Fretboard Harmony

An approach to modern harmonic relationships that are unique to the guitar



Bruce Bishop



Introduction

This book provides an approach to modern harmonic relationships that is unique to the guitar, creating the foundation necessary for a complete understanding of music theory as it relates to the guitar fingerboard. Designed for the elementary and intermediate player, this book does not require the ability to sight-read.

The book is divided into two sections: text and workbook. The text section is presented with a minimum of verbiage, the workbook section is comprised of simple exercises designed to promote assimilation and utilization of the information provided in the text.

Topics covered: Sharps, flats and enharmonics; symmetrical scales and technique exercises; the five pentatonic scale patterns; the "relative minor" relationship; pattern movements within I, IV, V progressions; intervals and their symbols; the fretboard geometry of intervals; the major scale and its role in present-day music; chords, chord progressions and chord substitutions; chord inversions; 15 common major-scale-type chord progressions; 45 real-world, useable chords diagrammed and explained; the five major scale patterns; root positions of the five major scale patterns; detailed presentations and analyses of three songs; the "D" tuning, with diagrams of 40 practical chords; line progressions, diagrammed and explained; passing chords, ascending and descending; contrasting major and minor keys; understanding minor progressions; and commonly used chord types in minor progressions.

It is recommended that players practice and study at least one hour per day to reap the maximum benefits from this book.

Acknowledgments

Fretboard Harmony is a distillation of 35 years of lessons learned from a vast pool of players, teachers, friends, studio engineers and even a few dogs and cats. All of their names and stories easily could fill a book — a book that would be far more interesting than a text for the guitar.

I am grateful to my wife, Julie, who with the help of her mother, Jo Hadley, took a loose, unorganized, and often long-winded manuscript and turned it into this beautifully produced book. Special thanks, also, to my talented friend Ben Bull (Obscure Design, San Bernardino, California), for his generous and invaluable computer-graphics advice during the production of this book.

I have also had more than my share of bright, talented and challenging students who have helped guide the presentation of these concepts.

As a teacher, Jack Smalley, at the Dick Grove Music Workshops, opened up a multitude of doors and insights into the tapestry of music and human experience. His positive vitality, honesty and humor were irresistible, and the learning was fun.

Thanks also to Jim Bogen for helping to arrange my classes at Pitzer College. Without his efforts I would not have undertaken this book.

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FRETBOARD HARMONY TEXTBOOK

1 The Basics

SHARPS, FLATS AND ENHARMONICS

b = flat Note is lowered by one fret, 1/2 step

= sharp Note is raised by one fret, 1/2 step

The Chromatic Scale All 12 notes

The Ascending Chromatic Scale $A A^{\sharp} B C C^{\sharp} D D^{\sharp} E F F^{\sharp} G G^{\sharp} A$

The Descending Chromatic Scale $A A^{\flat} G G^{\flat} F E E^{\flat} D D^{\flat} C B B^{\flat} A$

Enharmonic Equivalents Same note with two names

Example: $(A^{\sharp} \& B^{\flat}) (C^{\sharp} \& D^{\flat}) (D^{\sharp} \& E^{\flat})$

 $(F^{\sharp} \& G^{\flat}) (G^{\sharp} \& A^{\flat}) (B^{\sharp} \& C)$

 $(B \& C^{\flat}) (F \& E^{\sharp})$

Exercises

Practice drawing and saying the alphabet A through G forwards, backwards, and every other letter.

Using workbook pages 129 through 136, draw and recite chromatic scales starting from each note.

SYMMETRICAL SCALES AND TECHNIQUE

Symmetrical Scales are groups of evenly spaced notes.

Chromatic Scale	Whole-Tone Scale	<u>Diminished Scale</u>
All 12 notes, spaced	Whole steps	1-1/2 steps, minor 3rds
apart by 1/2 steps		
	M	
	M	B I
	B M	B
MRB		B 1
R B	B	B
B	BM	
	M	B
	B	B

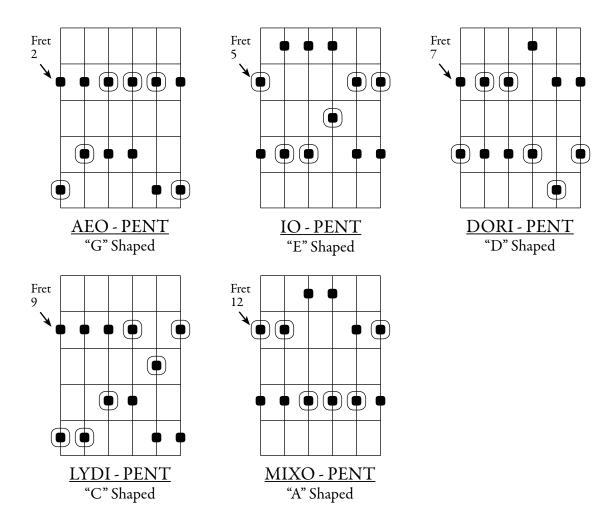
Exercises

Using workbook pages 137 through 142, draw the Symmetrical Scales.

PENTATONIC SCALES

- Are the most universal scales
- Lay well on the fretboard
- Provide an open sound with great harmonic strength
- Are able to assume many harmonic identities
- When layered over with blues scales, provide wide range of possibilities

Example of Pentatonic Scales in the key of A



Exercises

Practice drawing chord shapes.

Play chord shapes and scales.

Break the patterns into parts and develop licks.

Advanced: Play as 4ths (two adjacent notes at once).

Using workbook pages 143 through 155, draw the pentatonic scale patterns and their corresponding chord shapes.

METRONOME PRACTICE

Time is everything! Tell yourself this every day for life!

<u>GET ONE</u> — <u>BUY ONE</u> — <u>STEAL ONE</u>!

Exercises

Practice playing the following with a metronome:

M.M. 200	Play 1/2 notes (one note equals two ticks)
M.M. 120	Play 1/4 notes (one note equals one tick)
M.M. 120	Play 1/8 notes (two notes equal one tick)
M.M. 120	Play 1/8 notes with swing feel (doo-ba)

Repeat the above, playing in between the metronome ticks.

GENERAL PRACTICE TIPS

Warm up slowly with the symmetrical scales for three or four minutes.

Practice drawing what you are working on.

Isolate your weaknesses and allow them more time.

Keep a practice journal.

Save "getting off" for after practice.

Remember that two minutes of concentrated effort on a difficult passage is the equivalent of 15 to 20 minutes of song repetition.

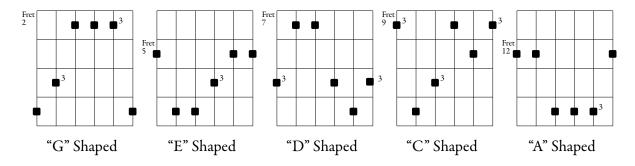
Don't get discouraged! It is not uncommon for people to have difficulty assimilating this new information and incorporating it into their playing repertoire. Most people who embark upon concentrated studies of this nature tend to lose perspective on their growth rate. This is totally normal! A little faith and patience will help a lot.

2 Changing Major to Minor

MAJOR AND MINOR

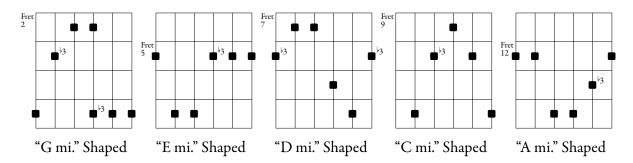
All five basic chord shapes can be changed from major to minor. Doing this requires memorizing which of the chord notes are the <u>3rds</u>.

