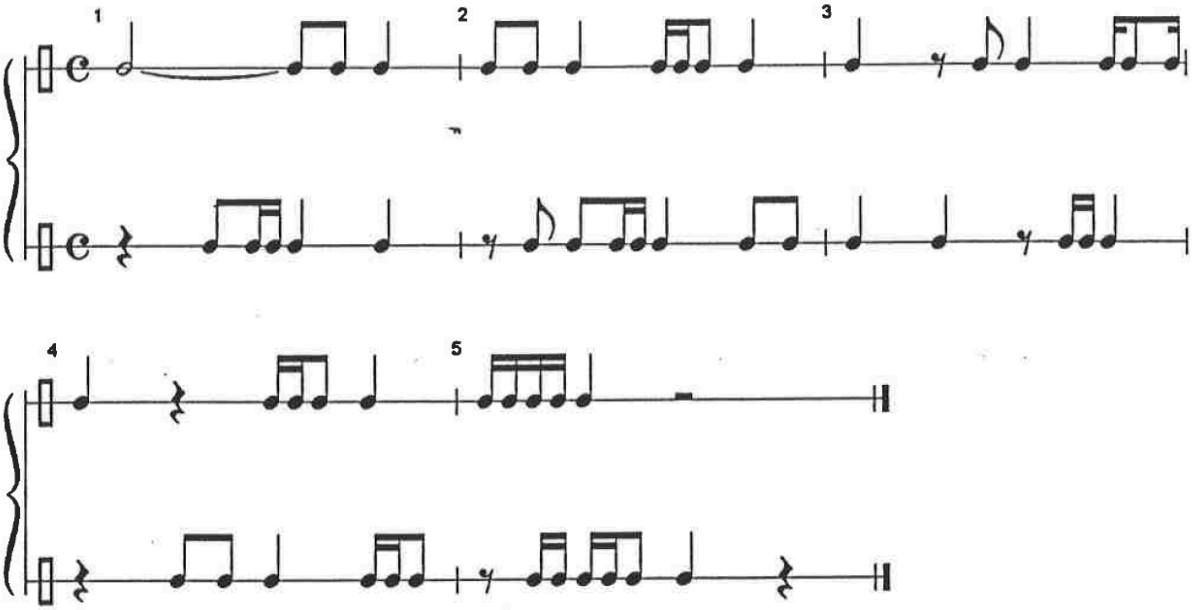


Duets

#9



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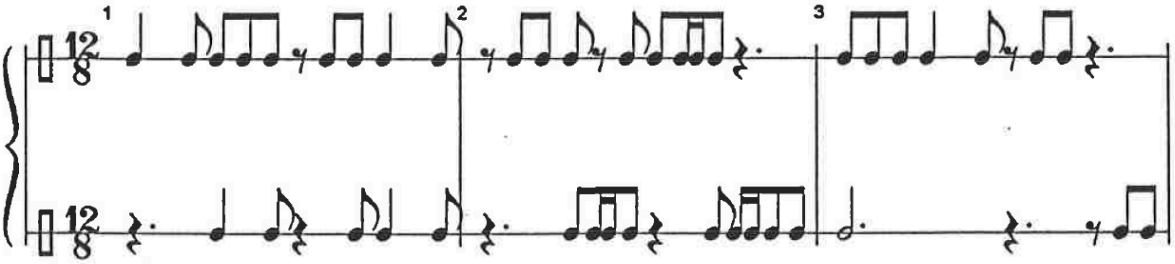

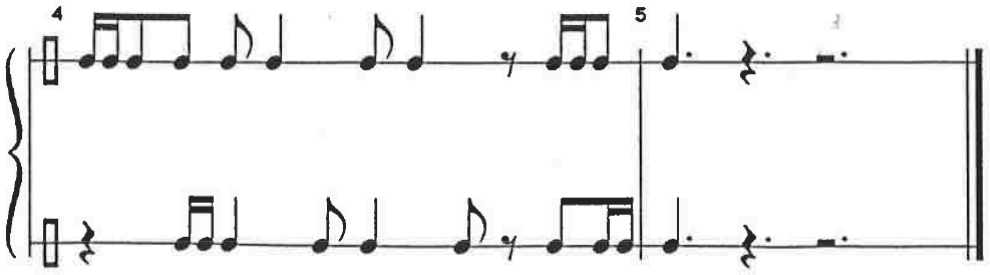

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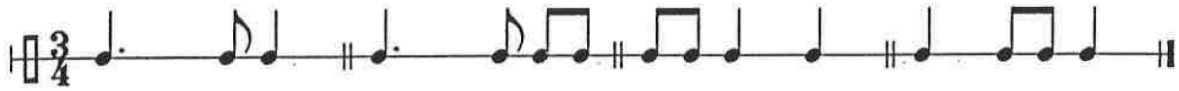

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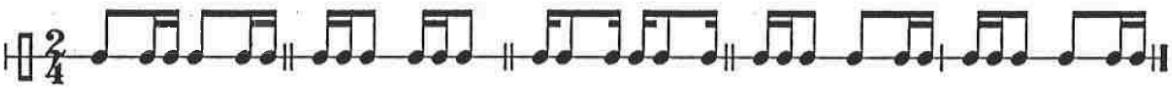

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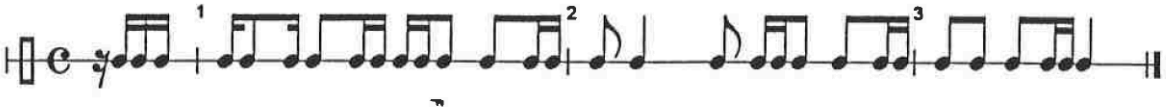

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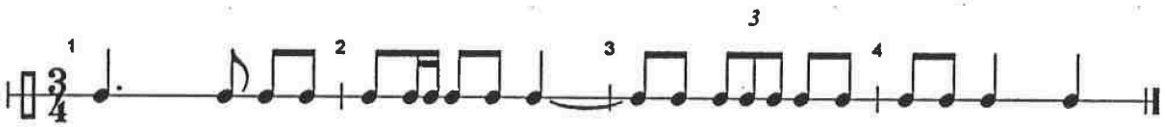

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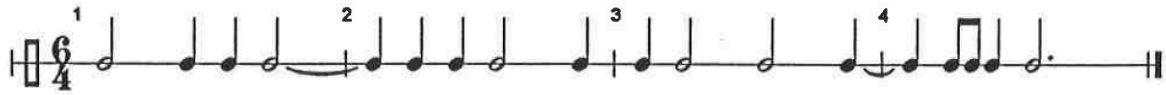

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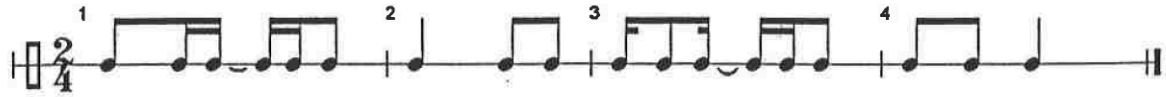

