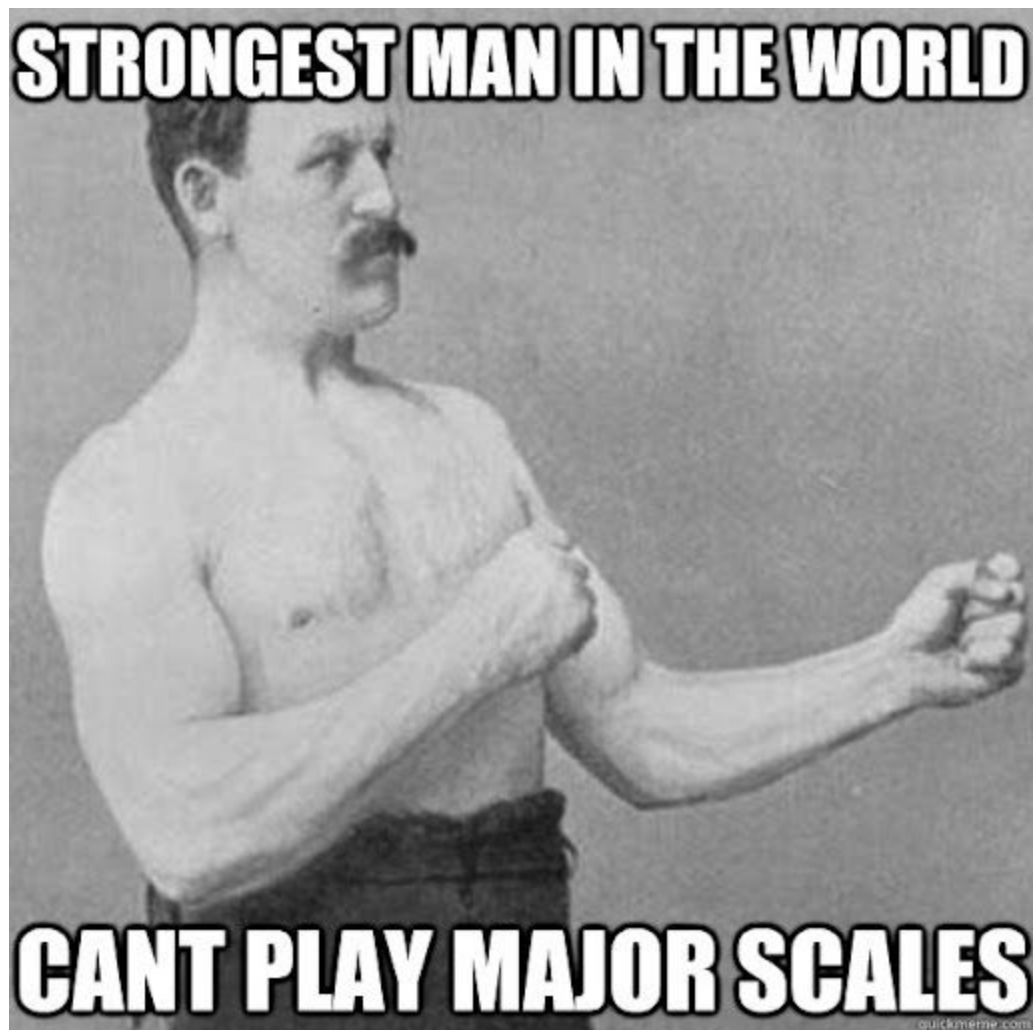


# Music Theory for the Organist

November 2024

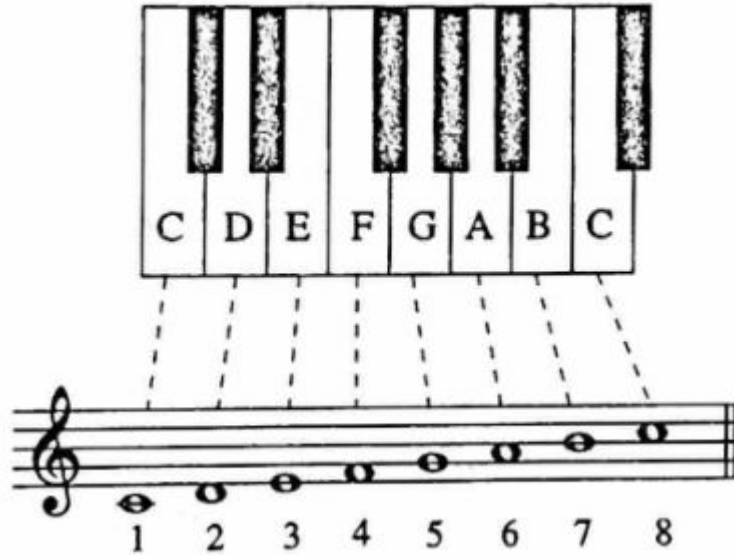
Levels 1-2

Scales



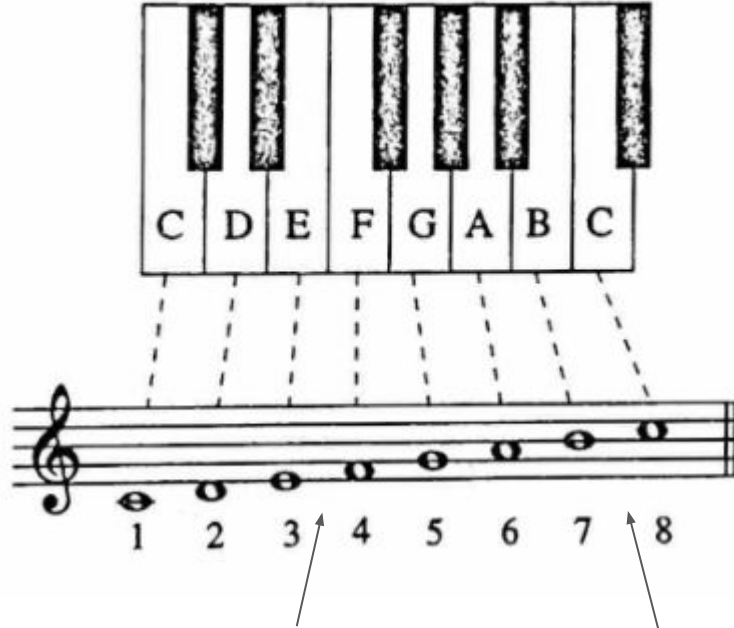
# The Major Scale

Where are the half steps in this set of notes?



# The Major Scale

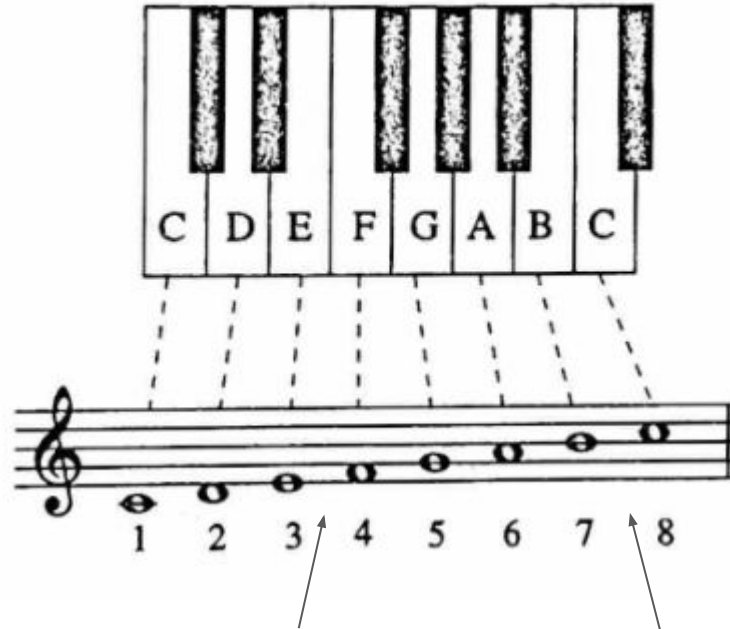
Where are the half steps in this set of notes?



