

**10<sup>th</sup> Grade**

**Music – Choir I: Theory Review**

May 18 – May 22

*Time Allotment: 20 minutes per day*

Student Name: \_\_\_\_\_

Teacher Name: \_\_\_\_\_

**Academic Honesty**

I certify that I completed this assignment  
independently in accordance with the GHNO  
Academy Honor Code.

*Student signature:*

\_\_\_\_\_

I certify that my student completed this  
assignment independently in accordance with  
the GHNO Academy Honor Code.

*Parent signature:*

\_\_\_\_\_

## Packet Overview

Date	Objective(s)	Page Number
Monday, May 18	1. Review interval structure and identification	2
Tuesday, May 19	1. Review triads and seventh chords	5
Wednesday, May 20	1. Review Roman numeral analysis	8
Thursday, May 21	1. Review harmonic function	11
Friday, May 22	1. Demonstrate knowledge of musical structures by taking a written assessment.	13

**Additional Notes:** In order to complete the tasks within the following packet, it would be helpful for students to have a piece of manuscript paper to write out triads; I have included a blank sheet of manuscript paper to be printed off as needed, though in the event that this is not feasible students are free to use lined paper to hand draw a music staff.

I have also included answer keys to the exercises at the end of the packet. Parents, please facilitate the proper use of these answer documents (i.e. have students work through the exercises for each day before supplying the answers so that they can self-check for comprehension.)

As always, will be available to provide support via email, and I will be checking my inbox regularly. Please do not hesitate to reach out with questions or concerns during this time. For your reference my email is [kevin.austin@greatheartsnorthernnoaks.org](mailto:kevin.austin@greatheartsnorthernnoaks.org)

I will also be holding guided instruction hours from via Zoom according to the following schedule (This week is the last week of guided instruction):

2 <sup>nd</sup> Period	Monday, Wednesday; 11:00 – 11:50am
5 <sup>th</sup> Period	Tuesday, Thursday; 11:00 – 11:50am

These Zoom meetings are optional and will allow for much needed conversations to discuss theory problems and ask questions.

To join the Zoom Meeting:

<https://greathearts.zoom.us/j/93002027392?pwd=SWNMQWkVQbXFUWIAvVXNLTUVBbW0rQT09>

Meeting ID: 930 0202 7392

Password: 223071

## Monday, May 18

Music Theory Unit: Theory Review  
Lesson 1: Review of Intervals

**Objective:** Be able to do this by the end of this lesson.

1. Recall the process for interval identification and identify intervals on the staff using the interval calculator.

### **Introduction to Lesson 1: Review of Intervals**

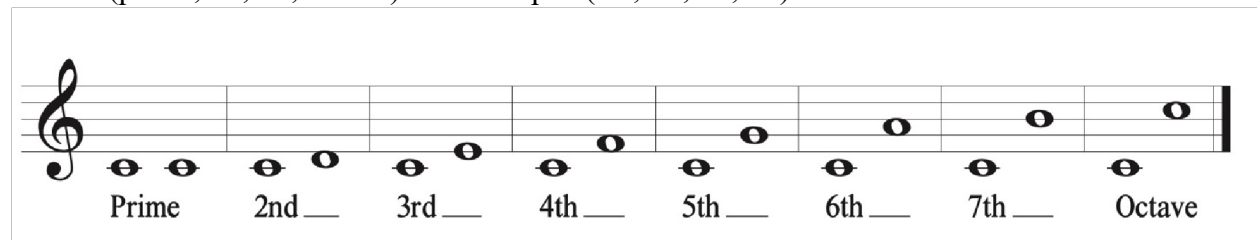
When we speak about the relationship between two successive pitches, we often use the term “interval.”

An Interval is the vertical distance from one pitch to the next.

Recall that we can think of intervals as a twofold measurement. The first part of this measurement is what we call its “interval class.”

Interval Class is the absolute distance between two notes on the staff

- Interval class is not concerned with any accidentals attached to notes, instead it is the absolute distance as measured on the staff.
- This is the first part of the interval that we must identify; It will tell us if it is a Group I (prime, 4<sup>th</sup>, 5<sup>th</sup>, octave) or a Group II (2<sup>nd</sup>, 3<sup>rd</sup>, 6<sup>th</sup>, 7<sup>th</sup>) interval.



A musical staff with a treble clef and a key signature of one flat (B-flat). The staff is divided into eight measures, each containing a pair of notes. Below each pair of notes is a label for the interval class: Prime, 2nd \_\_, 3rd \_\_, 4th \_\_, 5th \_\_, 6th \_\_, 7th \_\_, and Octave. The notes are placed on the lines and spaces of the staff to illustrate the distance between them.

- When we measure interval class, we always measure from the lowest note to the highest note, and we count the lines and spaces from the lowest note to the highest note including the notes themselves.

The second part of an interval measurement is what we call the interval quality.

Interval Quality is the specific distance, measured in half steps, between two pitches.

- There are two types of interval qualities: *diatonic* (major, minor, perfect) and *chromatic* (diminished, augmented)
- *Diatonic* intervals are those that can be fit inside the given key signature (without alteration via an accidental)
- *Chromatic* intervals are those that, due to the presence of an accidental, do not fit inside a given key signature.