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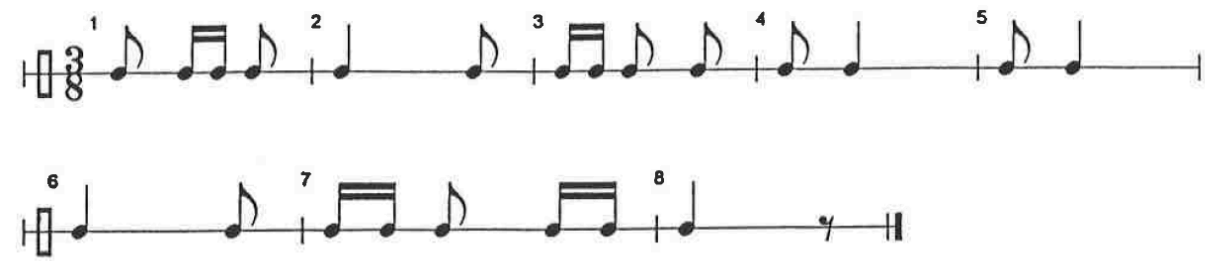

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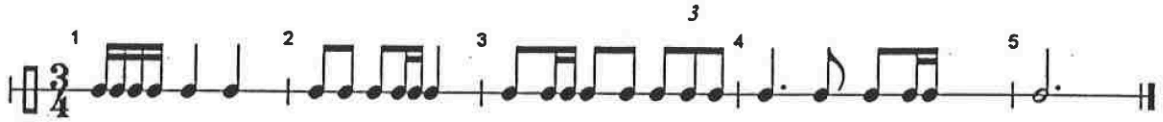

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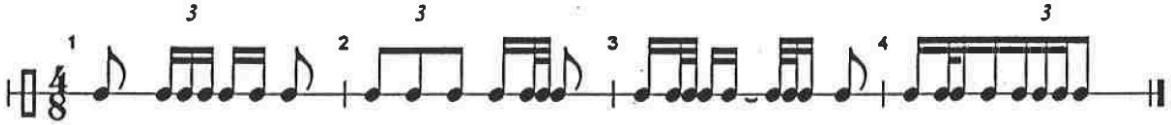

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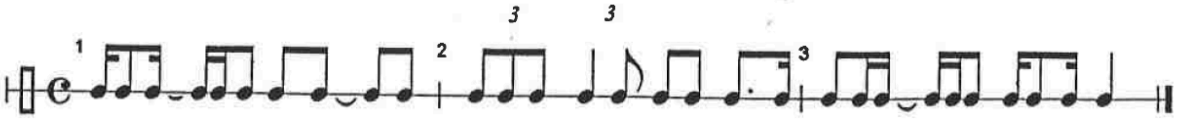