Key of "A" Major



Lowering the 3rd by one fret (1/2 step) changes the chord from major to minor.

Key of "A" Minor

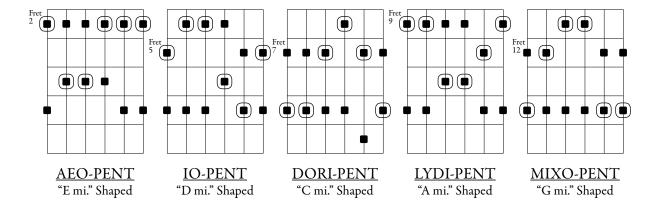


RELATIVE MINOR

The term *relative minor* means that three frets down from any major chord lies a minor chord that shares most of its notes with its *relative major* chord, three frets up. "A" major's *relative minor* is "F[‡]" minor. "F[‡]" minor's *relative major* is "A" major.

Here is how " F^{\sharp} " minor fits into the five pentatonic scale patterns:

Key of "F#" Minor



Note that each of the five pentatonic patterns contains a major chord and its corresponding relative minor chord.

Exercises

Experiment with new chord shapes within the patterns — most sound good and there are many possibilities — all of which can be substituted for their basic chord counterparts.

Using workbook pages 156 through 177, complete the major-to-minor exercises.

SUMMARY OF BASIC MAJOR AND MINOR CHORD SHAPES WITHIN THE PENTATONIC PATTERNS

Preceding are five different fingerings and scale patterns of the Pentatonic Scale; each pattern contains the shape of a major chord, and the shape of its relative minor chord.

Example:

The Keys of "A" Major and F# Minor

AEO-PENT at fret #2 = "G" shaped major chord and "E" minor shaped chord. IO-PENT at fret #5 = "E" shaped major chord and "D" minor shaped chord. DORI-PENT at fret #7 = "D" shaped major chord and "C" minor shaped chord. LYDI-PENT at fret #9 = "C" shaped major chord and "A" minor shaped chord. MIXO-PENT at fret #12 = "A" shaped major chord and "G" minor shaped chord.

Also, three frets below any major chord is its relative minor chord.

Example:

Three frets below "A" major lies its relative minor chord, "F[#]"minor.

It follows then, when changing from major to minor, all of the patterns shift up the neck by three frets.

Example:

The "A" major chord becomes the "A" minor chord.

3 I, IV, V Progressions

PENTATONIC SCALES WITHIN I, IV, V PROGRESSIONS

A chord progression is a group of chords played in succession.

Chord progressions typically have a beginning and an end — they are a cycle.

Chord progressions usually move between tension and resolution.

The most basic chord progression is the I, IV, V.

The Roman numerals are used to simplify transposition.

The Roman numeral "I" always names the key.

Example:

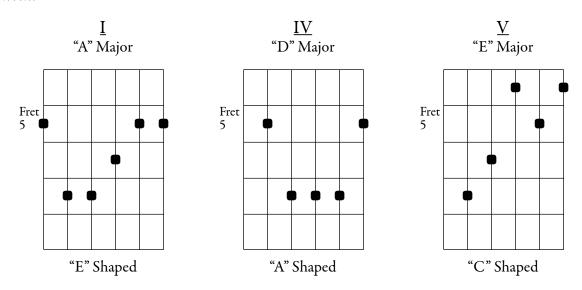
The I, IV, V Progression in the Key of "A" Major

I = "A" Major

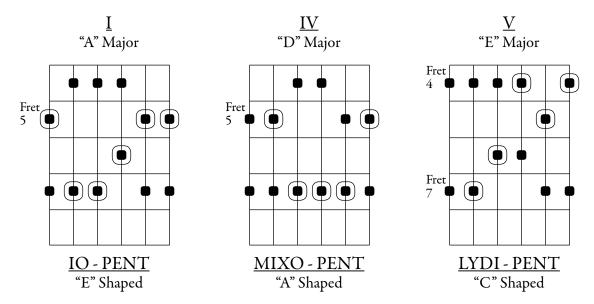
IV = "D" Major

V = "E" Major

Observe what occurs at the fifth fret when the "A", "D", and "E" chords are played. Notice all three chords can be easily played without ever leaving the fifth fret area of the neck.



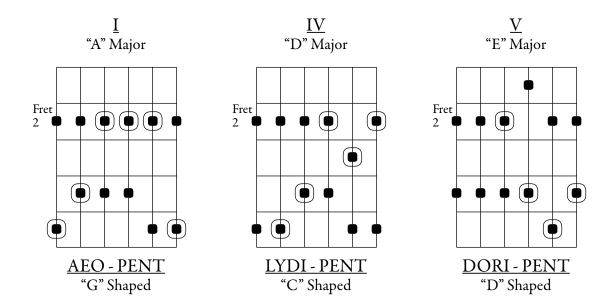
Associating the learned pentatonic scale pattern for each of the *five basic chord shapes* produces the following I, IV, V Progression in the key of <u>"A" Major</u>, at the <u>fifth fret</u>:



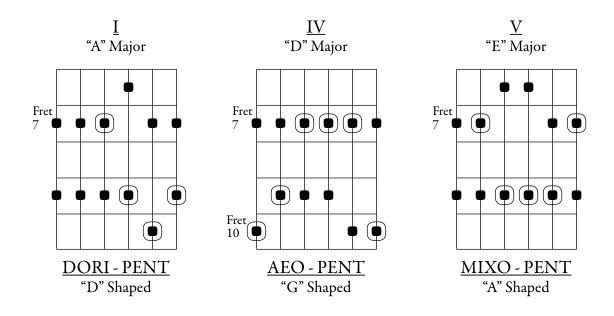
Exercises

Using workbook pages 178 through 180, complete the I, IV, V Progressions.

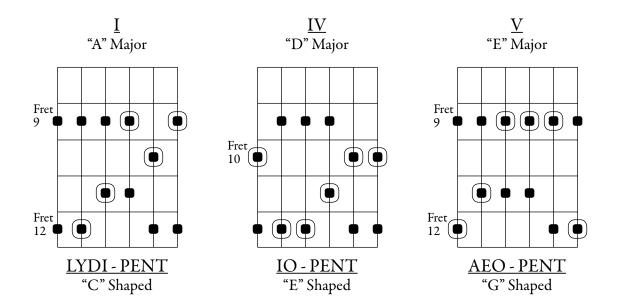
Observe a similar occurrence at the second fret:



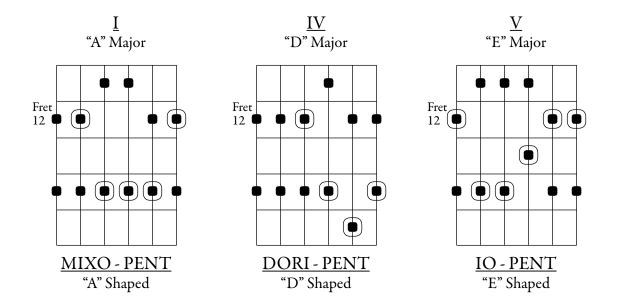
At the seventh fret:



At the <u>ninth fret</u>:



At the twelfth fret:



Exercises

Using workbook pages 181 through 186, complete the pattern movement exercises.