## Intervals and the Circle of 5ths

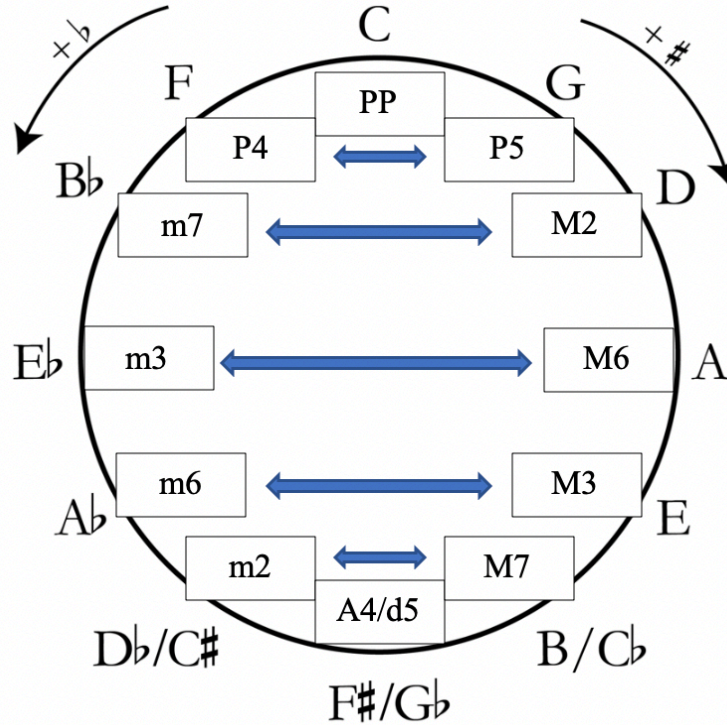
We also observed that intervals certain intervals are inversionally related and that this relationship plays into the underlying structure of the circle of 5ths.

Inversion is the mechanical reversal of the measurement of the interval by taking the lower note in the interval and moving up one octave.

We saw that not only do interval classes invert to result in other intervals to which they are related but that interval quality also inverts to its related quality. The following chart demonstrates these inversional relationships:

Minor ↔ Major	Second ↔ Seventh
Perfect ↔ Perfect	Third ↔ Sixth
Diminished ↔ Augmented	Fourth ↔ Fifth

These inversional relationships arise in the following way on the circle of 5ths. The result allows us to rotate this relationship around the circle to determine the interval between any starting pitch (PP) and another given note.




**Closing:** Check your understanding of the lesson by Identifying the following intervals on the staff with an interval class and an interval quality.

## Chromatic Intervals I

(Major, Minor, Perfect, Augmented and Diminished Intervals)

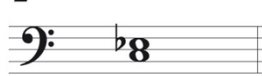
Name these intervals.

Use "M" for major intervals,  
"m" for minor intervals,  
"P" for perfect intervals,  
"dim" for diminished intervals and  
"Aug" for augmented intervals.

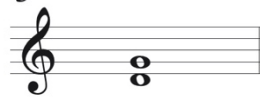
Example   
dim 5

1 

\_\_\_\_\_

2 

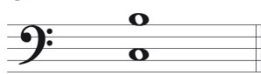
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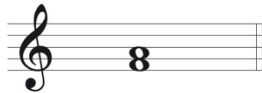
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4 


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5 


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6 

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8 

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**Tuesday, May 19**

Music Theory Unit: Theory Review  
Lesson 2: Review of Triads and Seventh Chords

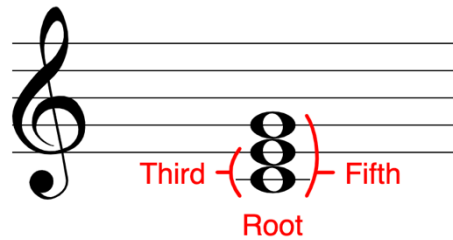
**Objective:** Be able to do this by the end of this lesson.

1. Recall triad and seventh chord structures and be able to identify the root note and the quality of a chord.

**Introduction to Lesson 2: Review of Triad and Seventh Chords**

Recall that when we combine two or more intervals, we create a chord, the simplest form of which we call a *triad*.

Triads (that are consonant) are built from a given pitch, which we called the *root note*, by stacking two 3rds above it to get a “close root position triad.”