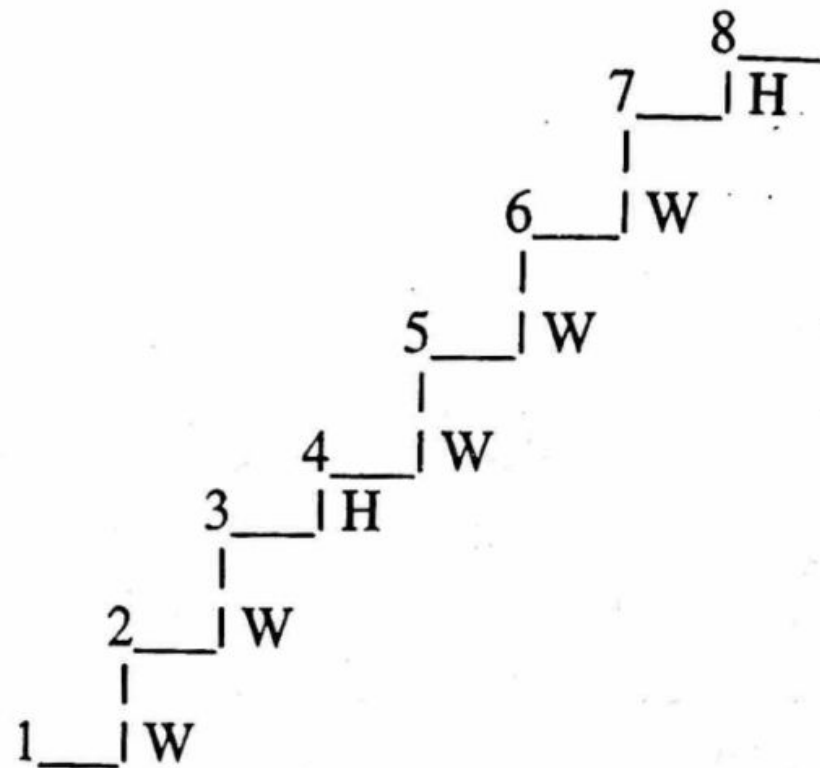
# The Major Scale

In the MAJOR scale, half steps occur between the 3rd and 4th degrees, and between the 7th

and 8th



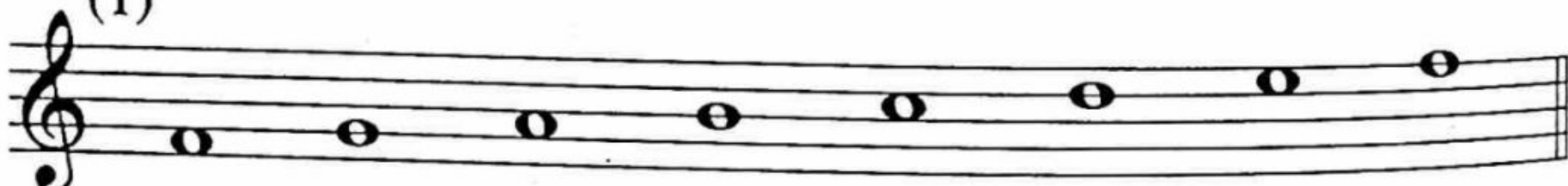
# Major Scale



H = half step  
W = whole step

Which of these is Major?

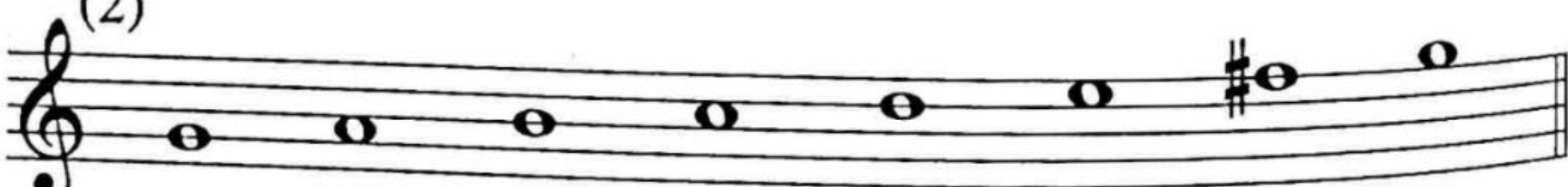
(1)



1 2 3 4 5 6 7 8

Detailed description: A single musical staff in treble clef with a key signature of one flat (B-flat). The notes are C4 (first space), D4 (second space), E4 (third space), F4 (third space, flat), G4 (fourth space), A4 (fifth space), B4 (fifth space, flat), and C5 (first line). The notes are numbered 1 through 8 below the staff.

(2)



1 2 3 4 5 6 7 8

Detailed description: A single musical staff in treble clef with a key signature of one sharp (F-sharp). The notes are C4 (first space), D4 (second space), E4 (third space), F4 (third space, sharp), G4 (fourth space), A4 (fifth space), B4 (fifth space, sharp), and C5 (first line). The notes are numbered 1 through 8 below the staff.



Which of these is Major? Number 2!

(1)

1 2 3 4 5 6 7 8

Detailed description: A musical staff in treble clef with a key signature of one flat (Bb). The notes are C4 (middle C), D4, E4, F4, G4, A4, B4, and C5. The notes are numbered 1 through 8 below the staff.

(2) ←

1 2 3 4 5 6 7 8

Detailed description: A musical staff in treble clef with a key signature of one flat (Bb). The notes are C4, D4, E4, F4, G4, A4, Bb4, and C5. The notes are numbered 1 through 8 below the staff. An arrow points to the label (2).

Which of these is major?

(1)

1 2 3 4 5 6 7 8

(2)

1 2 3 4 5 6 7 8

Detailed description: The image shows two musical staves in bass clef, each with an ascending scale of eight notes. Staff (1) starts on G2 and ends on A3, with a key signature of one sharp (F#). The notes are G2, A2, B2, C3, D3, E3, F#3, and G#3. Staff (2) starts on F#2 and ends on F#3, with a key signature of one sharp (F#). The notes are F#2, G2, A2, B2, C3, D3, E3, and F#3. The numbers 1 through 8 are placed below each note to indicate its position in the scale.

Which of these is major? Number 1!

(1) ←

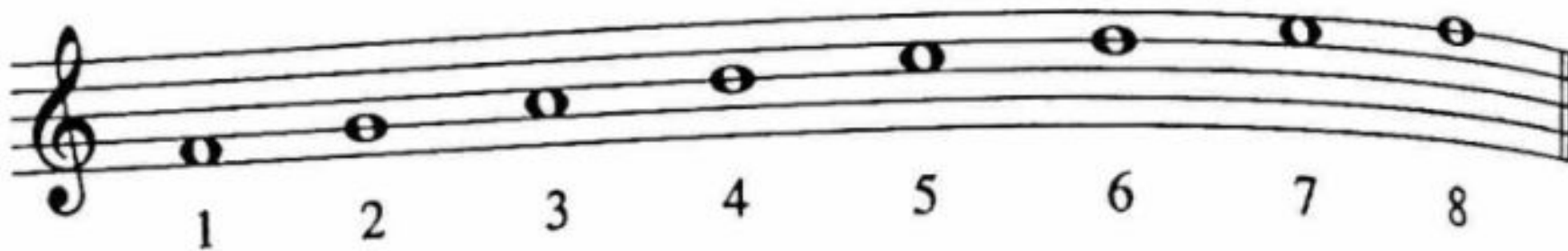
1 2 3 4 5 6 7 8

(2)

1 2 3 4 5 6 7 8

Detailed description: The image shows two musical staves in bass clef, each with eight numbered positions. Staff (1) starts with a double bar line and a sharp sign on the third line (F#). The notes are: 1. G (second space), 2. A (second space), 3. B (third line, sharp), 4. C (third space), 5. D (third space), 6. E (third space, sharp), 7. F# (third space, sharp), 8. G (third space). Staff (2) starts with a double bar line and a flat sign on the first line (F). The notes are: 1. F (first line, flat), 2. G (first space), 3. A (first space), 4. B (second line), 5. C (second space), 6. D (second space), 7. E (second space), 8. F# (second space, sharp).