Remember that each chord in the I, IV, V Progression has a corresponding relative minor chord.

Example:

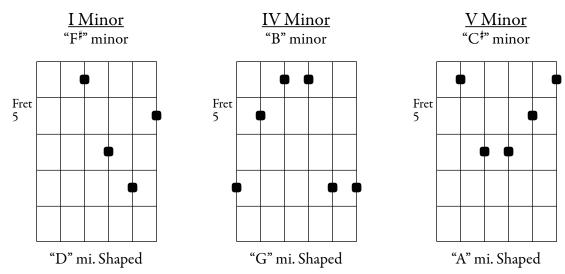
A I, IV, V Minor Progression can be built using *relative minor* chords:

This would be called the key of "F#" minor.

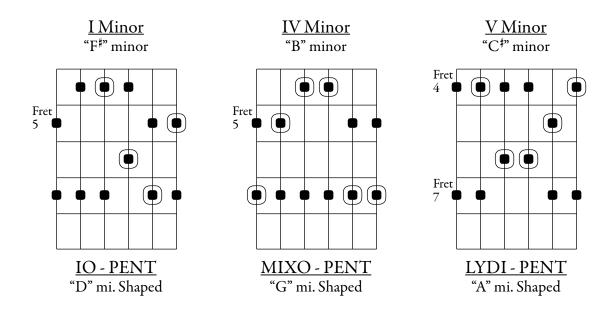
The learned pentatonic scale patterns are exactly the same for the:

$$\label{eq:continuous} $\underline{I\ (\text{``A'' Major})}$, $\underline{IV\ (\text{`'D'' Major})}$, $\underline{V\ (\text{``E'' Major})}$ Progression in $\underline{\text{``A''}}$ and the $I\ (\text{``F$^{\sharp\prime\prime}$ minor})$, $\underline{IV\ (\text{``B'' minor})}$, $V\ (\text{``C$^{\sharp\prime\prime}$ minor})$ Progression in $\text{``F$^{\sharp\prime\prime}$ minor}$$$

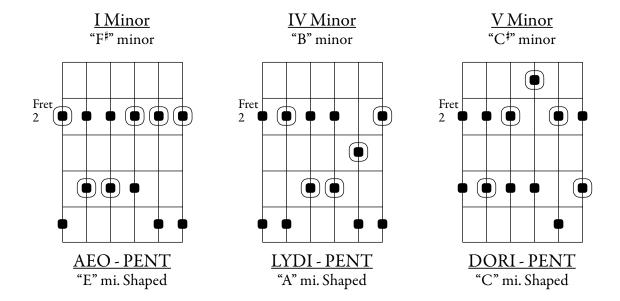
Observe what occurs at the fifth fret when the "F $^{\sharp}$ " minor, "B" minor, and "C $^{\sharp}$ " minor chords are played. *Notice all three chords can be played easily without ever leaving the fifth fret area of the neck.*



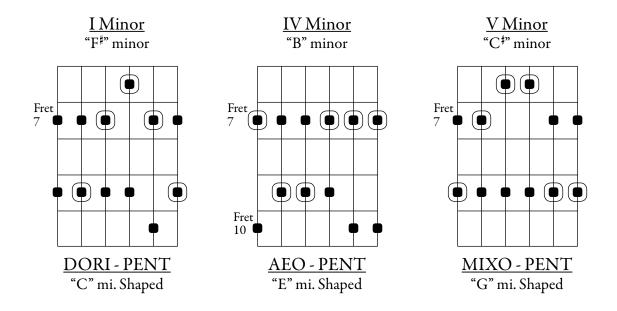
Associating the learned pentatonic scale pattern for each of the *five basic chord shapes* produces the following I, IV, V Progression in the key of "F[‡]" minor, at the <u>fifth fret</u>:



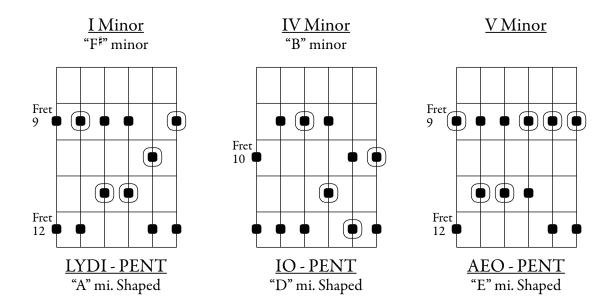
Observe a similar occurrence at the second fret:



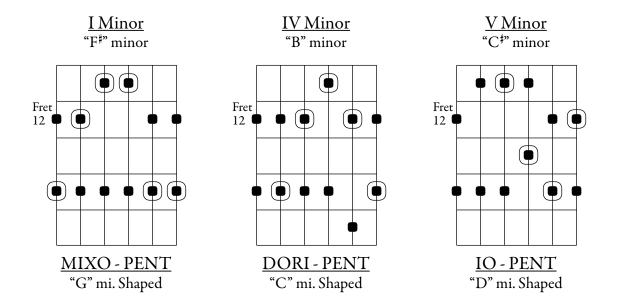
At the seventh fret:



At the <u>ninth fret</u>:



At the twelfth fret:



Exercises

Using workbook pages 187 through 191, complete the pattern movement exercises.

This information should be absorbed slowly — it takes time!

Exercises

Practice the I, IV, V chord/arpeggio and pattern changes at each of the five areas just reviewed.

Spending two minutes per area, for ten minutes a day, will do the trick.

Please be patient and consistent.



Mixed I, IV, V Progressions

MIXED I, IV, V Progression Combinations

I, IV, V Progressions in major and minor are often mixed together.

The possible combinations of Mixed I, IV, V Progressions are:

I minor	IV Major	V Major
I Major	IV minor	V Major
I Major	IV Major	V minor
I minor	IV minor	V Major
I minor	IV Major	V minor
I Major	IV minor	V minor

Exercises

Using workbook pages 192 through 224, complete the pattern movement exercises.

SIMPLIFYING THE PENTATONIC PATTERN MOVEMENT IN I, IV, V PROGRESSIONS

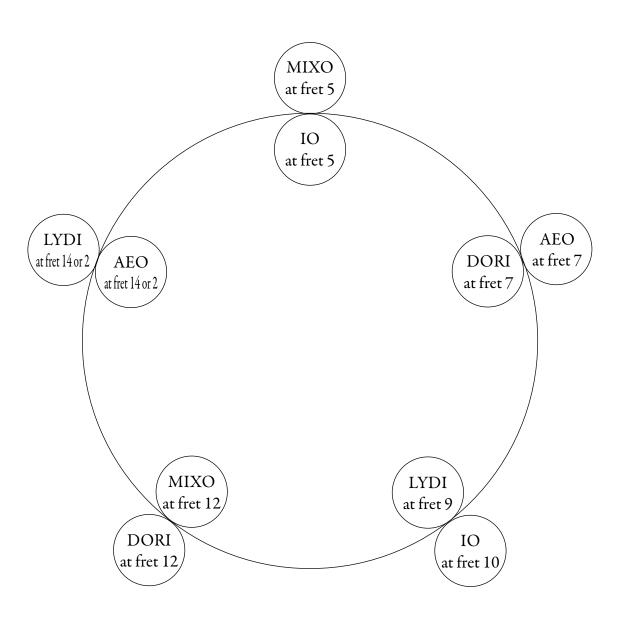
The following pentatonic pattern movements are based on all of the possible two-part combinations of I, IV, V Progressions.