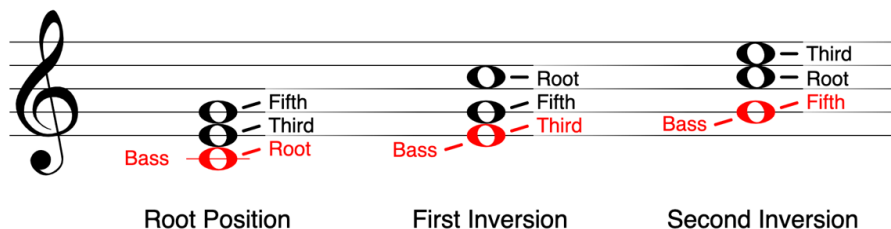


- The bottom note in this structure is, as we said, the *Root*
- The middle note, which creates an interval of a 3<sup>rd</sup> above the root, is called the *Third*
- The top note, which is a 3<sup>rd</sup> above the middle note and which creates a 5<sup>th</sup> above the root, is called the *Fifth*

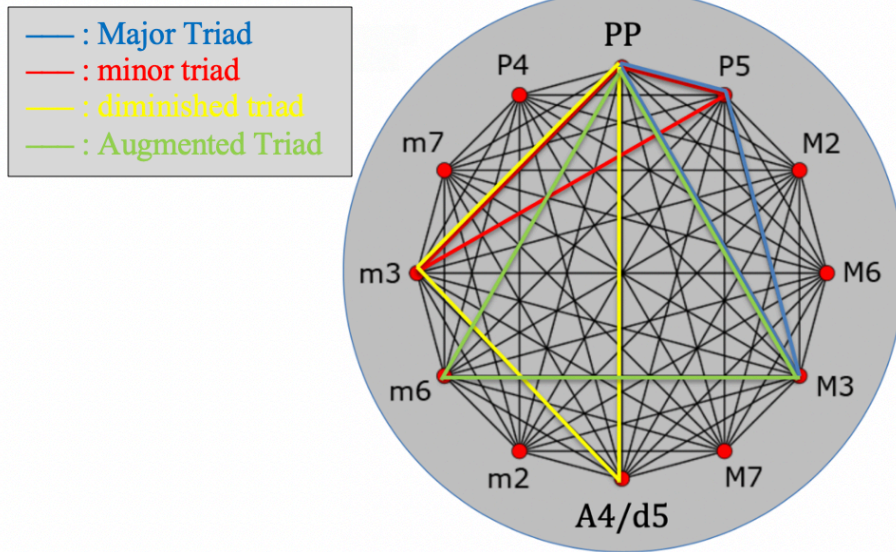
Depending on the qualities of the internal intervals the overall quality of the chord will become one of four types: Major, minor, Augmented, or diminished. (common abbreviations are given in parentheses)



Triad can also appear in inversion, which means that the root note is not always the bottom note of the chord. We determine the inversion of the chord based on the part of the triad that is in the *bass position*.



Regardless of inversion (which does not change the quality of the chord) we can relate each triad quality back to the circle of fifths, which results in a specific triangular relationship for each quality.

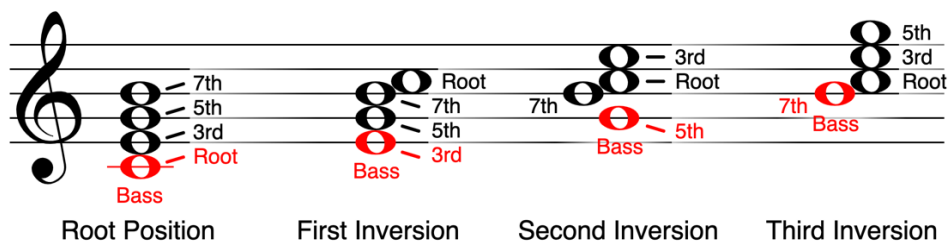


**Seventh Chords**

We can extend a given triad by adding a seventh above the root. This results in a new type of chord that we call a *seventh chord*. The addition of another note allows for greater variance in chord quality; the five most common seventh chord qualities are given according to the following table.

Seventh Chord	= Triad	+ Seventh Interval	Abbreviation
Dominant 7th	Major Triad	Minor	<b>7</b>
Major 7th	Major Triad	Major	<b>M7</b>
Minor 7th	Minor Triad	Minor	<b>m7</b>
Half-diminished 7th	Diminished Triad	Minor	<b>ø7</b>
Diminished 7th	Diminished Triad	Diminished	<b>°7</b>

As with triads, seventh chords may also appear in inversion and the inversion is determined again by the part of the chord in the *bass position*.



**Closing:** Check your understanding of the lesson by identifying the following chords on the staff with a root note and quality. Indicate the inversion where appropriate.

1

\_\_\_\_\_

2

\_\_\_\_\_

3

\_\_\_\_\_

4

\_\_\_\_\_

5

\_\_\_\_\_

6

\_\_\_\_\_

7

\_\_\_\_\_

8

\_\_\_\_\_



**Wednesday, May 20**

Music Theory Unit: Theory Review  
Lesson 3: Review of Roman Numerals

**Objective:** Be able to do this by the end of this lesson.

1. Recall the process for relating chords to key signatures and be able to analyze chords using a system of Roman numerals.

**Introduction to Lesson 3: Review of Roman Numerals**

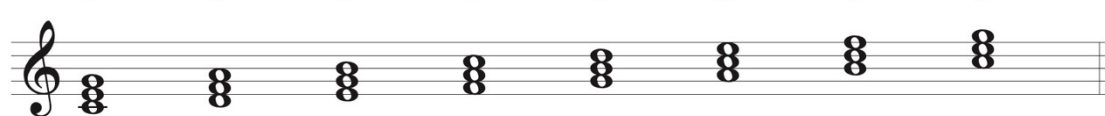
Much like diatonic intervals that appear unaltered inside a key signature, we can have diatonic chords that also adhere to patterns governed by the key signature. When we relate a chord to a key signature, we are identifying the relationship between the root of the chord and the tonic note of the key (i.e. the first scale degree). To distinguish the triads built on the various scale degrees from the scale degrees themselves we use a system of Roman numerals to identify them. We can manipulate Roman numerals in various ways to communicate the root and quality of the chord according to the following chart.