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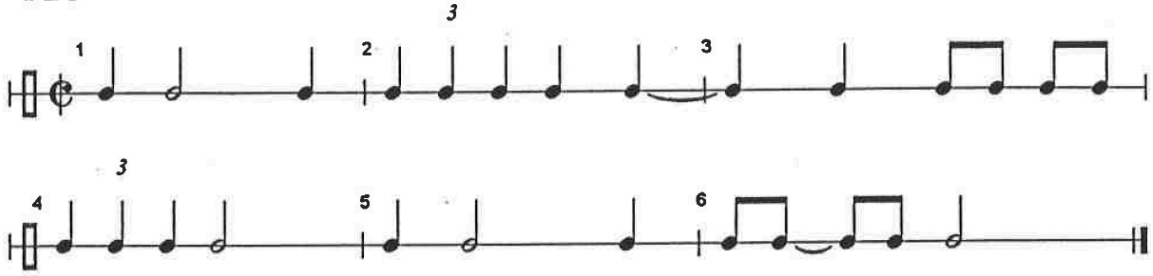
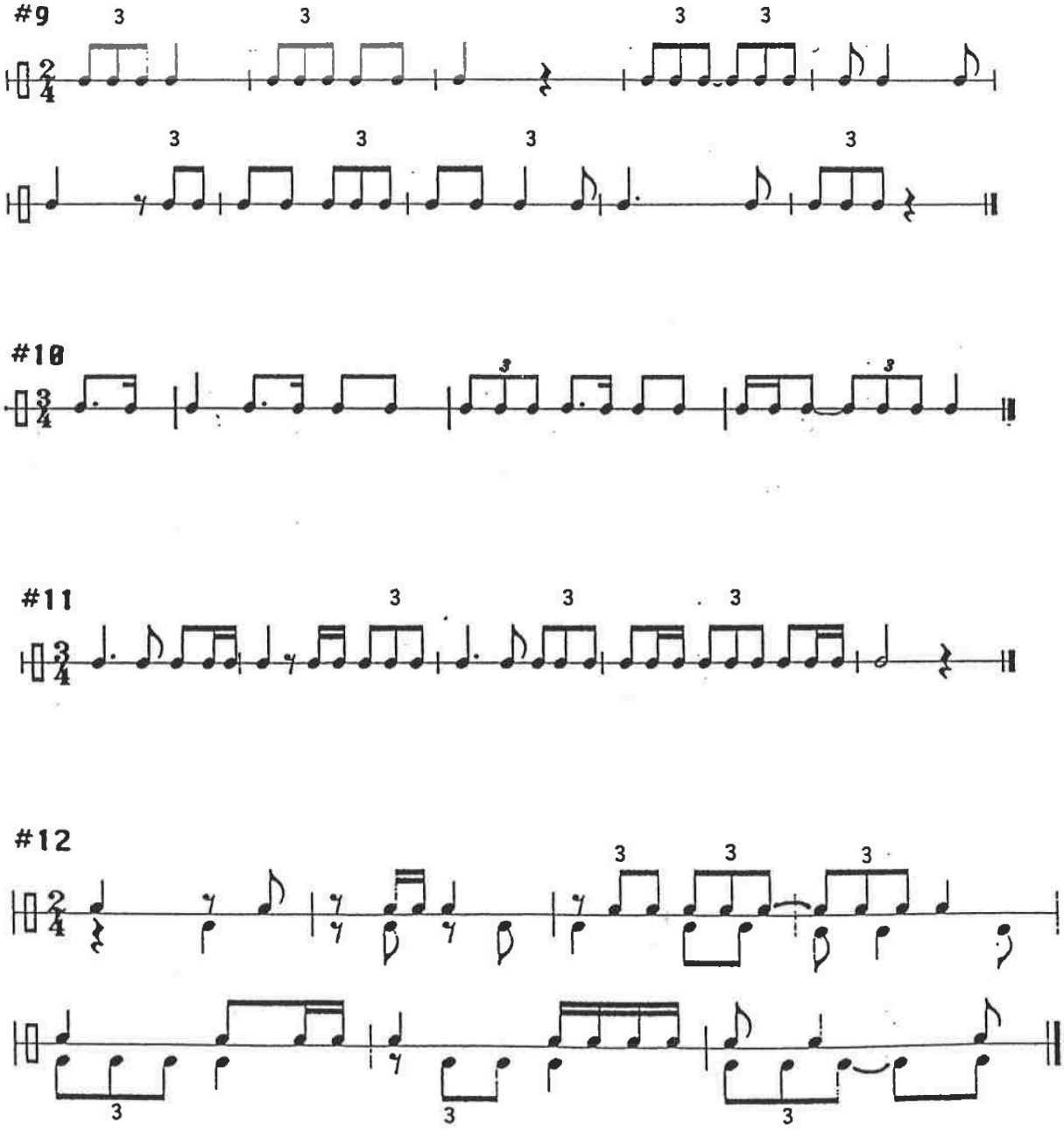
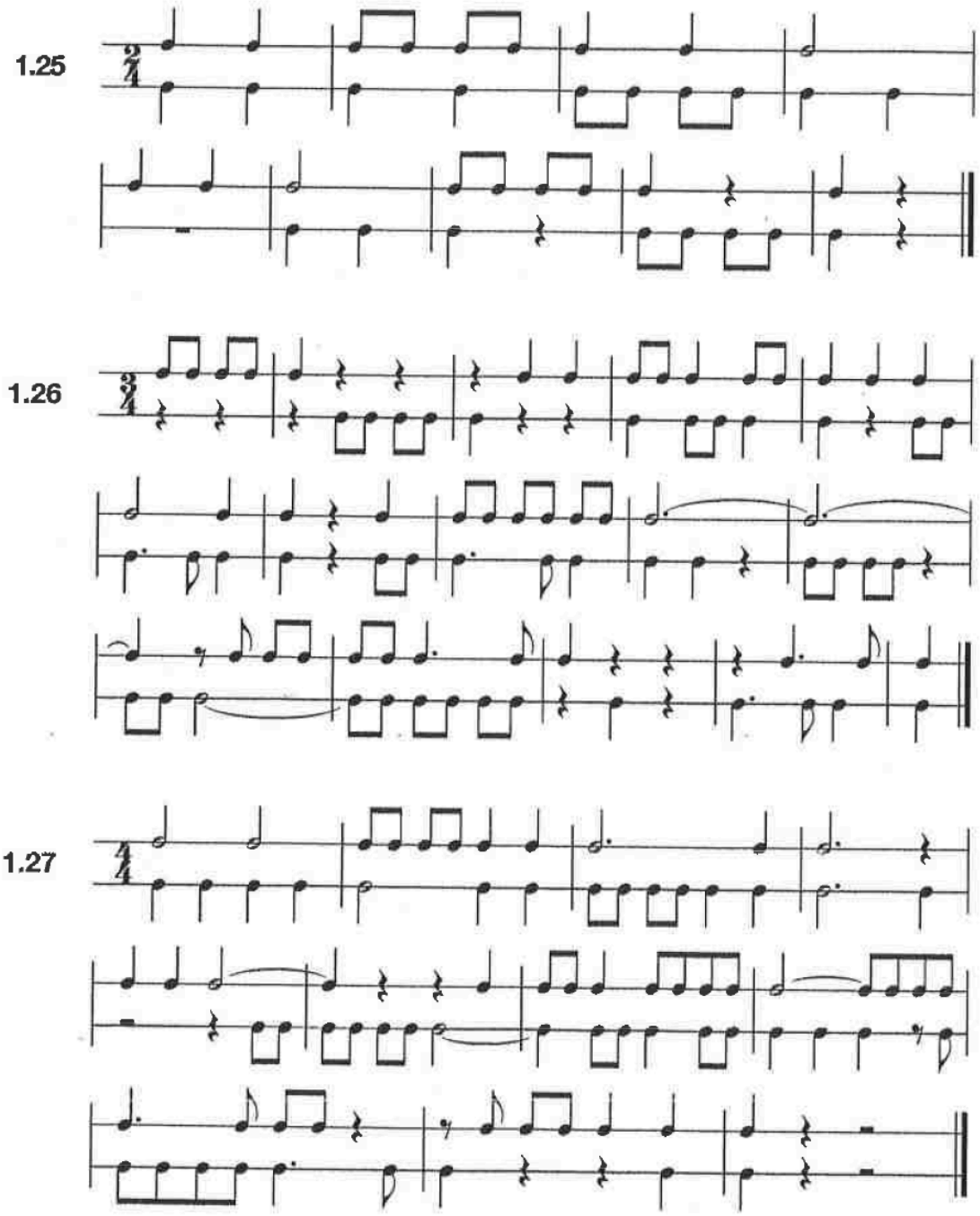


Triplets and Cross-Rhythms



From Ottman: Music for Sight Singing



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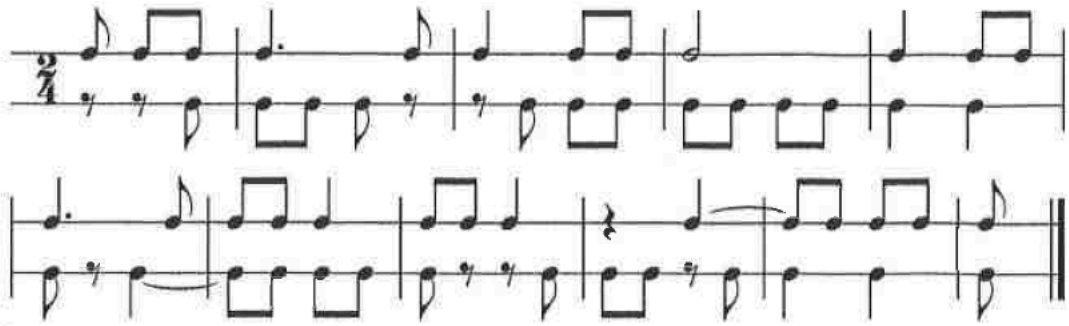

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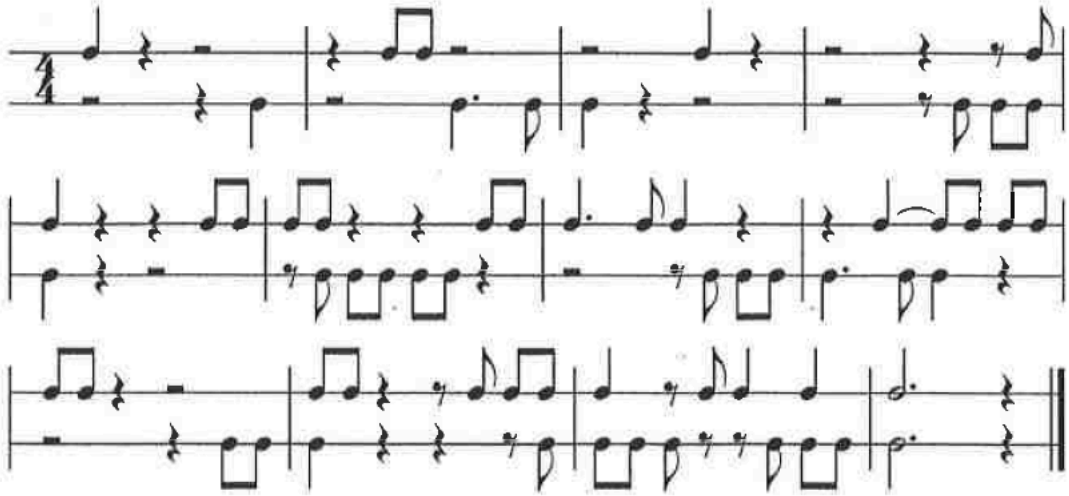