Add accidentals to form the F major scale

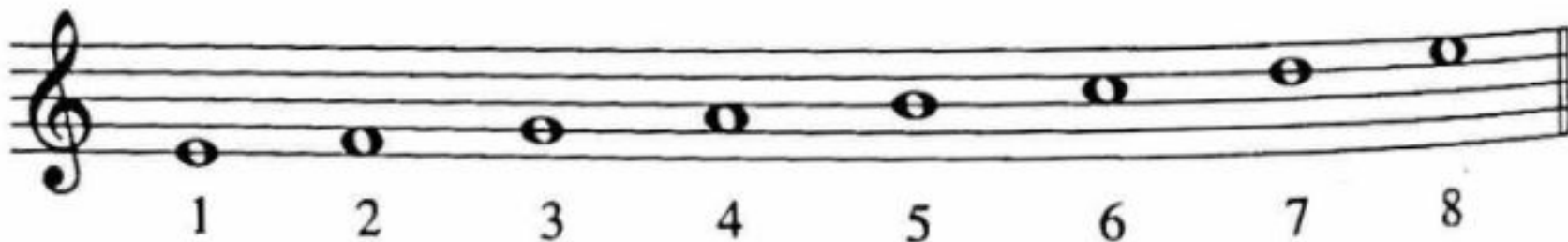


Add accidentals to form the F major scale

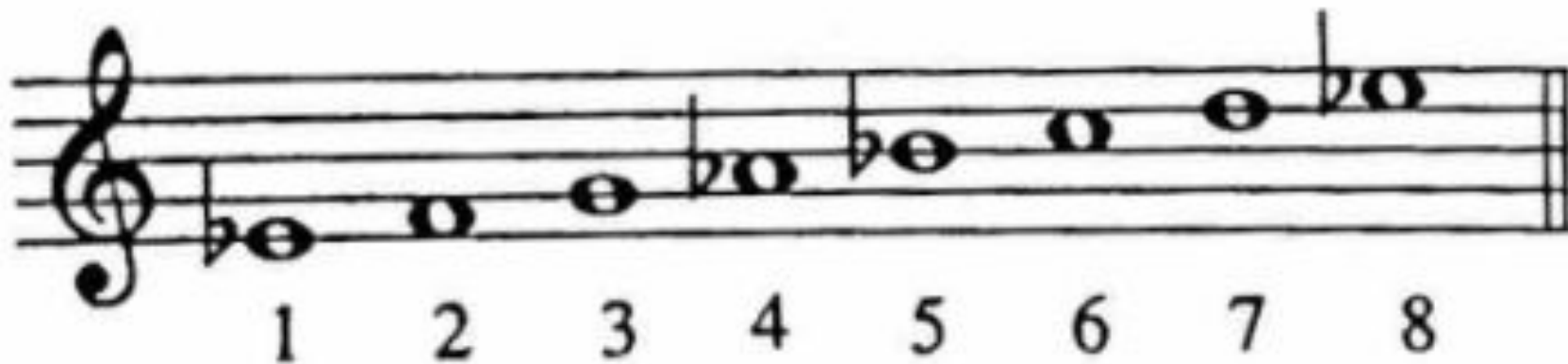


A musical staff in treble clef showing the first eight notes of the F major scale. The notes are: F (first line), G (first space), A (second line), Bb (second space), C (third line), D (third space), E (fourth line), and F (fourth space). Below the staff, the numbers 1 through 8 are placed under each note, indicating the fingerings for the right hand. A bar line is positioned between the third and fourth notes.

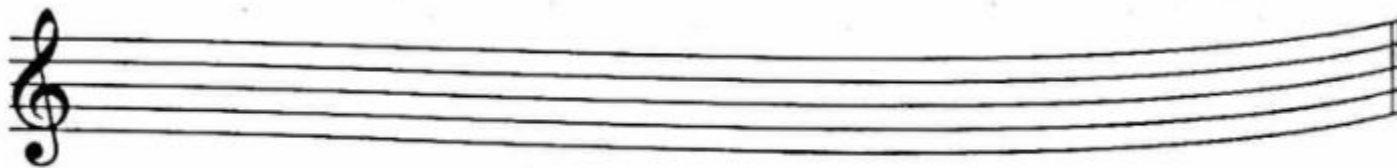
Add accidentals to form the Eb major scale:



Add accidentals to form the Eb major scale:

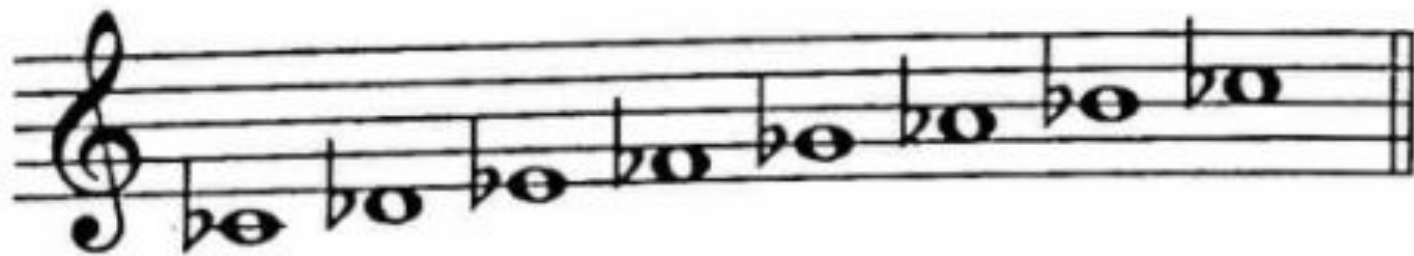


Write the Cb major scale:





Write the Cb major scale:



# Minor Scales

There are 3 types of minor scales:

- Natural minor
- Harmonic Minor
- Melodic Minor



# Minor Scales

There are 3 types of minor scales:

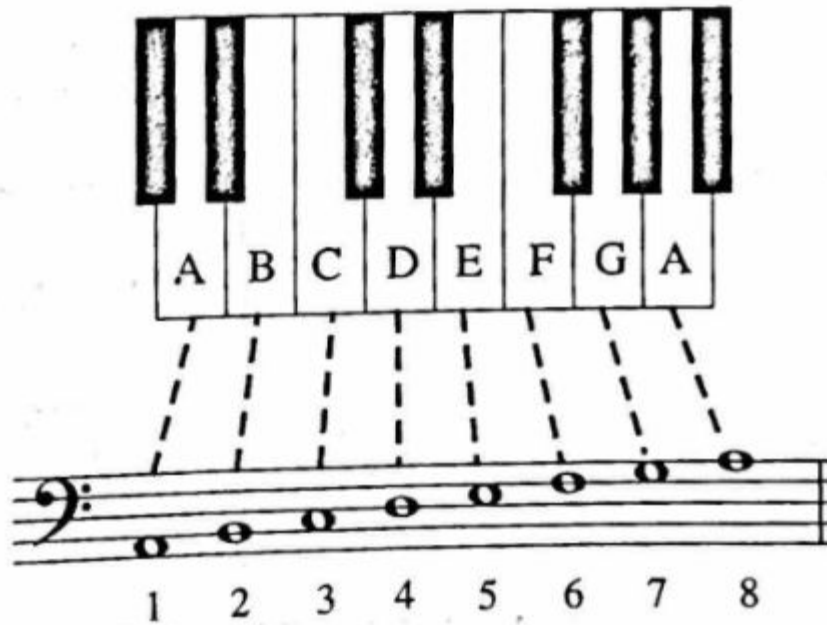
- Natural minor
- Harmonic Minor
- Melodic Minor

My goldfish are named Major, Minor, Dorian, Lydian and Diminished. The only way I can tell them apart is by their scales.