Triad type	Roman numeral	Example
Major	Uppercase	V
Minor	Lowercase	ii
Diminished	Lowercase with a °	vii°
Augmented	Uppercase with a +	III+

Accordingly, we can analyze the chords in the major scale with Roman numerals as follows...

Scale degree  
of root note

1            2            3            4            5            6            7            8



Roman numeral    I            ii            iii            IV            V            vi            vii°            I

- This system allows us to identify diatonic chords in any key according to the scale degree of its root note and the overall quality of the chord.
- The triad's root is indicated by the number of the numeral and the quality is indicated by the form of the numeral itself.

In minor keys there are more triads possible because of the variation of scale degrees 6 and 7. There are a total of 13 possible triad that occur diatonically in minor keys, though there are still seven that are most common.

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On the staff below we see all 13 with the seven most common numerals circled.

Scale degree  
of root note

1 2 2 3 3 4 4 5 5 6 #6 7 #7

Roman numeral

i ii° ii III III+ iv IV v V VI #vi° VII vii°

Notice that the roots of the triads circled above all belong to the harmonic minor scale. In fact, all the notes of the circled triads belong to the harmonic minor scale, with the exception of the fifth of the III chord. That being said any and all of the 13 diatonic minor triads can appear in a minor key signature.

### Analyzing Seventh Chords

Because, as we have already observed, seventh chords are just extensions of triadic harmonies, we can, in a similar way, add on to the existing Roman numeral to denote a seventh chord extension.

I<sup>M7</sup> ii<sup>7</sup> iii<sup>7</sup> IV<sup>M7</sup> V<sup>7</sup> vi<sup>7</sup> vii<sup>o7</sup> I<sup>M7</sup>

- Notice that for minor seventh chords the roman numeral is already lowercase, which denotes minor, so we don't include the "m" in the extension.
- For major sevenths and dominant sevenths, we do make the distinction because both of these qualities are extension on a major triad.
- The chord that arises in major keys on the seventh scale degree is now a half-diminished seventh chord.
- Four of the five seventh chord qualities appear diatonically in major keys.

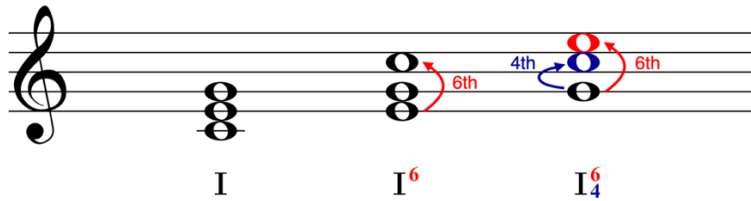
When we look at seventh chords in minor, the problem of minor reemerges. Because of the variability of scale degrees 6 and 7, there are sixteen possible diatonic seventh chords in minor. This however, we again restrict to only those that commonly appear. The following are the most common diatonic seventh chords found in minor keys.

i<sup>7</sup> ii<sup>o7</sup> III<sup>M7</sup> iv<sup>7</sup> V<sup>7</sup> VI<sup>M7</sup> vii<sup>o7</sup> i<sup>7</sup>

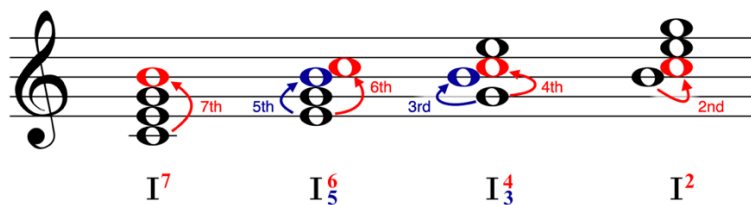
- Those chords which are minor do not carry the "m" in the extension by virtue of the lowercase Roman numeral.
- Notice now the presence of all five seventh chord types in minor keys.

**Inversion Symbols**

When we invert a chord, as we have seen, the part of the chord in the bass position changes, which results in different intervals above the note in the bass. We identify the inversion by labeling these ‘unexpected’ intervals that arise (that is, those intervals that are not the normal third and fifth seen in a “close root position triad”)

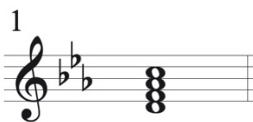


- Root position triads remain unaltered in their Roman numeral.
- First inversion results in an interval of a 6<sup>th</sup> above the bass note, so we add a superscript “6” to the numeral.
- Second inversion we see both a 4<sup>th</sup> and a 6<sup>th</sup> above the bass note so we notate both intervals with a superscript “6” and a subscript “4” stacked on top of each other.