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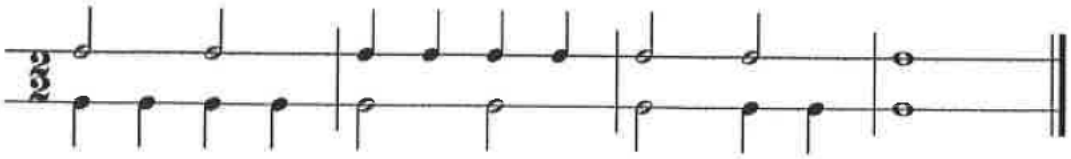

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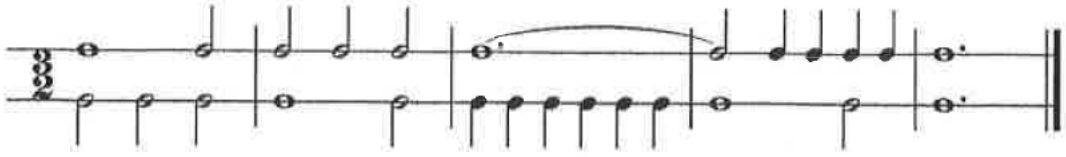

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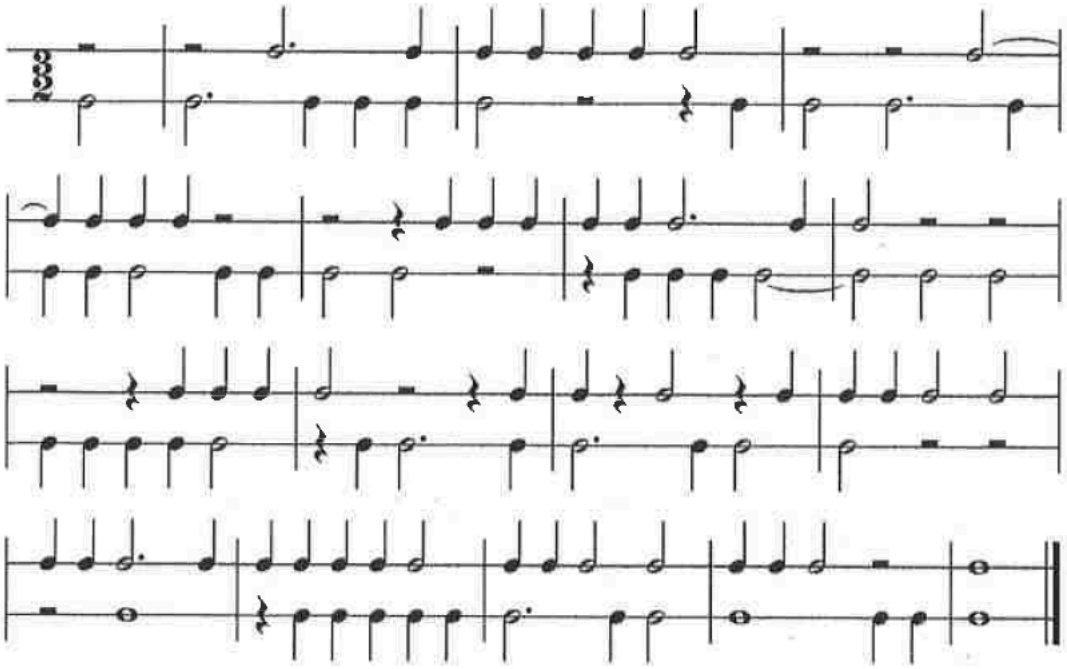

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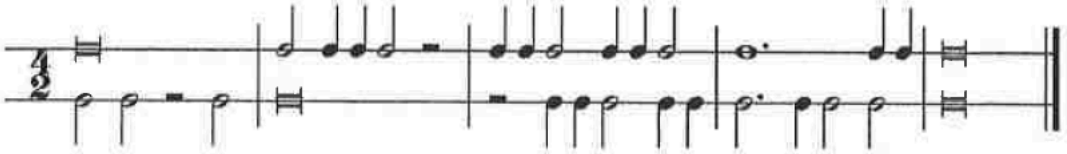

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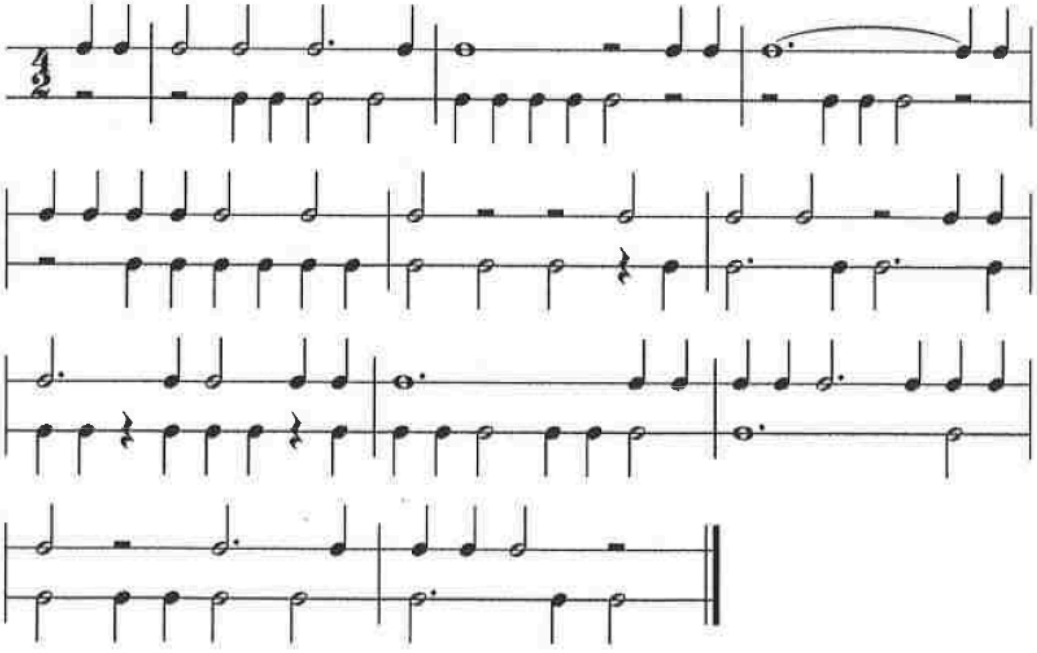