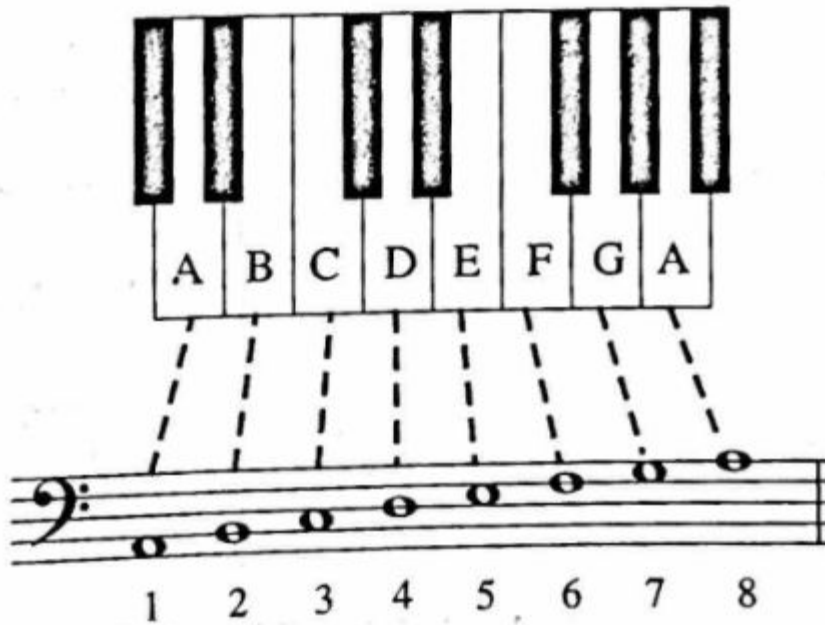
# Natural Minor Scales



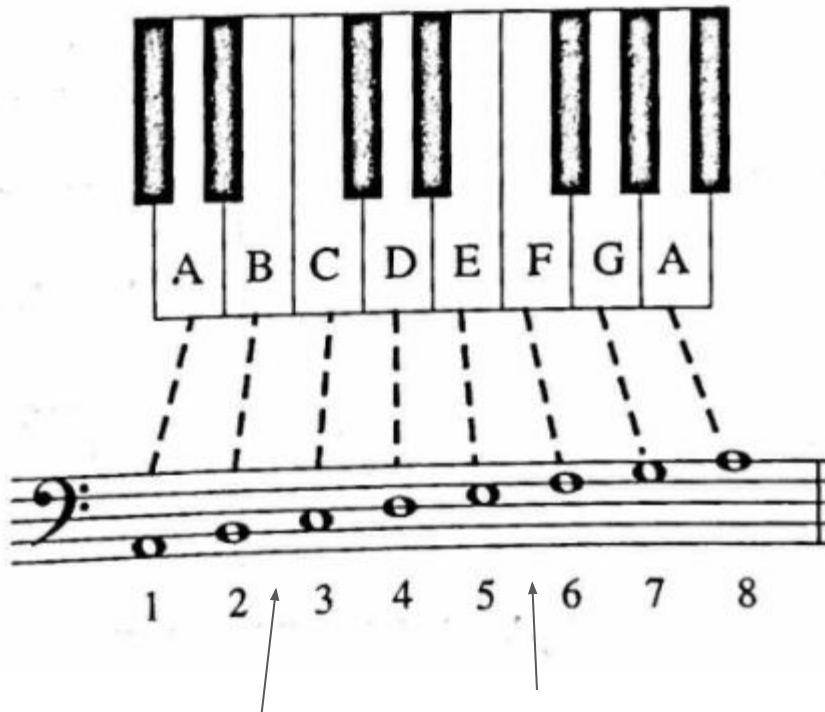
# Natural Minor Scales



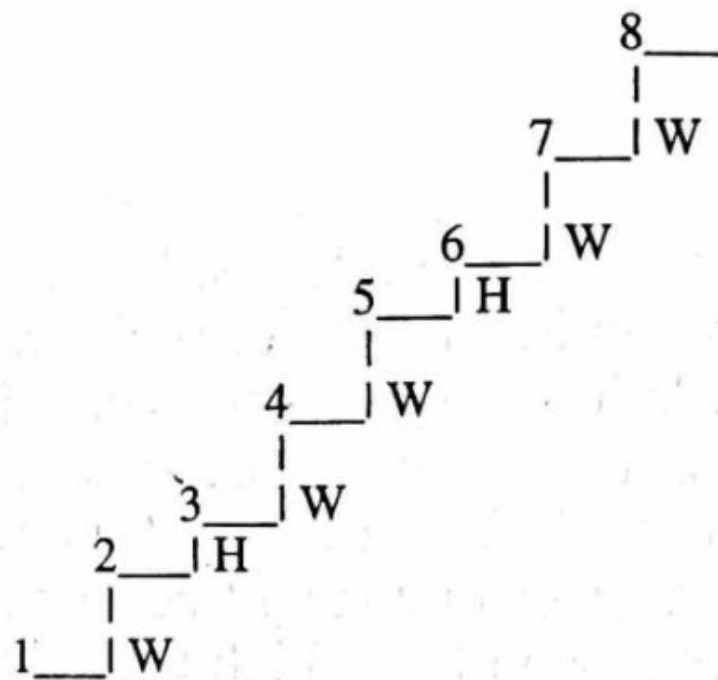
Where are the half steps in the natural minor scale?



Where are the half steps in the natural minor scale?



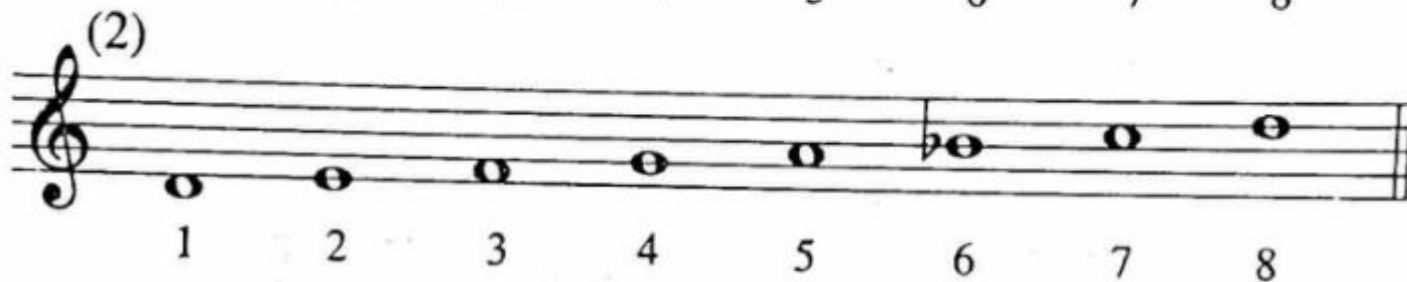
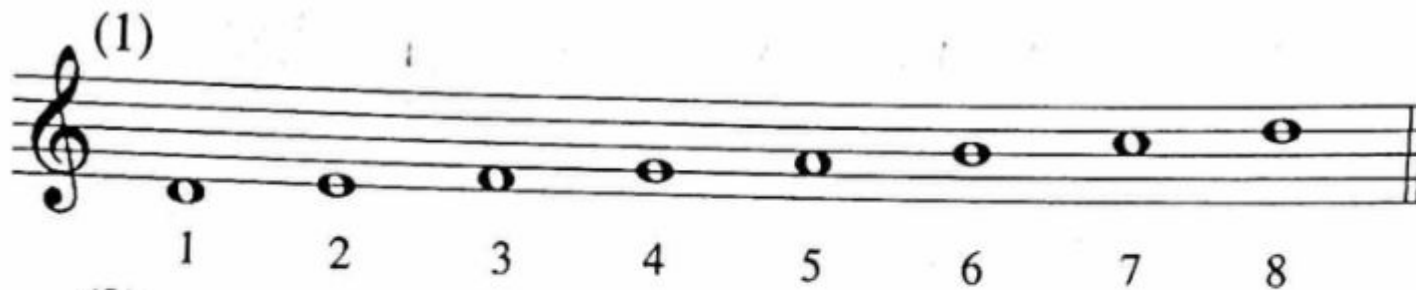
# Natural Minor Scale



H = half step  
W = whole step



Which of these scales is natural minor?