- Root position seventh chords carry the “7” extension as we have already seen.
- First inversion has a 6<sup>th</sup> above the bass note but in order to distinguish from a first inversion triad we will also notate the 5<sup>th</sup>
- Second inversion has both a 6<sup>th</sup> and a 4<sup>th</sup> but again this is too similar to the inversion for the triad. To differentiate we will take the 4<sup>th</sup> and the 3<sup>rd</sup> as our unique interval markers.
- Third inversion has a 2<sup>nd</sup> above the bass note which is unique enough that we will use it for our shorthand of this inversion.

**Closing:** Check your understanding of the lesson by identifying the following chords on the staff with a Roman numeral. Indicate the inversion where appropriate.



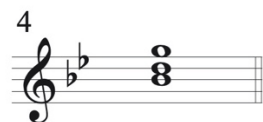
E<sup>b</sup>: \_\_\_\_



e: \_\_\_\_



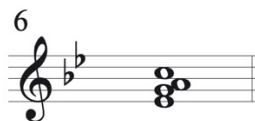
A: \_\_\_\_



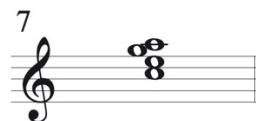
g: \_\_\_\_



G: \_\_\_\_



B<sup>b</sup>: \_\_\_\_



a: \_\_\_\_



D<sup>b</sup>: \_\_\_\_

**Thursday, May 21**

Music Theory Unit: Theory Review  
Lesson 4: Review of Harmonic Function

**Objective:** Be able to do this by the end of this lesson.

1. Identify chords according to their harmonic function

**Introduction to Lesson 4: Review of Harmonic Function**

In tonal music, harmonies tend to cluster around three high-level categories of harmonic function. These categories are traditionally called *tonic* (T), *predominant* (P), and *dominant* (D). Each of these functions has their own characteristic tendencies. And each of these functions tend to participate in certain kinds of chord progressions more than others.

- Tonic Chords: establish the key center and provide a point of rest and resolution within the music.
- Dominant Chords: are the second most important structural chord next to the tonic and create tension that establishes a goal of motion toward the tonic chord.
- Predominant Chords: extend the tonic-dominant-tonic progression and provide for variation in the chord progression as it approaches dominant functioning chords.

Because we are already comfortable with Roman numerals, we can generally think of I, iii, and vi as *tonic*, ii and IV as *subdominant*, and V and vii<sup>o</sup> as *dominant*. This is possible because of the principle of chord substitution.

*Chord substitution* is the principle that says, since chords function according to the tendencies of their component parts, if two triads share two notes in common, they will function similarly and can be substituted for each other.

**Expanded Form**

Chords are, as we have observed, not always going to be in root position. This is because progressions tend to sound best when we have smooth voice leading (i.e. individual voices tend to want to move by step where possible, and large leaps are used sparingly) As we encounter chords in expanded form remember that the voicing of a given chord (much like its inversion) does not affect its quality, but it will affect its function.

The image shows a musical score in G major (one sharp) and 4/4 time. The melody is in the treble clef and the bass line is in the bass clef. The chords are labeled with Roman numerals: I, vi, I<sup>6</sup>, IV<sup>M7</sup>, V, <sup>7</sup>I, I, <sup>7</sup>I<sup>6</sup>, V, <sup>7</sup>I. The last three chords (I<sup>6</sup>, V, <sup>7</sup>I) are enclosed in boxes. The <sup>7</sup>I chord is a first inversion tonic triad (B-D-G).

What is the function (tonic, predominant, or dominant) of the chords in the boxes? How are they analyzed with Roman numerals?

**Closing:** Check your understanding of harmonic function by completing the following analysis with Roman numerals and then labeling chords with their function: **(T)** for tonic, **(P)** for predominant, and **(D)** for dominant. Remember that notes in parentheses are non-chord tones and are not to be included in the harmonic analysis.

*BWV 274 – Christe, der du bist Tag und Licht* J.S. Bach

i<sup>6</sup>     $\frac{5}{3}$     6    v    i<sup>6</sup>    i    vii<sup>o6</sup><sub>4</sub>    i

**Friday, May 22**

Music Theory Unit: Theory Review  
Quiz: Musical Order

**Objective:** Be able to do this by the end of this lesson.

1. Demonstrate understanding of musical order by taking a written assessment.

**Quiz: Musical Order**

To assess your understanding of this week’s lessons you will respond to the following prompt. Please allot yourself 20 minutes to complete the prompt. Be sure to reference topics that we have discussed throughout the semester and to use the proper musical terms.