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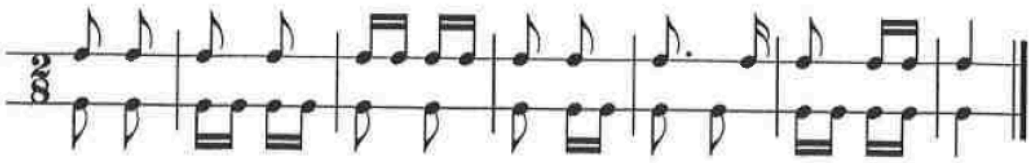

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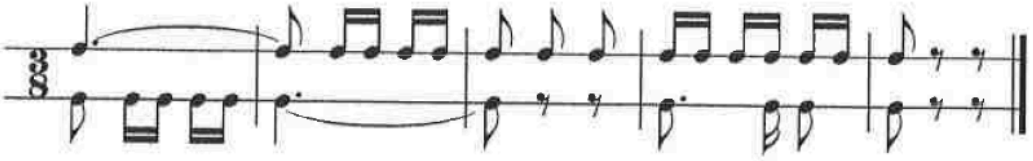

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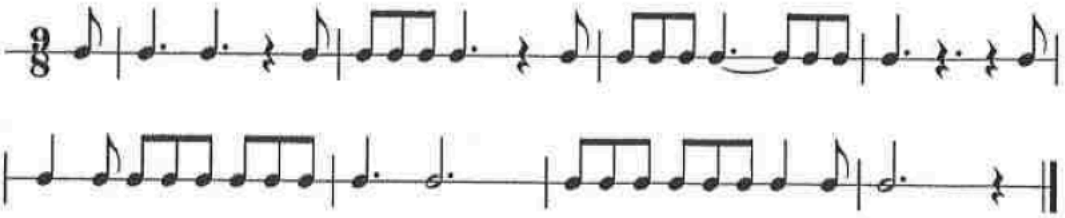

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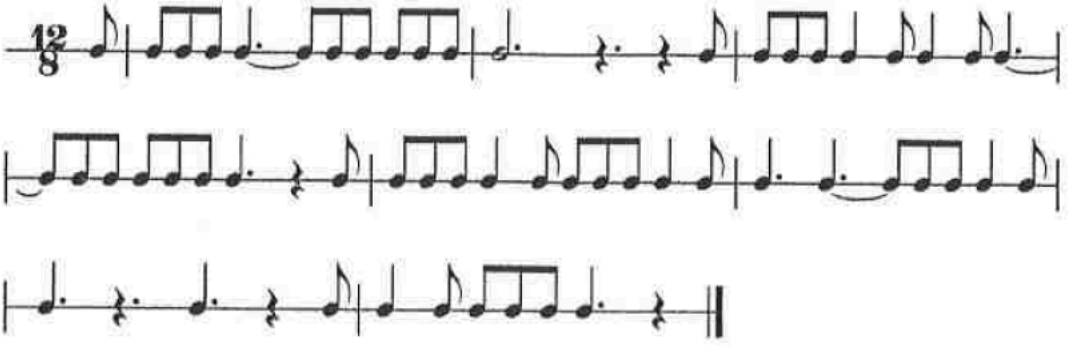

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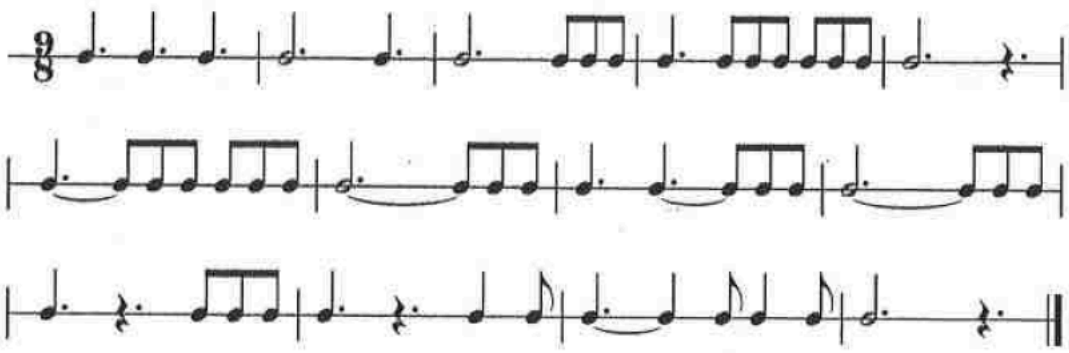

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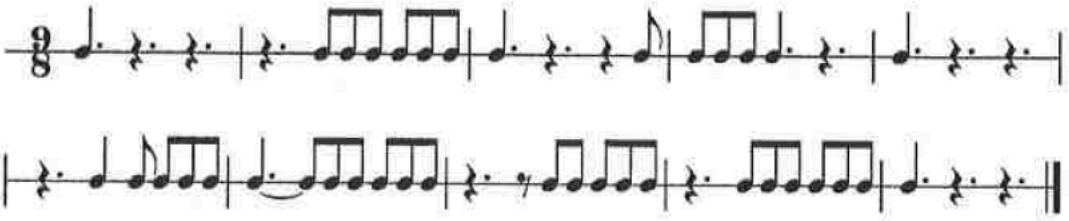

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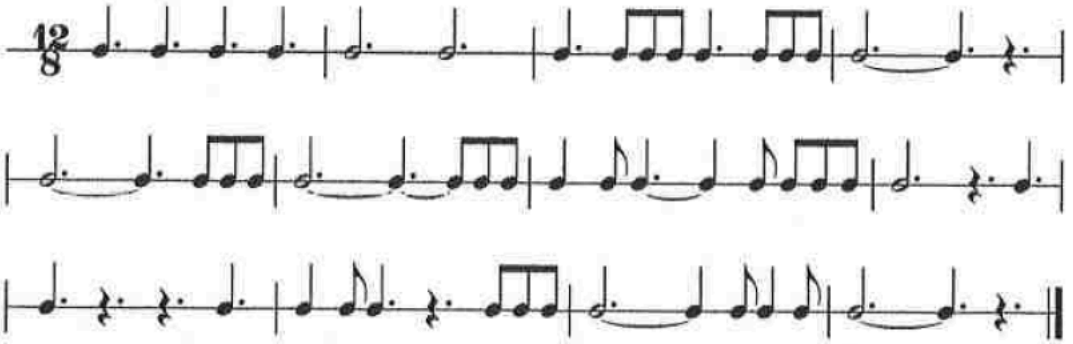