Which of these scales is natural minor?

(1)

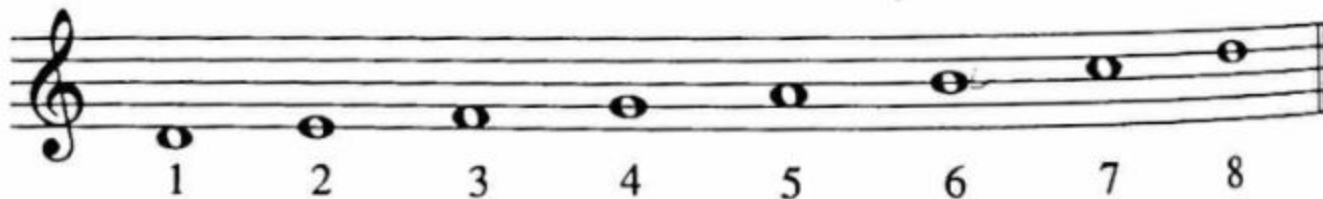
(2)

1 2 3 4 5 6 7 8

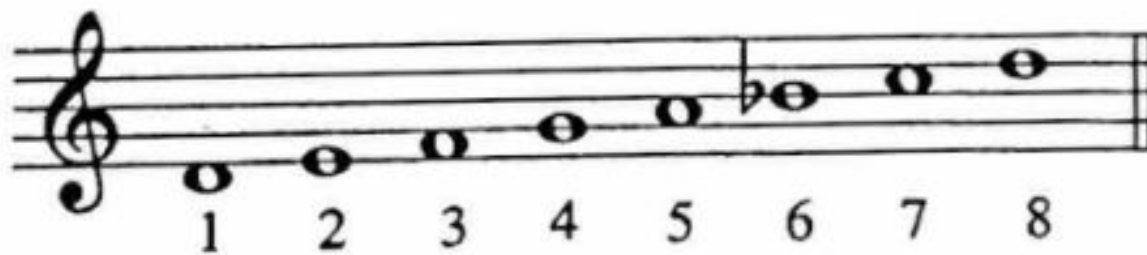
1 2 3 4 5 6 7 8

The image shows two musical scales on a treble clef staff. Scale (1) is a major scale with notes G4, A4, B4, C5, D5, E5, F5, and G5. Scale (2) is a natural minor scale with notes G4, A4, B4, C5, D5, E5, F5, and G5. An arrow points to the 6th note of scale (2), which is F5.

Add accidentals to make the d natural minor scale:



Add accidentals to make the d natural minor scale:



Levels 3-4

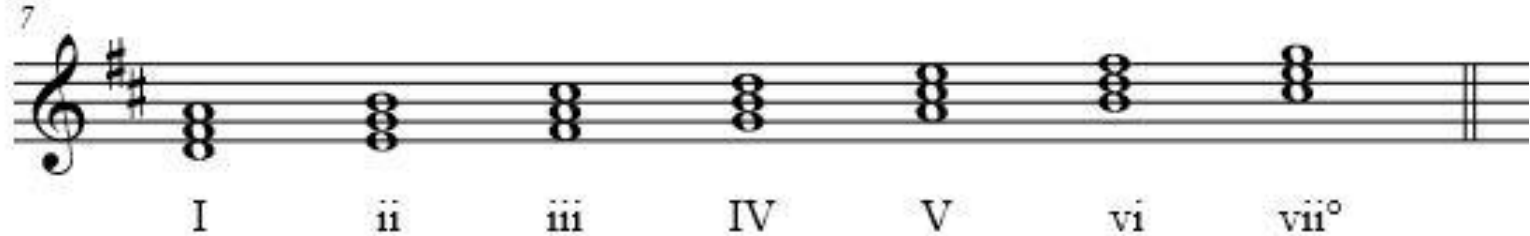
# Part 1: What is Tonality?

- Music composed between 1600-1900
- Based on major and minor scales.
- The “keynote” predominates over all other tones.
- The keynote is the same as the first note of the scale

# Tonal Harmony \*in handout

- Based on major and minor scales

7



The image shows a musical staff in G major (one sharp, F#) with seven diatonic triads. The triads are labeled I, ii, iii, IV, V, vi, and vii°. The notes for each triad are: I (G, B, D), ii (A, C, E), iii (B, D, F#), IV (C, E, G), V (D, F#, A), vi (E, G, B), and vii° (F#, A, C).

I      ii      iii      IV      V      vi      vii°

- These are diatonic triads, since they only use notes contained in the major or minor.

# Roman Numerals \*in handout

We use Roman numerals to identify the chords built off pitches of the major scale.

7

A musical staff in G major (one sharp) showing the seven chords of the major scale. The chords are represented by their Roman numerals: I, ii, iii, IV, V, vi, and vii°. The chords are built on the notes G, A, B, C, D, E, and F# respectively. The staff includes a treble clef, a key signature of one sharp (F#), and a double bar line at the end.

I      ii      iii      IV      V      vi      vii<sup>o</sup>



## Roman numerals cont.

- Major chords are written as upper case Roman numerals, e.g. I, IV, V
- Minor chords are written as lower-case Roman numerals, e.g. ii, iii, vi
- Diminished chords are written as lower-case Roman numerals with a diminished symbol, e.g. vii<sup>°</sup>

What are the Roman numerals here? (upper case or lower case)

10



I    \_\_\_\_\_

The image shows a musical staff with a treble clef and a key signature of two flats (B-flat major). The staff contains seven chords, each represented by a vertical stack of three notes. The first chord is a B-flat major triad (B-flat, D, F). Below the staff, the Roman numeral 'I' is written under the first chord, and six blank lines are provided for the other chords.

Cont.

What key is this, and what are the roman numerals?

10

The image shows a musical staff in bass clef with a key signature of one flat (B-flat). The staff contains seven chords, each represented by a vertical line with a small circle above it. The chords are: 1. B-flat major (B-flat, D, F), 2. D minor (D, F, A-flat), 3. F major (F, A, C), 4. A-flat major (A-flat, C, E-flat), 5. B-flat major (B-flat, D, F), 6. D minor (D, F, A-flat), 7. F major (F, A, C). Below the staff are seven horizontal lines, one under each chord, intended for writing Roman numerals.

10

A musical staff in bass clef with a key signature of one flat (Bb). The staff contains seven chords, each represented by a circle with a dot in the center, indicating a triad. The chords are: 1. i (G-Bb-D), 2. ii° (A-Bb-C), 3. III+ (Bb-C-D), 4. iv (E-F-G), 5. V (Bb-C-D), 6. VI (F-G-A), and 7. vii° (Ab-Bb-C). The staff ends with a double bar line.

G minor:

i

ii°

III+

iv

V

VI

vii°



The pattern is consistent throughout all major and minor scales

In major:

- 1st scale degree triad is: Major
- 2nd scale degree triad is: minor
- 3rd scale degree triad is: minor
- 4th scale degree triad is: Major
- 5th scale degree triad is: Major
- 6th scale degree triad is: minor
- 7th scale degree triad is: diminished



# In harmonic minor

- 1st scale degree triad is: minor
- 2nd scale degree triad is: diminished
- 3rd scale degree triad is: Augmented
- 4th scale degree triad is: minor
- 5th scale degree triad is: Major
- 6th scale degree triad is: Major
- 7th scale degree triad is: diminished

# Examples:

The image shows a musical staff with a treble clef and a key signature of one flat (Bb). The staff is divided into three measures by double bar lines. The first measure contains a chord with notes Bb, D, and F. The second measure contains a chord with notes E, G, and B. The third measure contains a chord with notes D, F, and A. Below the staff, the labels 'Bb:', 'e:', and 'D:' are positioned under the first, second, and third measures respectively, each followed by a horizontal line.