In 5 – 7 complete sentences (you may write more if you wish) respond again to the question we considered on the first day of class: *What is the relationship between order and the Beautiful? How does this relationship relate to musical structures? Given what you have learned this semester, has your understanding of this relationship changed? Why or why not?*

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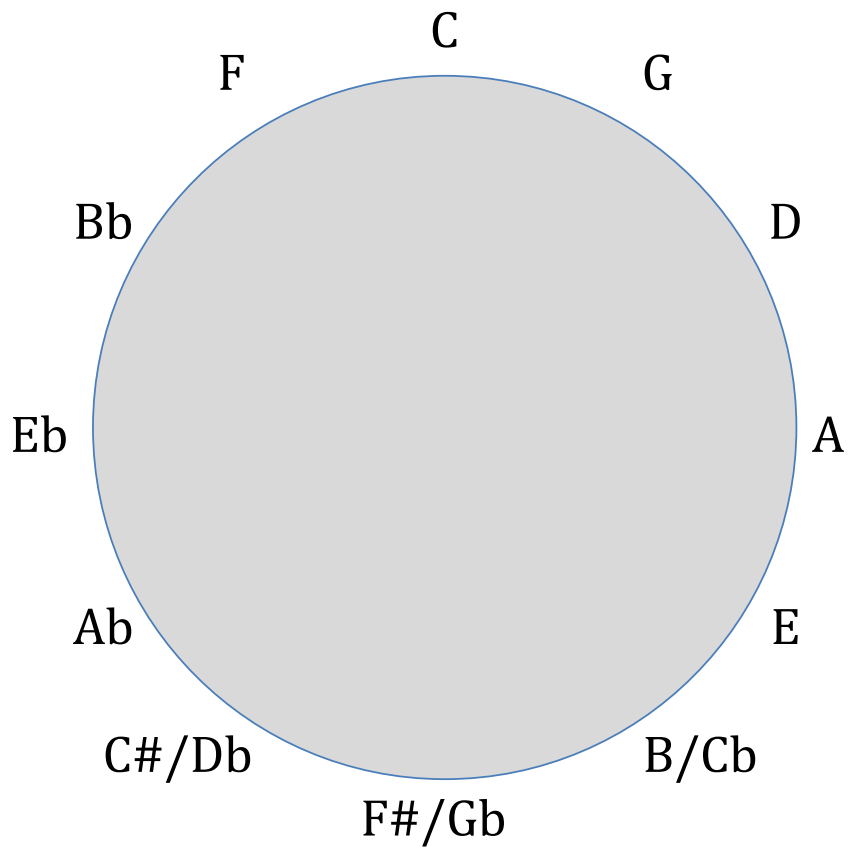
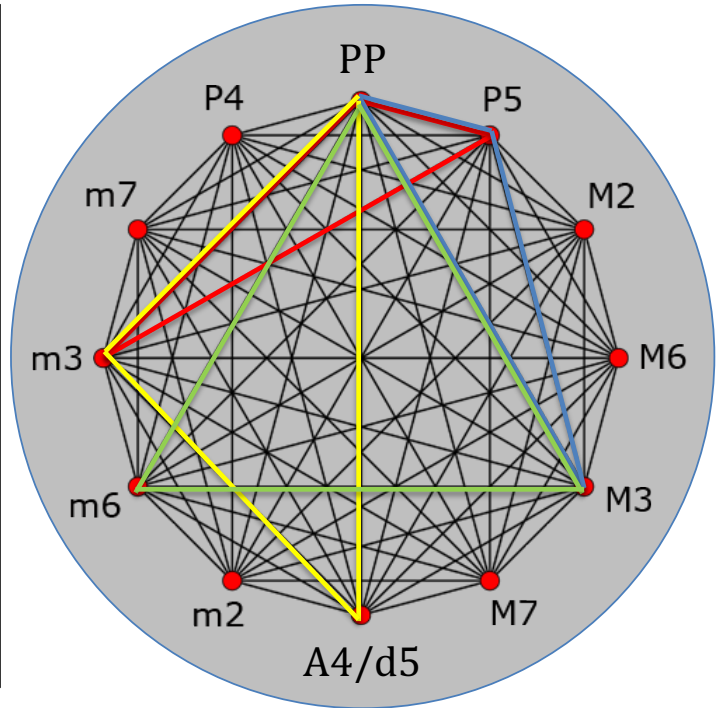
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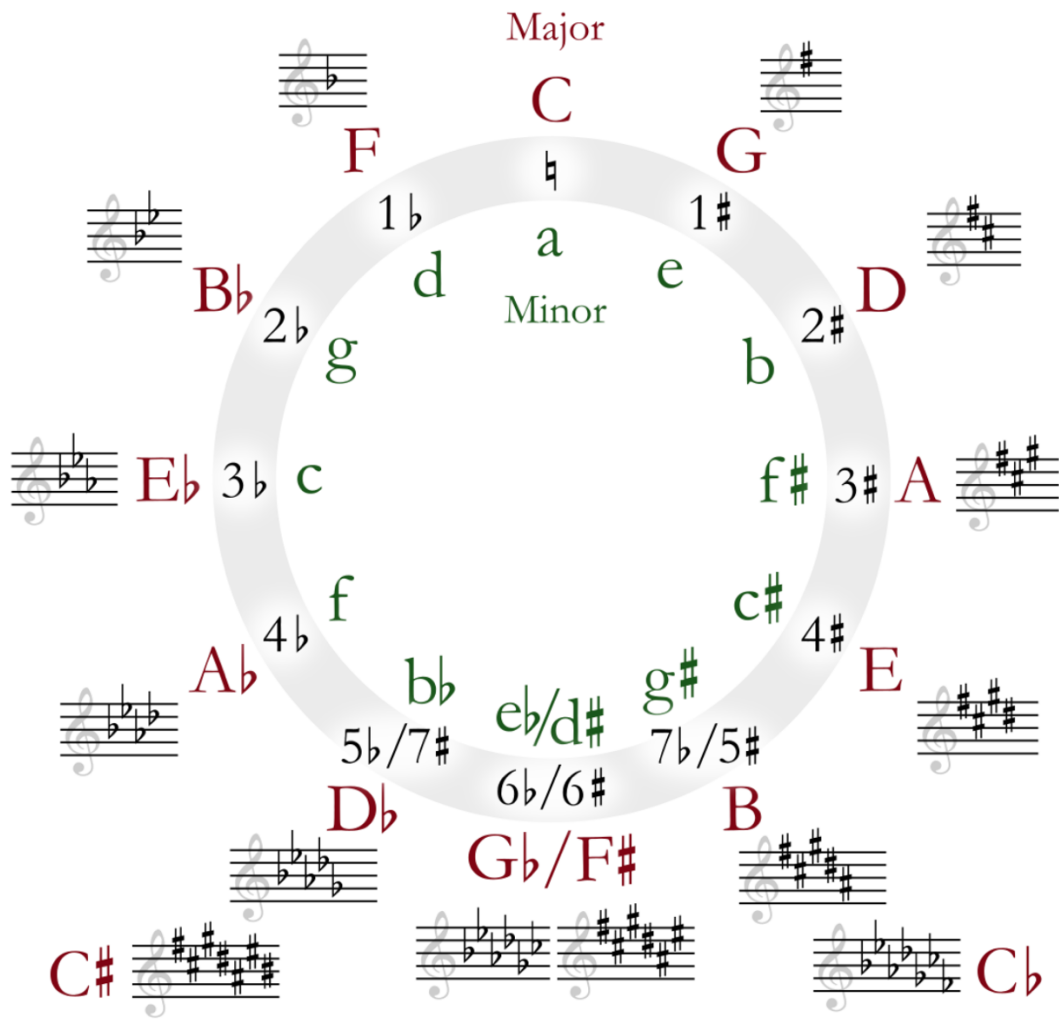
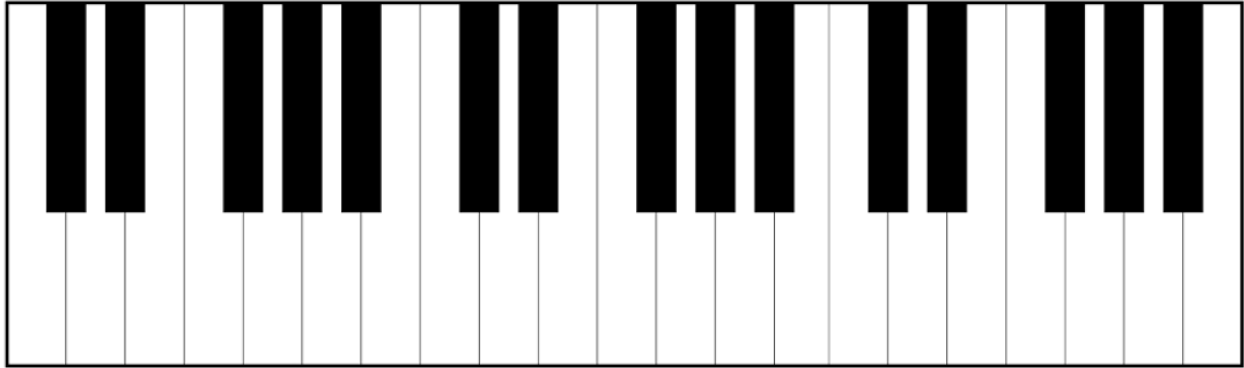
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- Cut along the circumference of the circle to the right, and along the dotted line below.  
 - Lay the interval structure on top of the circle of 5<sup>ths</sup> at the bottom of the page to form the interval calculator.  
 - When calculating intervals make sure to align prime (PP) with the lower note in the interval.