Although there are 16 possible two-part combinations of the I, IV, V Progressions, only seven different pattern movements are required to produce them.

In fact, of the seven movements, only four need be memorized, because the other three are the same movements in reverse order.

<u>I to IV</u> and <u>IV Major to V Minor</u>

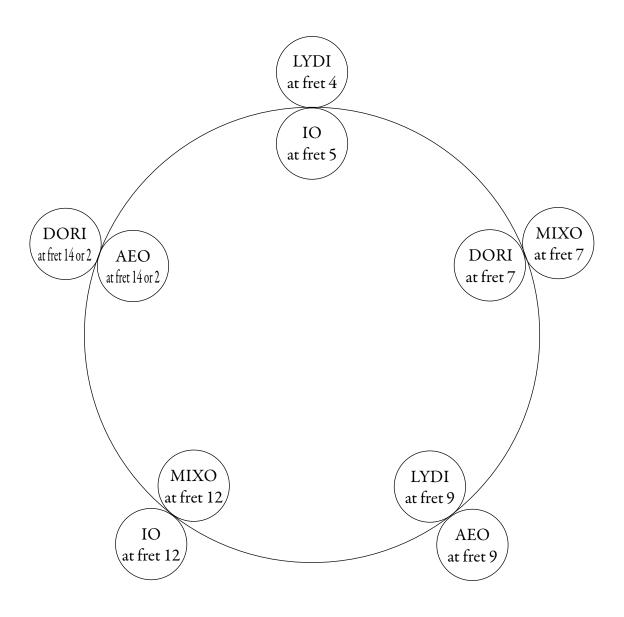
 $Inside \ circle = I \ (A) \qquad \qquad Inside \ circle = IV \ Major \ (A)$ $Outside \ circle = IV \ (D) \qquad \qquad Outside \ circle = V \ minor \ (B \ minor)$



GROUP TWO PENTATONIC MOVEMENT

 $\underline{I \text{ to } V}$

Inside circle = I(A)Outside circle = V(E)



Note: This is group one in reverse.

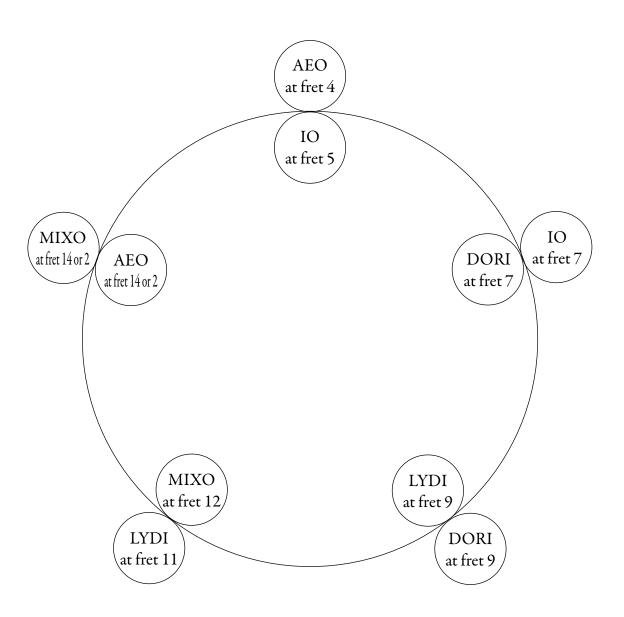
GROUP THREE PENTATONIC MOVEMENT

IV to V and I Minor to IV Major

Inside circle = IV(A)

Outside circle = V(B)

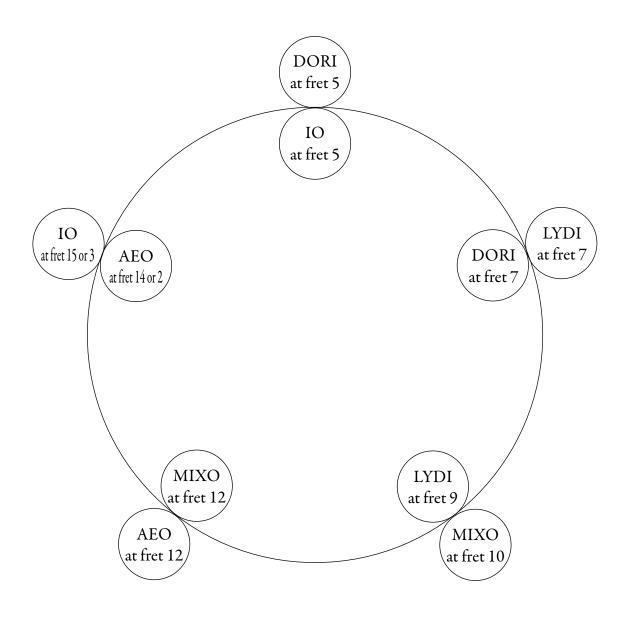
Inside circle = I minor (F[#] minor) Outside circle = IV Major (B)



GROUP FOUR PENTATONIC MOVEMENT

I Major to V Minor

Inside circle = I Major (A)
Outside circle = V minor (E minor)

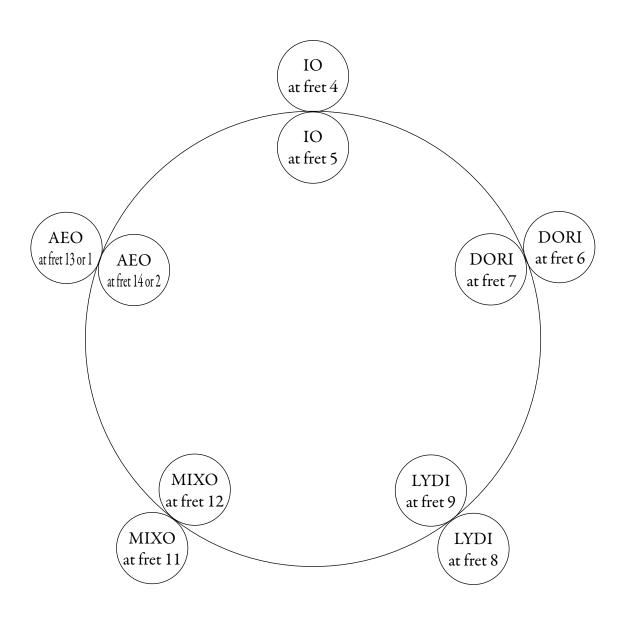


Note: This is group three in reverse.