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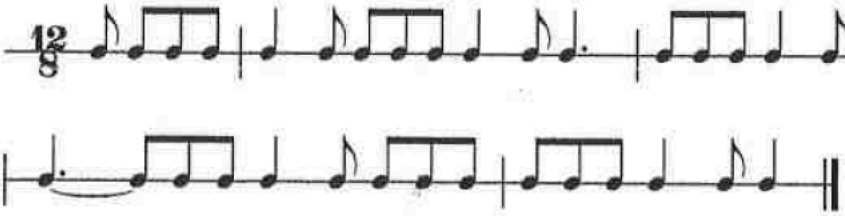

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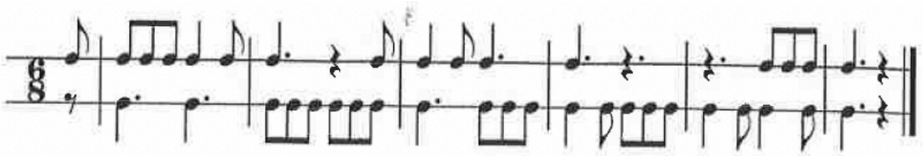

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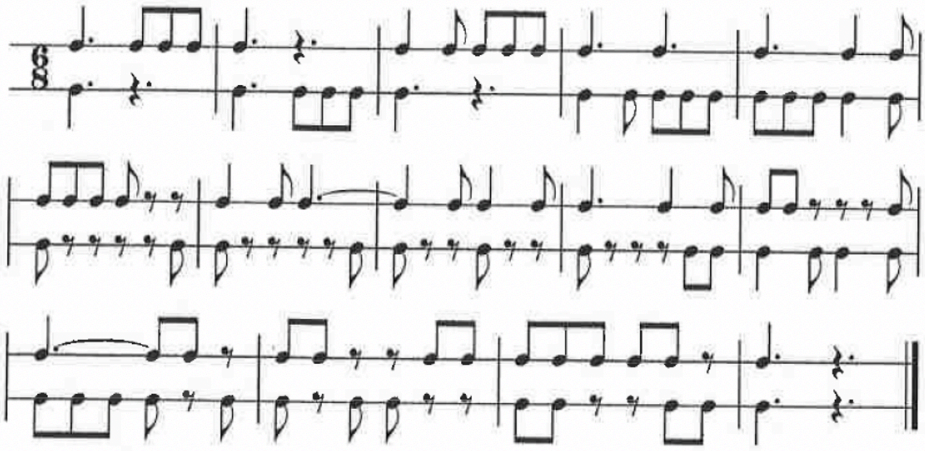

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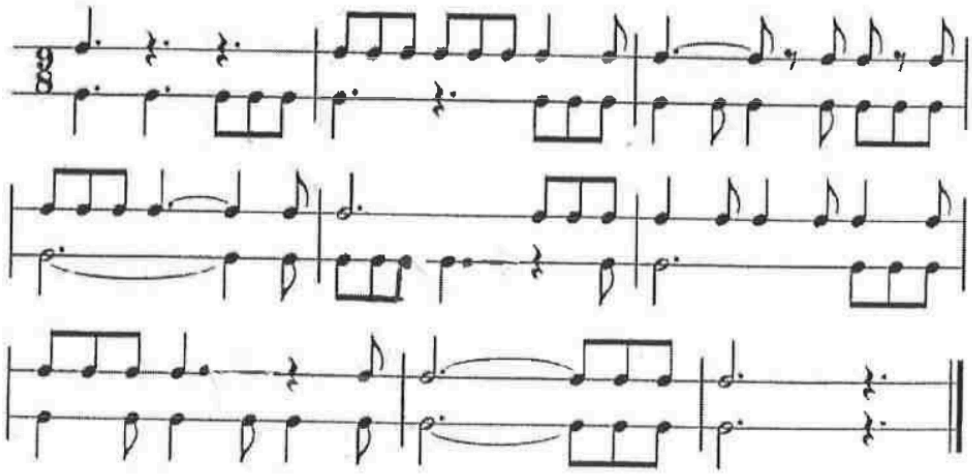

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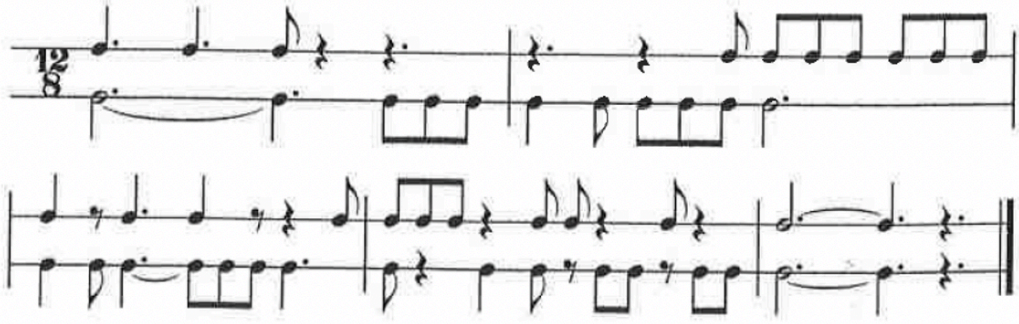

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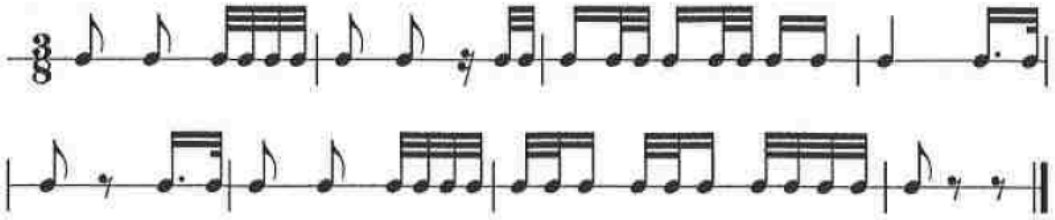

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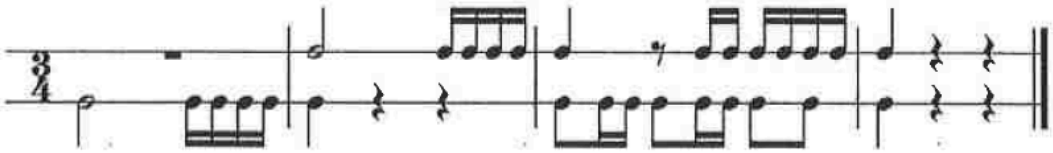

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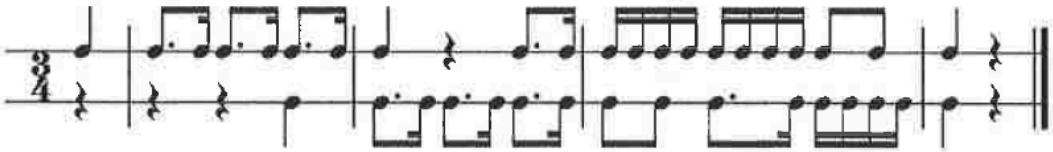