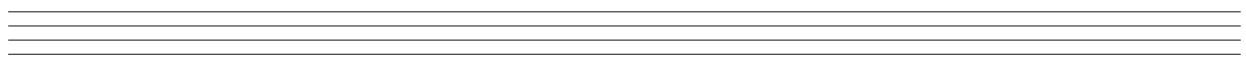
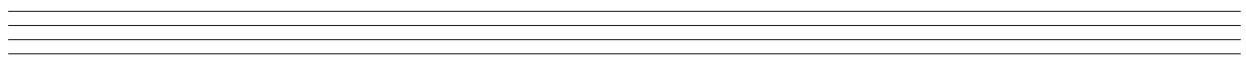
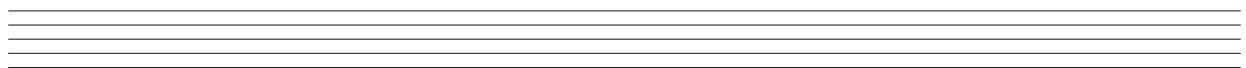
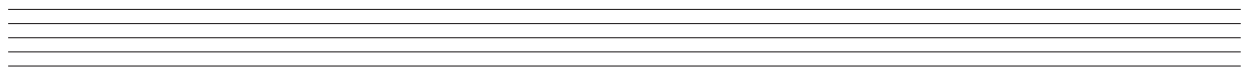
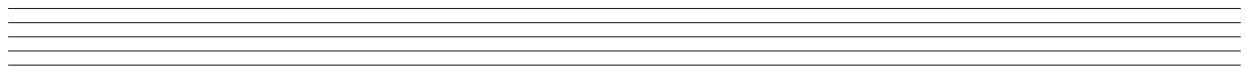
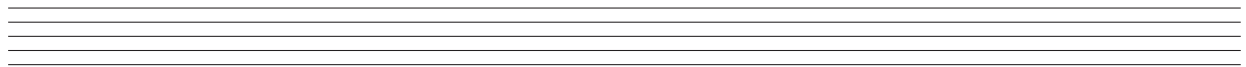
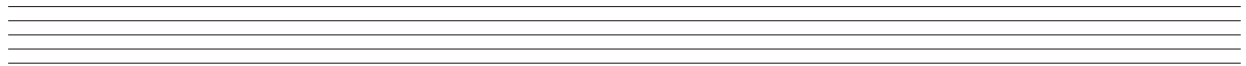
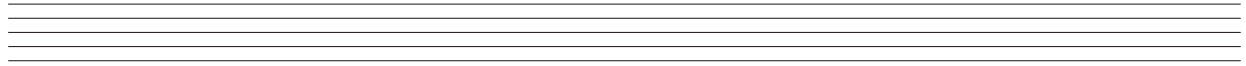
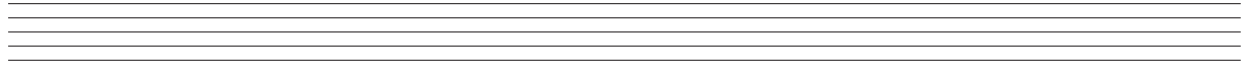