GROUP FIVE PENTATONIC MOVEMENT

IV Minor to V Major

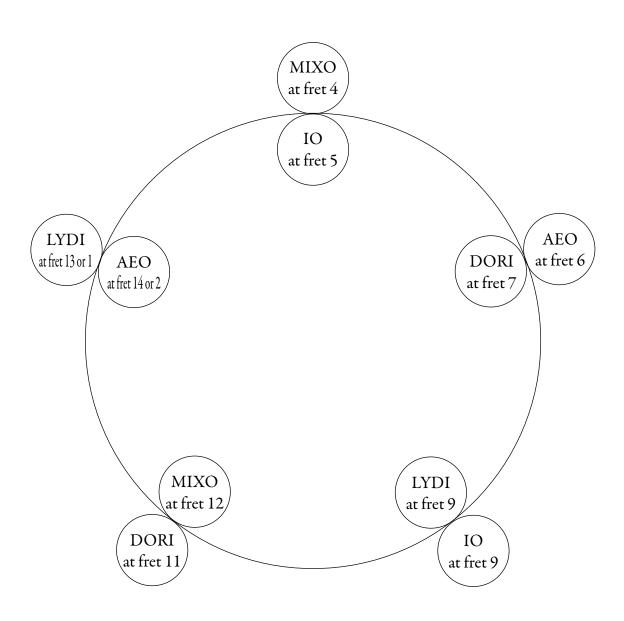
Inside circle = IV minor $(F^{\sharp} minor)$ Outside circle = V Major (G^{\sharp})



GROUP SIX PENTATONIC MOVEMENT

I Minor to V Major

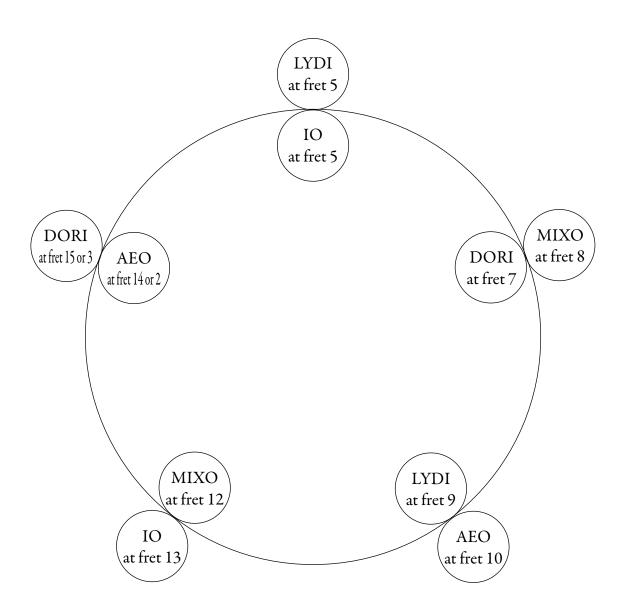
Inside circle = I minor (F^{\sharp} minor) Outside circle = V Major (C^{\sharp})



GROUP SEVEN PENTATONIC MOVEMENT

I Major to IV Minor

Inside circle = I Major (A)
Outside circle = IV minor (D minor)



Note: This is group six in reverse.

5 Interval Geometry

INTERVALS AND SYMBOLS

In harmony the distance between notes is measured up or down using whole steps (two frets), and half steps (one fret).

Each distance or interval is given a name:

Root	<u>Up</u>	or <u>Down</u>		<u>Is Called</u>	Written As
"C"	6 whole steps	6 whole steps	=	"C", an octave	8
"C"	1 whole step		=	"D", a major 2rd	2
"C"	142 whole steps	• • • • • • • • • • • • • • • • • • • •	=	"E♭", a minor 3rd	mi. 3 or \3
"C"	2 whole steps		=	"E", a major 3rd	Ma. 3, 3 or Δ 3
"C"	$2\frac{1}{2}$ whole steps		=	"F", a perfect 4th	4
"C"	3 whole steps	3 whole steps	=	"G ^b ", a diminished 5th	flat 5 or \$5
"C"	$3\frac{1}{2}$ whole steps	$2\frac{1}{2}$ whole steps	=	"G", a perfect 5th	5
"C"	4 whole steps	2 whole steps	=	"G [‡] ", an augmented 5th	+5
"C"	$4\frac{1}{2}$ whole steps	1½ steps	=	"A", a major 6th	Ma. 6, 6 or Δ6
"C"	5 whole steps	1 step	=	" B^{\flat} ", a minor 7th	flat 7, 7 or 7
"C"	5½ whole steps	1/2 step	=	"B", a major 7th	Ma. 7 or Δ 7

Upper Extensions

When describing an interval further than one octave above the root, the number seven (7) is added to the interval name.

Example:

"C" is the root

"D" is the major 2nd

One octave above "D" is called the Major 9th

It follows:

"F" is the 4th = one octave above "F" = 11th

"A" is the 6th = one octave above "A" = $\underline{13th}$

In everyday chord useage:

10ths are known as 3rds

12ths are known as 5ths

14ths are known as 7ths

15th are known as octaves

The exception is the 2nd, which is almost always referred to as a 9th!

Exercises

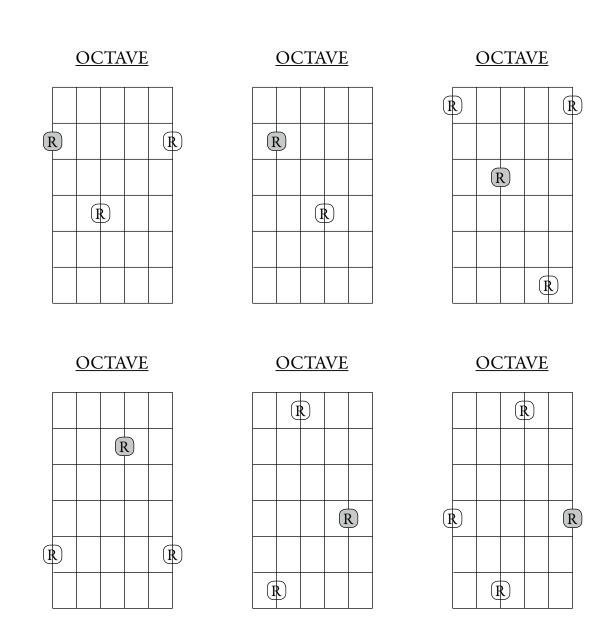
Using workbook pages 225 through 231, complete the interval exercises.

INTERVAL GEOMETRY

Octave = The same note 12 frets away

If "C" is the <u>root</u>, then "C" is also the <u>octave</u>.

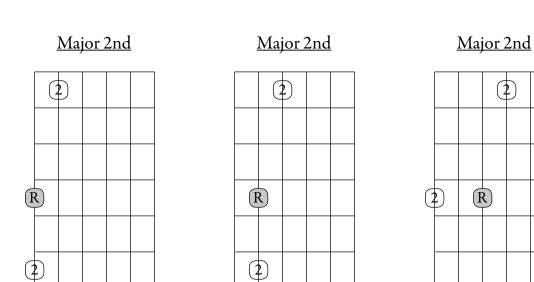
I and I

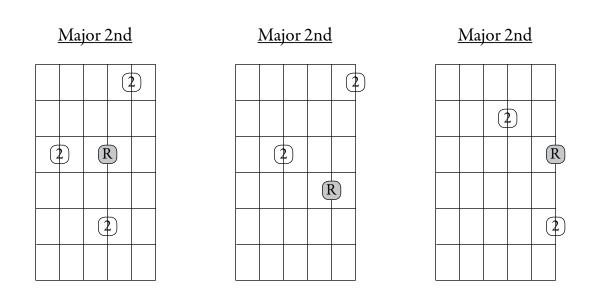


<u>Major 2nd</u> = Two frets above root (or ten frets below)

If "C" is the <u>root</u> (I), then "D" is the <u>major 2nd</u> (II).