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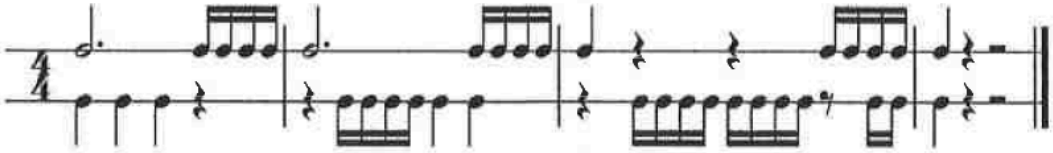

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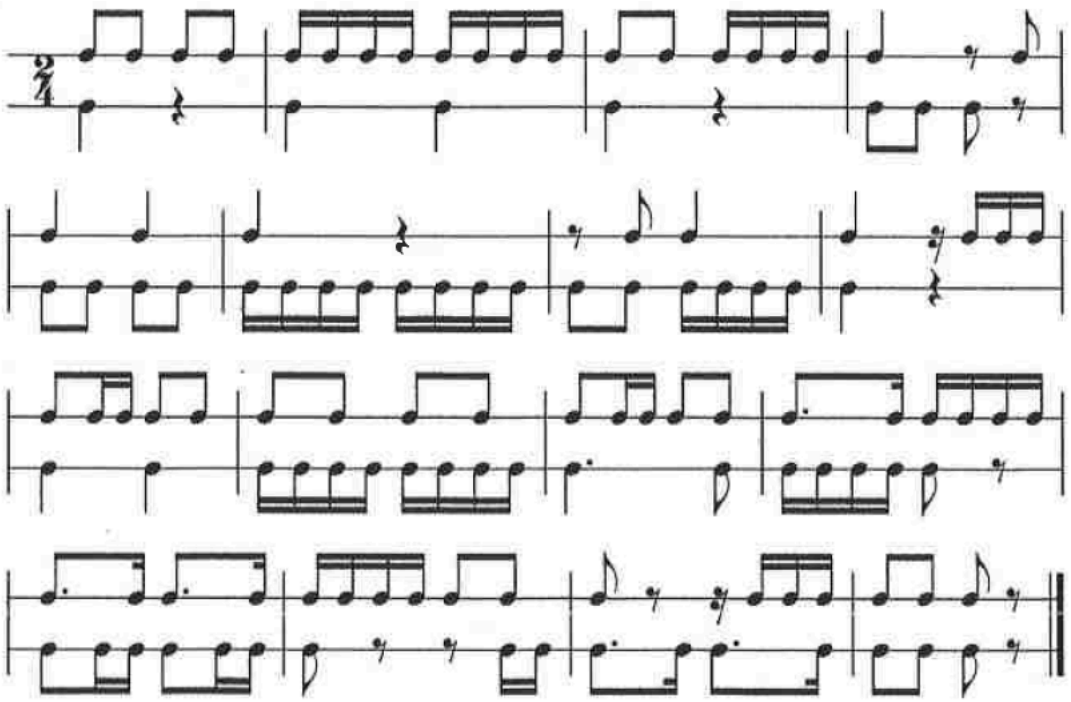

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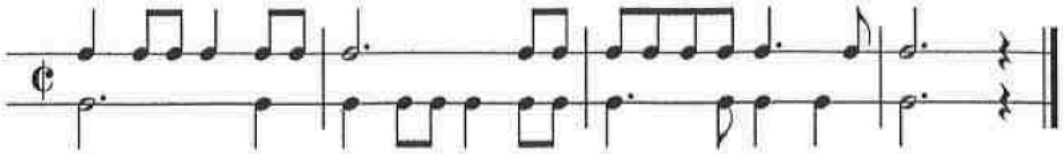

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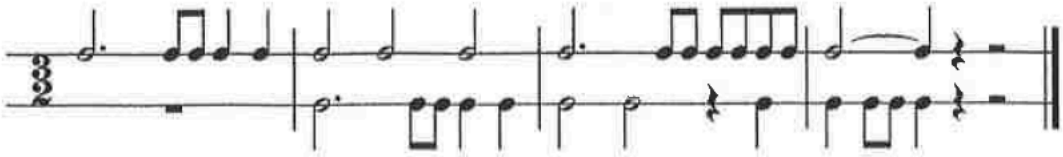