Music Theory Reference Sheet

*This sheet may be used as a study aid during the week's lessons*


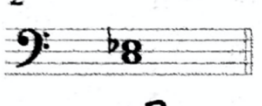
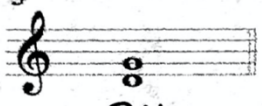
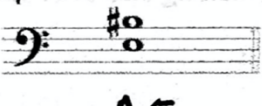

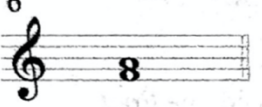
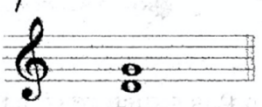
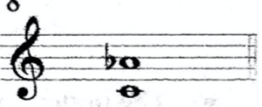




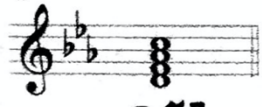
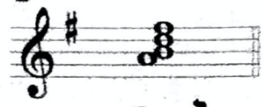
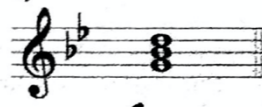


Answer Key

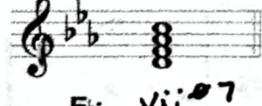
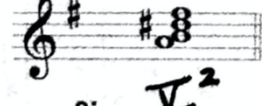

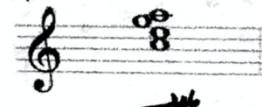
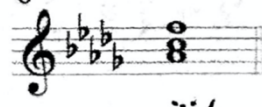
Monday, May 18

1  <u>A5</u>	2  <u>m3</u>	3  <u>P4</u>	4  <u>A5</u>
5  <u>M7</u>	6  <u>M3</u>	7  <u>P4</u>	8  <u>m6</u>

Tuesday, May 19

1  <u>D<sup>#</sup>7</u>	2  <u>Bm<sup>1</sup> 3<sup>rd</sup> inv.</u>	3  <u>G<sup>#</sup>m</u>	4  <u>Gm</u>
5  <u>D<sup>+</sup></u>	6  <u>A<sup>b</sup>M7 2<sup>nd</sup> inv.</u>	7  <u>Cm7 1<sup>st</sup> inv.</u>	8  <u>F<sup>b</sup>+</u>

Wednesday, May 20

1  <u>E<sup>b</sup>: VII<sup>#</sup>7</u>	2  <u>e: V<sup>2</sup></u>	3  <u>A: VII<sup>#</sup>4</u>	4  <u>g: i<sup>b</sup></u>
5  <u>G: V</u>	6  <u>B<sup>b</sup>: VII<sup>#</sup>4/3</u>	7  <u>a: III<sup>#</sup>6</u>	8  <u>D<sup>b</sup>: III<sup>b</sup>6</u>

Thursday, May 21

I vi I<sup>6</sup> IV<sup>M7</sup> V 7 I I 7 Vii<sup>6</sup> I<sup>6</sup> ii<sup>7</sup> V I

(D) (P)

BWV 274 – *Christe, der du bist Tag und Licht*

J.S. Bach

i<sup>6</sup> 6 v i<sup>6</sup> vii<sup>6</sup> i vii<sup>6</sup> V i

(D) (T) (D) (T) (D) - (T)