<u>I and II</u>

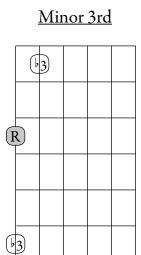


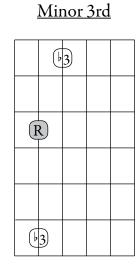


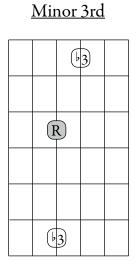
<u>Minor 3rd</u> = Three frets above root (or nine frets below)

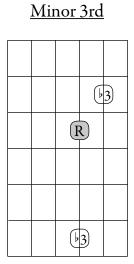
If "C" is the <u>root</u> (I), then "E $^{\flat}$ " is the <u>minor 3rd</u> ($^{\flat}$ III or $^{\flat}$ 3).

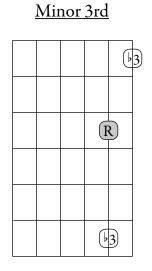
I and | III

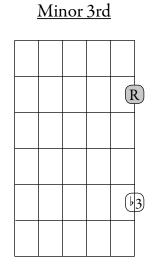








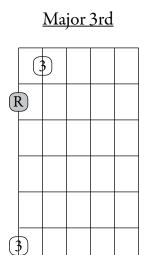


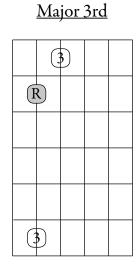


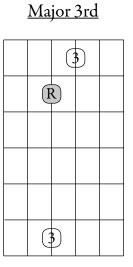
<u>Major 3rd</u> = Four frets above root (or eight frets below)

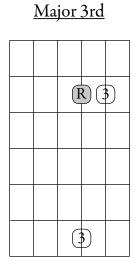
If "C" is the <u>root</u> (I), then "E" is the <u>major 3rd</u> (III).

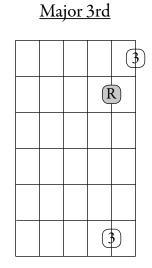
I and III

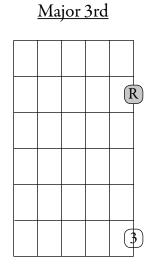








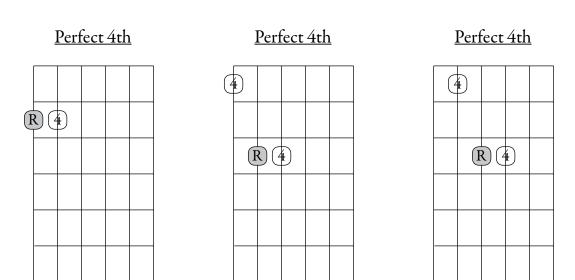


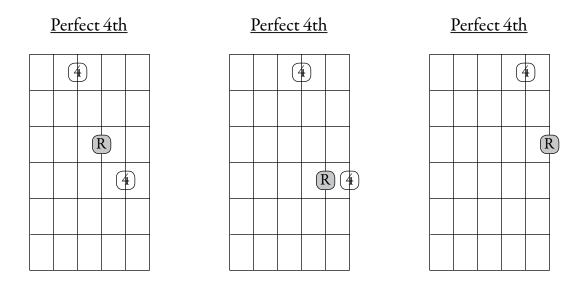


<u>Perfect (Normal) 4th = Five frets above root (or seven frets below)</u>

If "C" is the <u>root</u> (I), then "F" is the <u>perfect (normal) 4th</u> (IV).

I and IV



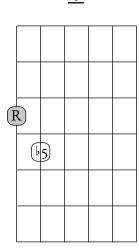


<u>Diminished/Flatted 5th = Six frets above root (or six frets below)</u>

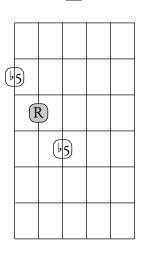
If "C" is the \underline{root} (I), then "G $^{\flat}$ " is the $\underline{flatted\ 5th}$ ($^{\flat}V$).

I and \(\bar{V} \)

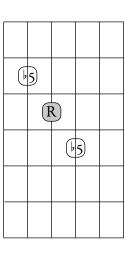
þ<u>5</u>



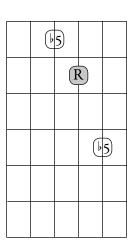
<u>\$5</u>

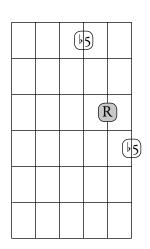


<u> 5</u>

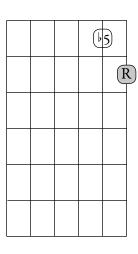


<u>\$5</u>





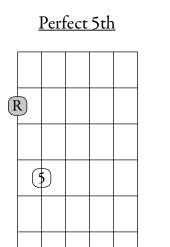
<u> 5</u>

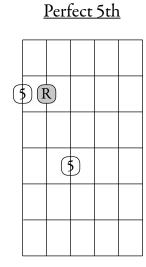


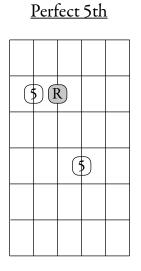
<u>Perfect (Normal) 5th = Seven frets above root (or five frets below)</u>

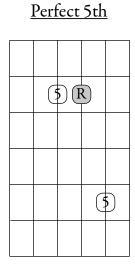
If "C" is the <u>root</u> (I), then "G" is the <u>perfect (normal) 5th</u> (V).

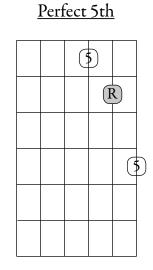
I and V

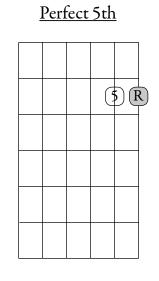










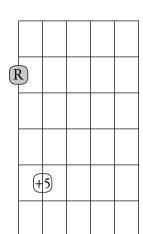


<u>Minor 6th or Augmented 5th = Eight frets above root (or four frets below)</u>

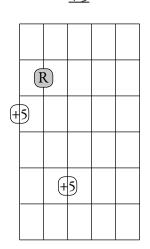
If "C" is the \underline{root} (I), then "G $^{\sharp}$ " is the $\underline{augmented\ 5th}$ (+V or +5).

I and +V

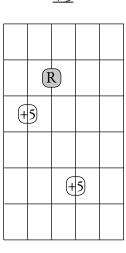
<u>+5</u>



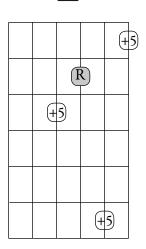
<u>+5</u>



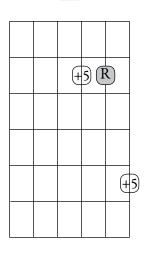
<u>+5</u>



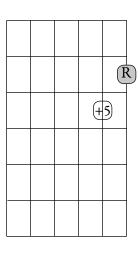
<u>+5</u>



<u>+5</u>



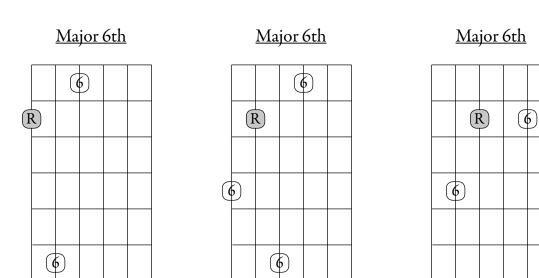
<u>+5</u>

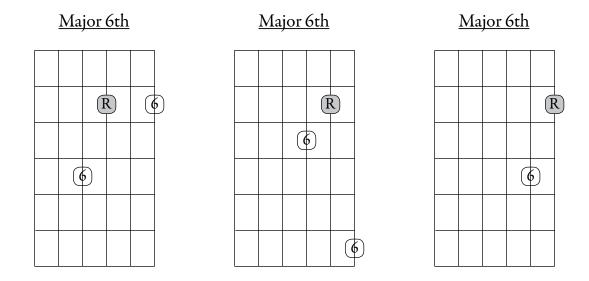


<u>Major 6th</u> = Nine frets above root (or three frets below)

If "C" is the <u>root</u> (I), then "A" is the <u>major 6th</u> (VI).