Bb: \_\_\_\_\_

e: \_\_\_\_\_

D: \_\_\_\_\_

Bb: I, e: III+: D: ii

The image shows a musical staff in treble clef with a key signature of two flats (Bb major). The staff is divided into three measures by double bar lines. The first measure contains a Bb major triad (Bb, D, F) and is labeled "Bb:" below it. The second measure contains an e minor triad (e, G, Bb) and is labeled "e:" below it. The third measure contains a D major triad (D, F#, A) and is labeled "D:" below it. Each measure has a horizontal line underneath it, likely indicating a fret position. The notes are represented by black circles on the staff lines.



# The Structure of Tonality

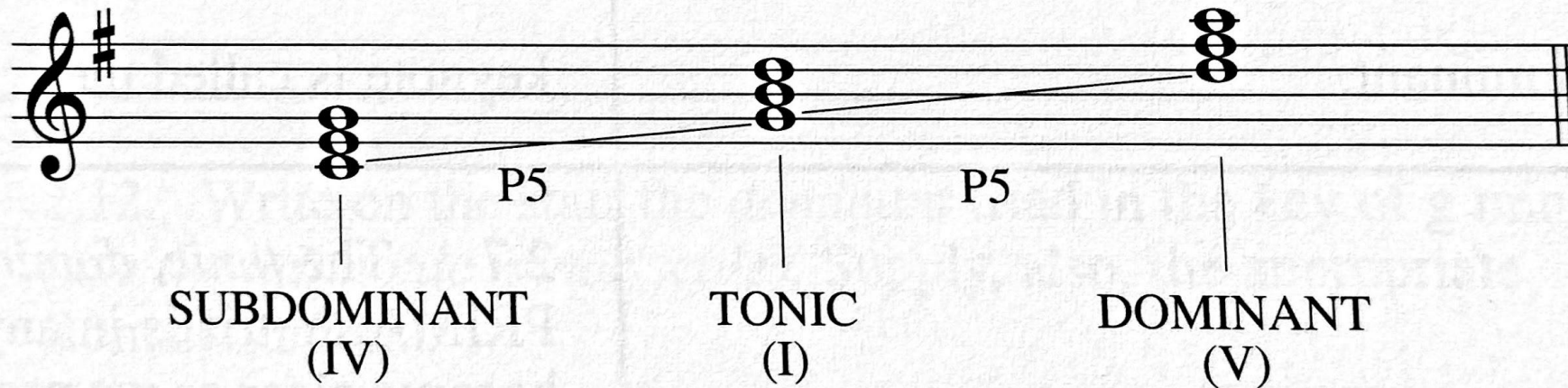
KEY OF G MAJOR

The diagram illustrates the structure of tonality in the key of G Major. It features a single musical staff with a treble clef and a key signature of one sharp (F#). Three triads are shown: the Subdominant (IV) chord, the Tonic (I) chord, and the Dominant (V) chord. The Subdominant chord consists of the notes B2, D3, and F#3. The Tonic chord consists of the notes G2, B2, and D3. The Dominant chord consists of the notes B2, D3, and F#3. The interval between the Subdominant and Tonic chords is a perfect fifth (P5), and the interval between the Tonic and Dominant chords is also a perfect fifth (P5). The chords are labeled as SUBDOMINANT (IV), TONIC (I), and DOMINANT (V) respectively. The labels 'P5' are placed between the chords to indicate the interval.

SUBDOMINANT (IV)      TONIC (I)      DOMINANT (V)

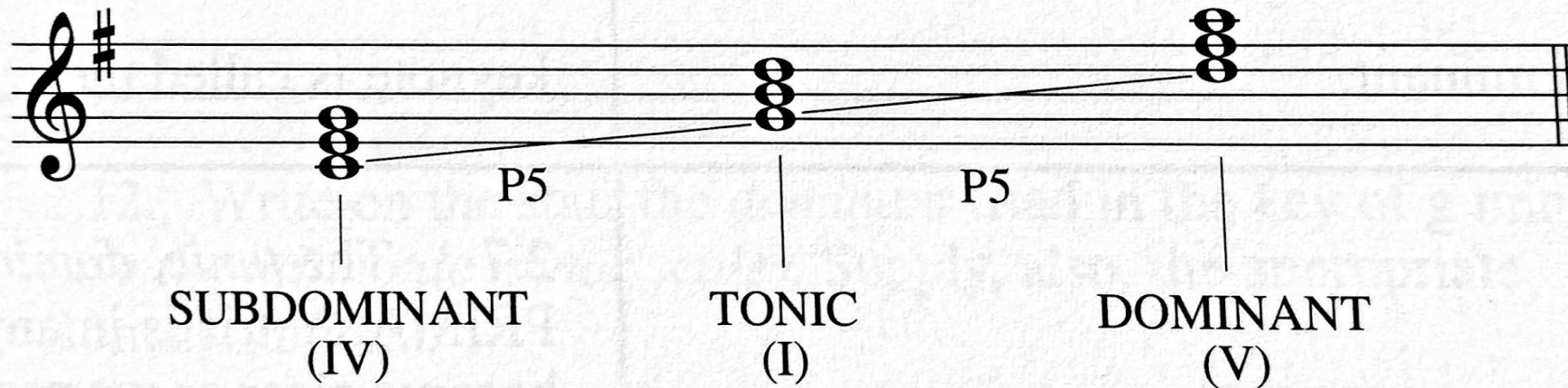
P5      P5

# KEY OF G MAJOR



- The word tonic comes from “tone” which represents our tonal center
- Subdominant is a 5th below (or a 4th above)
- Dominant is a 5th above

## KEY OF G MAJOR



- These three chords are the PRIMARY TRIADS in any key (I, IV, V)
- Their function is to progress the music toward the tonic.
- They are all related by a Perfect 5th (either up to V, or down to IV)

# KEY OF G MAJOR

A musical staff in the key of G major, indicated by a treble clef and a key signature of one sharp (F#). The staff displays five triads, each with a vertical line connecting it to its name and Roman numeral below. The chords shown are: Subdominant (IV) on the first line (D, F#, A), Submediant (vi) on the second space (B, D, F), Tonic (I) on the second space (G, B, D), Mediant (iii) on the third space (B, D, F), and Dominant (V) on the third space (B, D, F#). The Dominant chord is shown with a sharp sign on the F line, indicating the F#.

SUBDOMINANT  
(IV)

SUBMEDIANT  
(vi)

TONIC  
(I)

MEDIANT  
(iii)

DOMINANT  
(V)

Write the mediant and submediant triads in the key of b minor (use the harmonic minor scale)

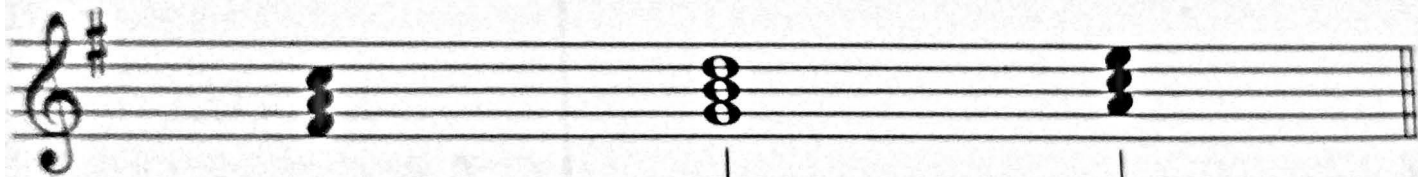
The image shows a musical staff in treble clef with a key signature of two sharps (F# and C#). The staff is divided into two sections by a double bar line. The left section is labeled "MEDIANT" and the right section is labeled "SUBMEDIANT". Below the staff, the key signature is indicated as "b:" (B-flat), and the Roman numerals "III<sup>+</sup>" and "VI" are placed under the two sections respectively.