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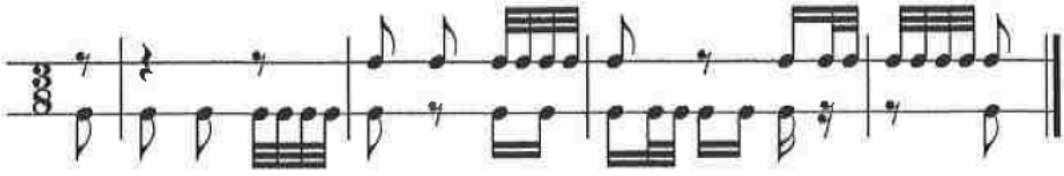
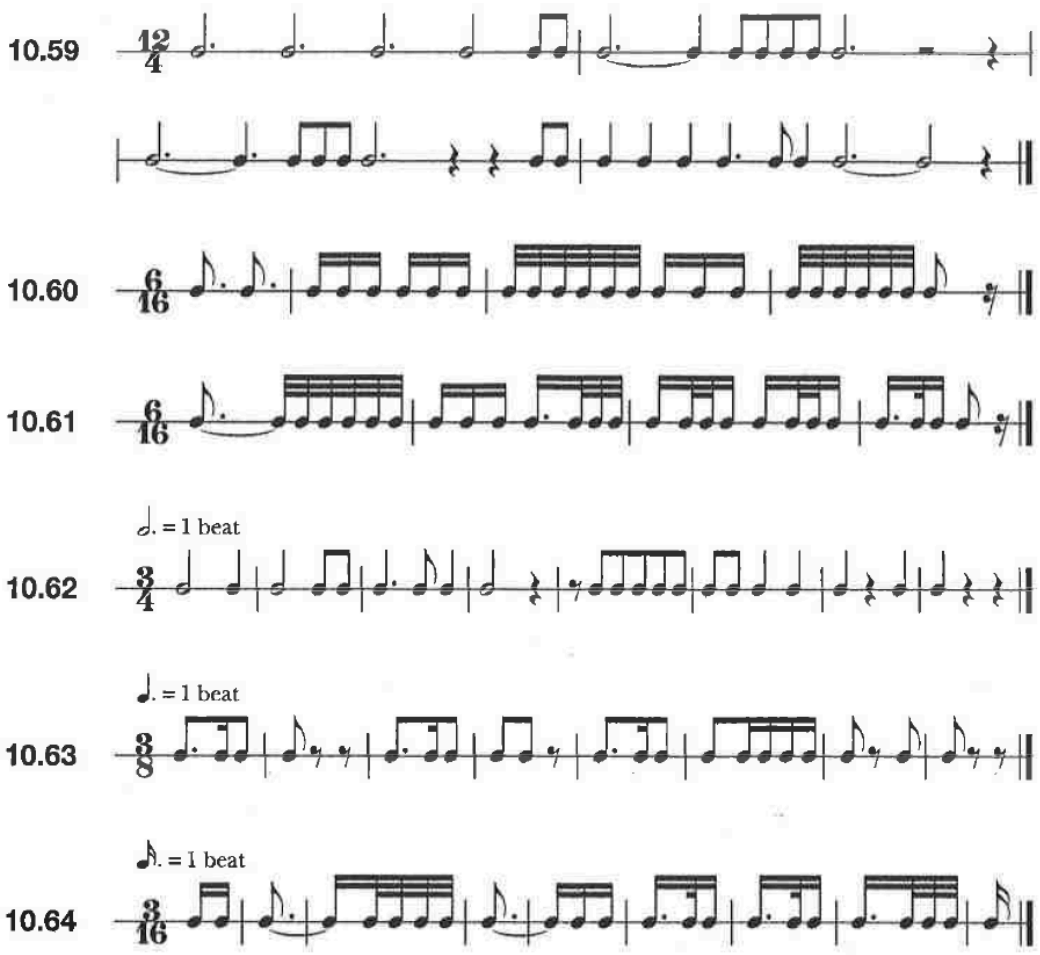
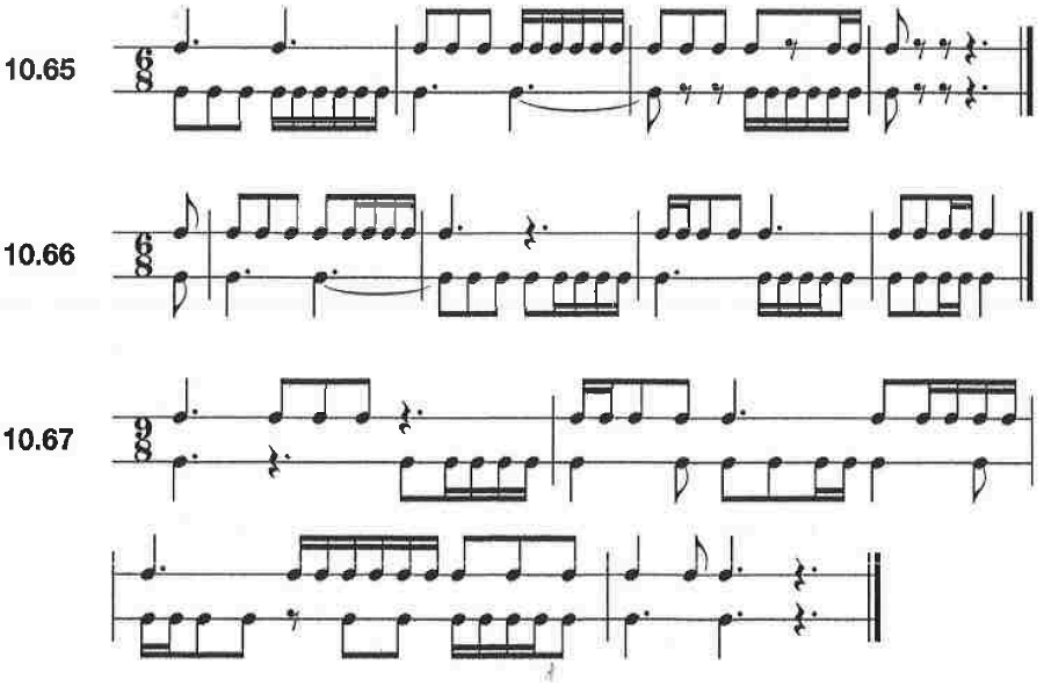




Section 6. Two-part drills, compound meters.



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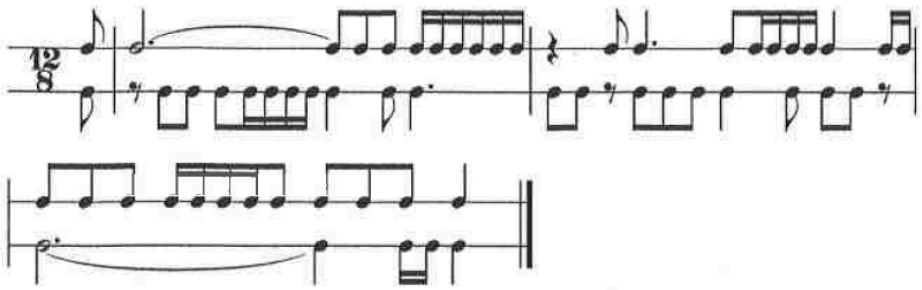

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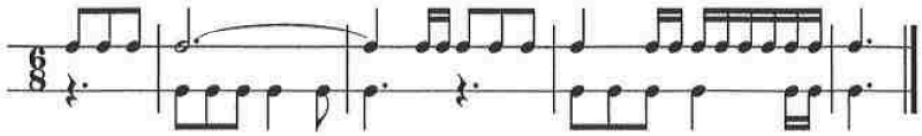

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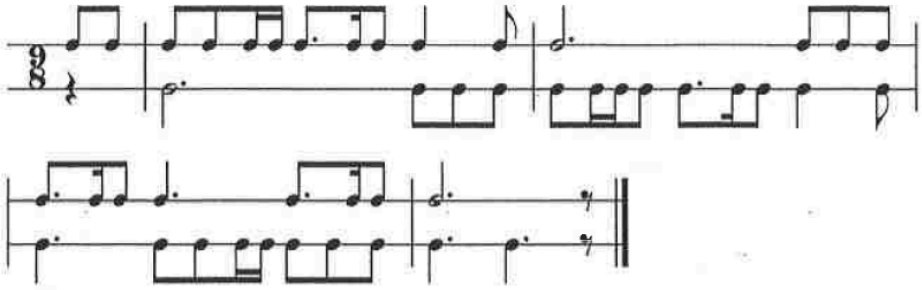

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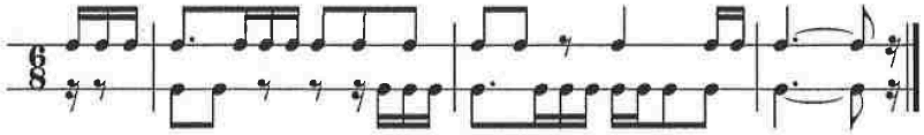

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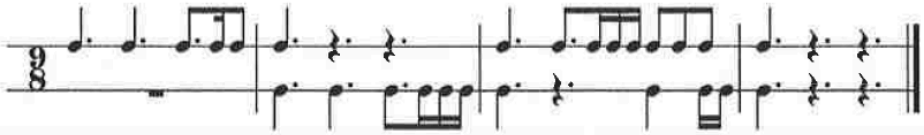

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