I and VI



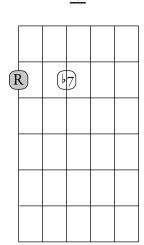


Flatted 7th = Ten frets above root (or two frets below)

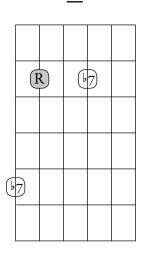
If "C" is the \underline{root} (I), then "B\" is the $\underline{flatted\ 7th}$ (\"VII or \"7).

I and VII

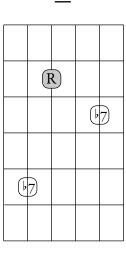
<u> 1</u>

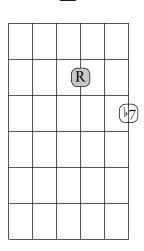


<u>\forall 7</u>

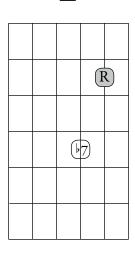


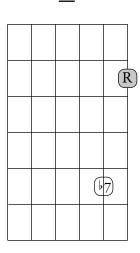
<u>\forall 7</u>





<u>\$7</u>

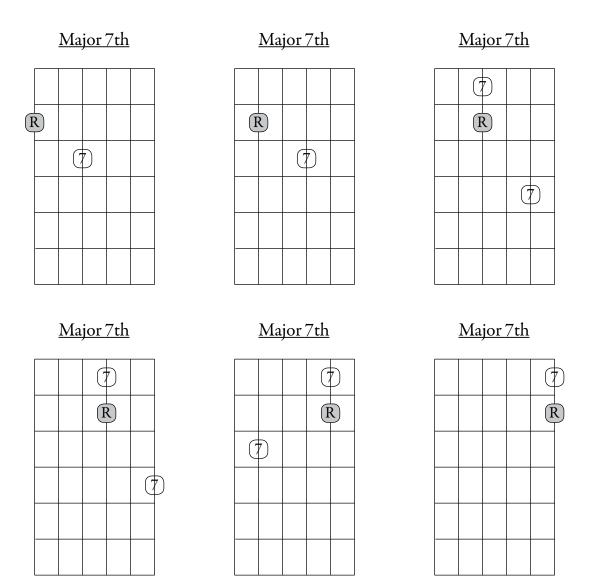




<u>Major 7th</u> = <u>Eleven frets above root (or one fret below)</u>

If "C" is the <u>root</u> (I), then "B" is the <u>major 7th</u> (VII).

I and VII



Exercises

Using workbook pages 232 through 238, draw the interval shapes.

6

The Major Scale

THE MAJOR SCALE

The major scale is used to measure and describe harmonic relationships.

Producing the major scale requires a series of whole steps (two frets) and half steps (one fret).

In the following examples: "W" = whole step

The sequence goes like this:

(whole step, whole step, half step, whole step, whole step, half step)

The sequence applied to the chromatic scale:

$$\begin{array}{c|c} C & C^{\sharp} & D & D^{\sharp} & E & F & F^{\sharp} & G & G^{\sharp} & A & A^{\sharp} & B & C \\ \hline W & W & W & W & W & W & H \\ \end{array}$$

Produces the major scale:

CDEFGABC

Each note is assigned a Roman numeral:

The familiar singable symbols are also assigned to each note:

Because the Roman numerals, singable symbols, and whole step/half step sequences always remain the same, it is easy to transpose from one key to another.

The following examples illustrate all 12 possible major scales and their practical spellings:

Key of "C" Major

No sharps or flats.

Key of "F" Major

One flat.

Key of "B\" Major

III IV V VI VII I I II H W W W H W W B^{\flat} C D E♭ F G B_{\flat} A

Two flats.

Key of "E[♭]" Major

IV V Ι II III VI VII W W W W W Η Η E_{ρ} A^{\flat} B^{\flat} C D G E_{\flat} F

Three flats.

Key of "A" Major

IV V VI VII I III I IIH W W W HW W A^{\flat} B^{\flat} C D^{\flat} E^{\flat} F G A^{\flat}

Four flats.

Key of "D\" Major*

V IV II III VI VII I I H W W W W W H G^{\flat} A^{\flat} F B^{\flat} C D_{\flat} E_{\flat} D_{\flat}

Five flats.

Key of "G" Major*

II III IV V VI VII I I W W W W Н W Η G^{\flat} A^{\triangleright} B^{\flat} C_{\flat} E_{\flat} G^{\flat} D_{\flat} F

Six flats.

Key of "C|" Major*

III IV VI VII V I II I W Н W W W W Η C_{\flat} E_{r} F^{\flat} G^{\flat} A^{\triangleright} B^{\flat} D_{\flat} C_{\flat}

Seven flats.

Key of "G" Major

V Ι II III IV VI VII I W Н W W W W Η F^{\sharp} C G В D E G A

One sharp.

Key of "D" Major

III IV V VI VII I II I W W W W W Η Η C^{\sharp} F^{\sharp} E G D В D A

Two sharps.

Key of "A" Major

III V VII I II IV VI I W W W W Η W Η C^{\sharp} G^{\sharp} F^{\sharp} В D E A A

Three sharps.

Key of "E" Major

Ι II III IV V VI VII Ι W Н W W W W Η F^{\sharp} G^{\sharp} C^{\sharp} D^{\sharp} E В E A

Four sharps.

Key of "B" Major

V Ι II III IVVI VII Ι W W W Н W W Н C^{\sharp} D^{\sharp} \mathbf{F}^{\sharp} G^{\sharp} A^{\sharp} В E В

Five sharps.

Key of "F#" Major*

III V II IV VI VII I I Н W W W W W Η G^{\sharp} A^{\sharp} C^{\sharp} F^{\sharp} В D^{\sharp} \mathbf{E}^{\sharp} F^{\sharp}

Six sharps.

Key of "C#" Major*

Seven sharps.

* (C $^{\flat}$ & B), (F $^{\sharp}$ & G $^{\flat}$), and (C $^{\sharp}$ & D $^{\flat}$) are all enharmonic equivalents.