MEDIANT

SUBMEDIANT

b: III<sup>+</sup> VI

# KEY OF G MAJOR



LEADING TONE  
(vii°)

TONIC  
(I)

SUPERTONIC  
(ii)

Which of these chords is the leading tone of F major?

The image shows a musical staff with a treble clef and a key signature of one flat (Bb). The staff is divided into four measures, each containing a chord. The chords are labeled (1) through (4) above the staff. The first measure is labeled 'F:' below the staff. The chords are: (1) F major (F, A, C), (2) F minor (F, Ab, C), (3) F major with a flat (F, Ab, C), and (4) F major with a sharp (F, A, C#).


Which of these triads is the leading tone in the key of bb minor?

The image shows a musical staff in treble clef with a key signature of two flats (B-flat and E-flat), indicated by a key signature symbol (bb:) below the staff. The staff is divided into four measures, each containing a triad. The triads are labeled (1), (2), (3), and (4) above them. Triad (1) consists of B-flat, D-flat, and F. Triad (2) consists of D-flat, F, and A-flat. Triad (3) consists of F, A-flat, and B-flat. Triad (4) consists of A-flat, B-flat, and C. The key signature is B-flat minor.



What term is appropriate for this chord?

KEY OF F MINOR



The image shows a musical staff with a treble clef and a key signature of two flats (Bb and Eb). The chord is represented by three notes: F (first space), Ab (second space), and Cb (third space). The notes are grouped together with a brace, indicating a triad. The text "KEY OF F MINOR" is written above the staff.

# Harmonic Activity

Tonic: The Tonic is a relatively neutral chord. Most compositions begin and end with this harmony and it has a sense of relative repose.

# Joseph Smith's First Prayer

26

*With dignity* ♩ = 84-92

The musical score is written in 4/4 time with a key signature of one flat (B-flat). It consists of two staves: a treble staff and a bass staff. The melody is primarily in the treble staff, with the bass staff providing harmonic support. The lyrics are written below the staves. A fermata is placed over the first measure of the treble staff. The lyrics are:

1. Oh, how love - ly was the morn - ing!  
2. Hum - bly kneel - ing, sweet ap - peal - ing  
3. Sud - den - ly a light de - scend - ed,  
4. "Jo - seph, this is my Be - lov - ed;

Most active chord is the dominant on at measure 2, which demands a resolution to the tonic. The harmony is tonic - dominant Dominant chord sounds incomplete.

# Joseph Smith's First Prayer

26

*With dignity* ♩ = 84-92

The musical score is written for a single melodic line in 4/4 time, featuring a treble clef and a key signature of one flat (B-flat). The tempo is marked 'With dignity' with a quarter note equal to 84-92 beats per minute. The score consists of 12 measures. The first measure begins with a fermata over a G4 note. The melody is primarily composed of quarter and eighth notes, with some rests. The final measure concludes with a fermata over a G4 note, marked with a '7' above it, indicating a final cadence. The lyrics are printed below the staff, with line numbers 1 through 4 corresponding to the four lines of text.

1. Oh, how love - ly was the morn - ing! Ra - diant beamed the sun a - bove.  
2. Hum - bly kneel - ing, sweet ap - peal - ing 'Twas the boy's first ut - tered prayer  
3. Sud - den - ly a light de - scend - ed, Bright - er far than noon - day sun,  
4. "Jo - seph, this is my Be - lov - ed; Hear him!" Oh, how sweet the word!

The dominant chord progresses the line back to the tonic.

## Israel, Israel, God Is Calling

*With spirit* ♩ = 72-84

1. Is - rael, Is-rael, God is call - ing, Call - ing thee from lands of woe.  
 2. Is - rael, Is-rael, God is speak - ing. Hear your great De - liv-'rer's voice!  
 3. Is - rael, an-gels are de-scend - ing From ce - les-tial worlds on high,  
 4. Is - rael! Is-rael! Canst thou lin - ger Still in er - ror's gloom-y ways?

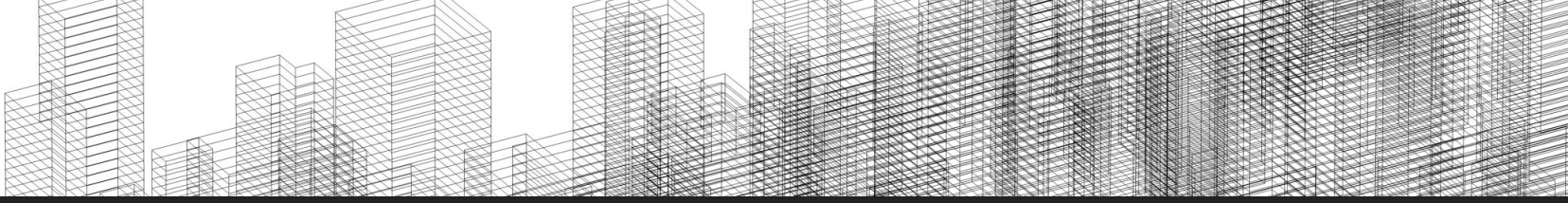


- Bab - y - lon the great is fall - ing; God shall all her tow'rs o'er-throw.  
 Now a glo-rious morn is break - ing For the peo-ple of his choice.  
 And to man their pow'r ex - tend - ing, That the Saints may home-ward fly.  
 Mark how judg-ment's point-ing fin - ger Jus - ti - fies no vain de - lays.



What is the  
harmonic  
movement  
here?

Does it end  
with a sense of  
finality?



# Harmonic motion

A commonly seen pattern is harmonic motion from IV - V - I. For example:

169

## As Now We Take the Sacrament

The image shows a musical score for the hymn 'As Now We Take the Sacrament'. It consists of two staves: a treble clef staff at the top and a bass clef staff at the bottom. The key signature is one flat (B-flat) and the time signature is common time (C). The melody is written in the treble staff, and the bass line is in the bass staff. The lyrics are centered between the two staves.

To us the gift of life was giv'n For all e - ter - ni - ty.  
With hands now pledged to do thy work, We take the sac - ra - ment.  
We love thee, Lord; our hearts are full. We'll walk thy cho - sen way.

What chords are the primary chords in G major?

I: \_\_\_\_\_

IV: \_\_\_\_\_

V: \_\_\_\_\_



What chords are the primary chords in G major?

I: G

IV: C

V: D

What chords are the secondary chords in G major?

ii: \_\_\_\_\_

iii: \_\_\_\_\_

vi: \_\_\_\_\_

vii<sup>o</sup>: \_\_\_\_\_

What chords are the secondary chords in G major?

ii: a

iii: b

vi: e

vii<sup>o</sup>: f#<sup>o</sup>

# Secondary chords

Secondary triads are closely related to the primary triads. Note the “common tones”

KEY OF C MAJOR

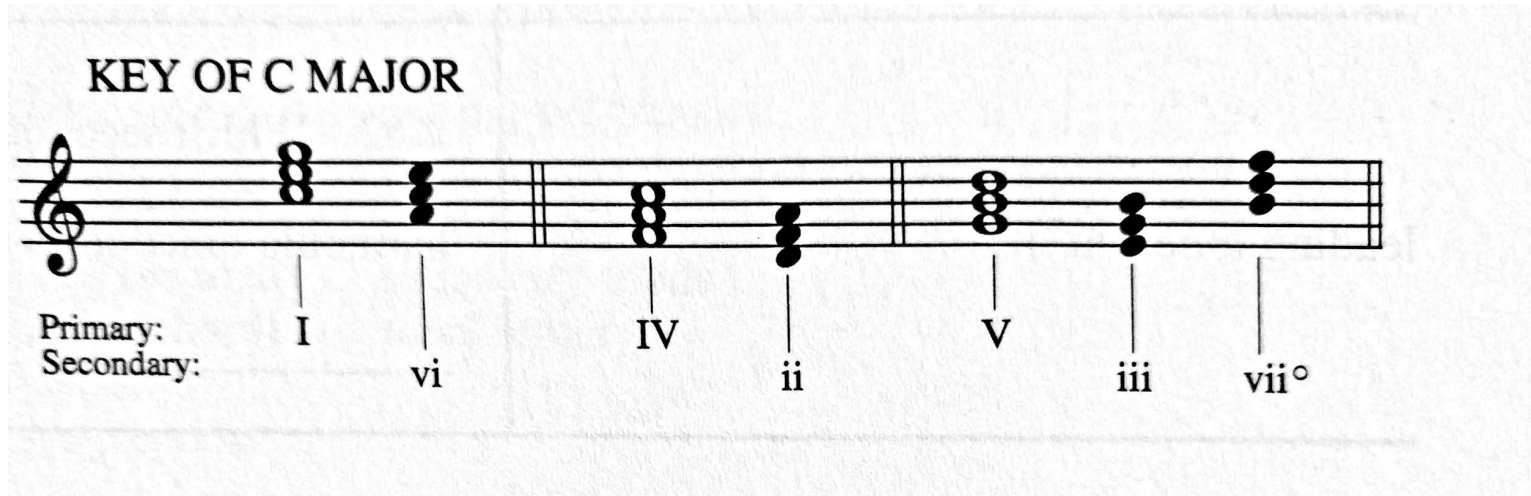
The image shows a musical staff in the key of C major. It displays seven triads: four primary triads (I, IV, V, vi) and three secondary triads (ii, iii, vii°). The primary triads are shown as open circles, and the secondary triads are shown as solid black dots. The secondary triads are positioned between the primary triads, sharing common tones with them. For example, the secondary triad ii (D-F-A) shares the notes F and A with the primary triad vi (D-F-A). The secondary triad iii (E-G-B) shares the notes G and B with the primary triad V (E-G-B). The secondary triad vii° (F-A-C) shares the notes A and C with the primary triad IV (F-A-C). The primary triad I (C-E-G) is shown at the beginning of the staff, and the primary triad vi (D-F-A) is shown at the end of the staff. The secondary triad ii (D-F-A) is shown between the primary triads IV and V. The secondary triad iii (E-G-B) is shown between the primary triads V and vi. The secondary triad vii° (F-A-C) is shown between the primary triads vi and I.

Primary: I vi IV ii V iii vii°  
Secondary:

# Secondary chords

This means that you can use these secondary triads as substitutes for primary triads.

KEY OF C MAJOR



The image shows a musical staff in the key of C major. The staff contains seven triads, each with a vertical line pointing to a label below it. The labels are arranged in two rows: 'Primary:' and 'Secondary:'. The primary triads are labeled I, IV, and V. The secondary triads are labeled vi, ii, iii, and vii°. The triads are: I (C-E-G), vi (A-C-E), IV (F-A-C), ii (D-F-A), V (G-B-D), iii (E-G-B), and vii° (F-A-C).

Primary:	I	vi	IV	ii	V	iii	vii°
Secondary:							



## PRIMARY TRIADS

## SECONDARY TRIADS

I

—

\_\_\_\_\_

IV

—

\_\_\_\_\_

V

—

\_\_\_\_\_

---

\*The leading tone triad is often considered to be a dominant seventh chord with the root omitted.

**Levels 5-6**



# Transposition

- It may occasionally be necessary to transpose up or down. This is active music theory in real-time!
- There are several transpositions that are easier to do. Beyond those, several theory tips will help.
- If all else fails, it never hurts to write the transposed music out on manuscript paper

# Mental Techniques

- **Imagine a different key signature**
  - This only works when the key note is the same letter, e.g. Eb - E, C#-C, etc
  - Watch out for accidentals! In flat keys, naturals become sharps, flats become naturals, and sharps become double sharps
  - In sharp keys naturals become flats, flats become double flats and sharps become naturals
- **Use the bass clef trick**
  - Read the treble clef as if it was written in the bass clef. This will transpose the piece up a minor third. Make sure to adjust the key signature in your mind. The left hand will need to be transposed to harmonize with the right hand.

# Other transposition techniques

- Assign every note a number based on scale degree, 1-7 (e.g. in C major, C is 1, D is 2, E is 3, etc) Think of each scale degree as you transpose to the new key
- Think of the distance moved for each pitch. If transposing up a major second, think about moving each pitch up a major second before transposing. E.g. in D major, D would move to E, E would move to F#, etc.

*With conviction* ♩ = 66-84

1. Come, come, ye Saints, no toil nor la - bor fear; But with joy  
 2. Why should we mourn or think our lot is hard? 'Tis not so;  
 3. We'll find the place which God for us pre - pared, Far a-way  
 4. And should we die be - fore our jour-ney's through, Hap - py day!

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*Peacefully* ♩ = 80-100



1. Si - lent night! Ho - ly night! All is calm, all is bright  
2. Si - lent night! Ho - ly night! Shep-herds quake at the sight!  
3. Si - lent night! Ho - ly night! Son of God, love's pure light



*Peacefully* ♩ = 80-100



1. Si - lent night! Ho - ly night! All is calm, all is bright  
2. Si - lent night! Ho - ly night! Shep-herds quake at the sight!  
3. Si - lent night! Ho - ly night! Son of God, love's pure light



1 1 2 3 1  
 3 3 4 5 5

*With conviction* ♩ = 66-84



1. Come, come, ye Saints, no  
 2. Why should we mourn or  
 3. We'll find the place which  
 4. And should we die be -



1 1 1 1 3  
 1 1 1 1 1

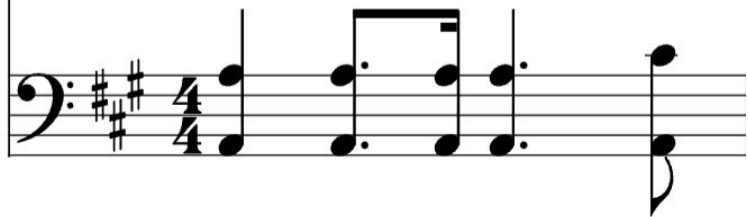
Let's transpose to A major

1 1 2 3 1  
3 3 4 5 5

*With conviction* ♩ = 66-84



1. Come, come, ye Saints, no  
2. Why should we mourn or  
3. We'll find the place which  
4. And should we die be -



1 1 1 1 3  
1 1 1 1 1



*With conviction* ♩ = 66-84

1. Come, come, ye Saints, no  
 2. Why should we mourn or  
 3. We'll find the place which  
 4. And should we die be -

Think intervals, up a perfect 5th (or down a 4th)

Soprano: G-D, A-E, B-F#  
 Alto: B-F#, C-G, D-A  
 Tenor: G-D, B-F#  
 Bass: G-D






THE COLLECTOR

1. Come, come, ye Saints, no  
 2. Why should we mourn or t  
 3. We'll find the place which  
 4. And should we die be -

Think intervals, up a perfect 5th (or  
 down a 4th)

Soprano: G-D, A-E, B-F#  
 Alto: B-F#, C-G, D-A  
 Tenor: G-D, B-F#  
 Bass: G-D

# If all else fails, write it out or use the interactive hymn tool

PDF Sheet Music	Lyrics Only	Interactive Sheet Music			
 	Repeat x1 	Key D 	Tempo 84 	Auto-Scroll <input checked="" type="checkbox"/>	Print 

30

## Come, Come, Ye Saints

*With conviction* ♩ = 66-84



1. Come, come, ye Saints, no toil nor la - bor fear; But with joy  
2. Why should we mourn or think our lot is hard? 'Tis not so;  
3. We'll find the place which God for us pre - pared, Far a - way  
4. And should we die be - fore our jour - ney's through, Hap - py day!