CHORDS AND CHORD PROGRESSIONS

Start by harmonizing the the major scale:

Key of "C" Major

```
= "C" Ma. 7
                  ("C", "C" sus., "C6", "C" Ma. 9, "C 69", etc.)
II = "D" mi. 7
                  ("D" mi. 6, "D" mi. 9, "D" mi. 11, etc.)
III = "E" mi. 7
IV = "F" Ma. 7
V = G7
            ("G7" sus. 4, "G9", "G13", etc.)
VI = "A" mi. 7
VII = "B" mi. 7 (5)
```

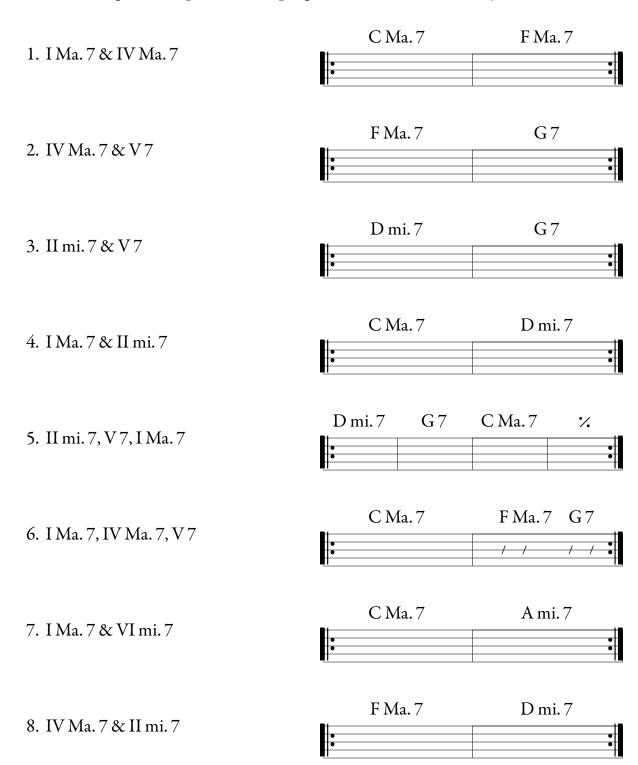
- The use of 7th chords (four-part harmony), clearly illustrates how a chord fits into its "parent" scale.
- The substitution possiblities within the Roman numerals are:

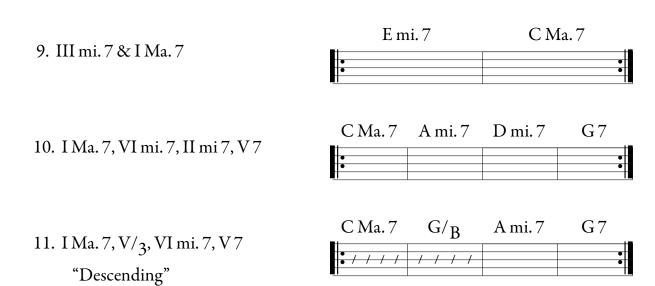
III and VI are substitutes for I

II and IV are substitutes for each other — II, V, I in jazz and I, IV, V in rock

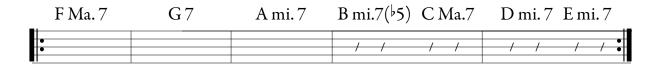
VII can substitute for V

The following are examples of chord progressions built from the major scale:

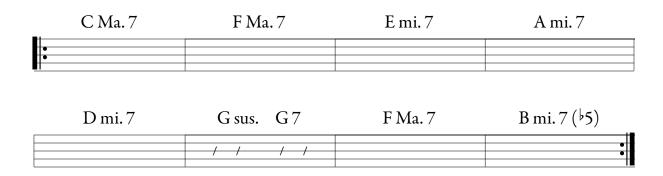




12. Ascending straight up the line starting from the IV Ma. 7



13. Moving primarily by 4ths



14. Moving primarily by 5ths



15. Using inversions to embellish a bass line



LEARNING NEW CHORDS

Learn "Root on E" and "Root on A" chords first, followed by "Root on D."

ABOUT INVERSIONS

In four-part harmony — 7th chords — any part of the chord can be put on the bottom of the "pile."

Using "G7" as an example:

= "G" $7/_3$ or "G" $7/_{B}$ " First inversion

= "G" 7/5 or "G" 7/"D" Second inversion

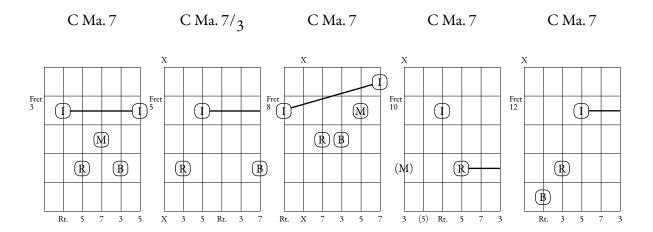
= "G" 7/ $_{\flat 7}$ or "G" 7/" $_{F}$ " Third inversion

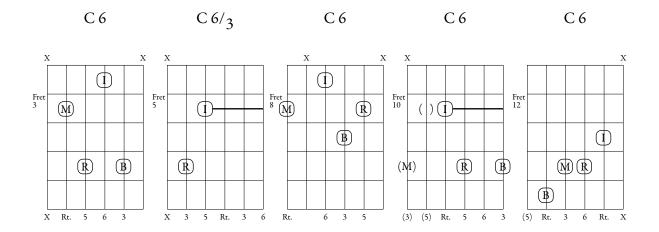
The primary reason to invert a chord is to achieve a desirable bass line (refer to chord progression example number 15, on page 56).

Examples

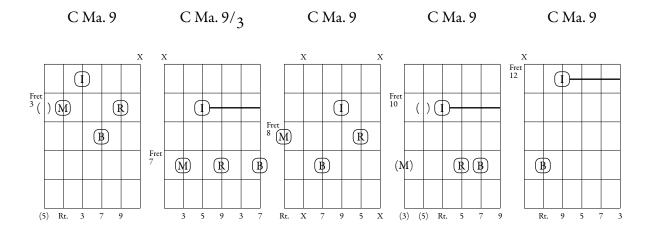
See the following five pages for examples of some of the chords that can be built using the major scale.

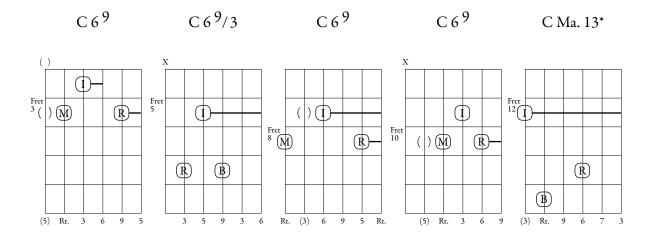
Major 7th and 6th Chords





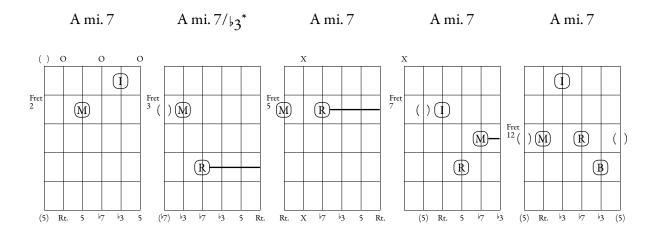
Major 9th and 6 ⁹ Chords



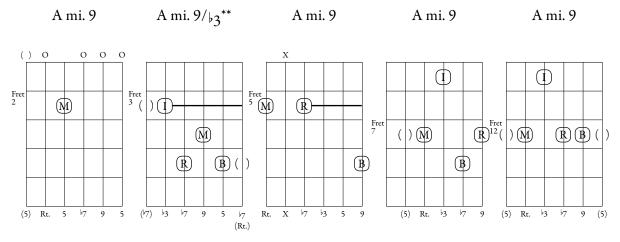


* When a Major 7th is added to a 6 9 chord, a Major 13 chord is the result.

Minor 7th and Minor 9th Chords



* Yes, C 6 and A minor 7 look and are the same.

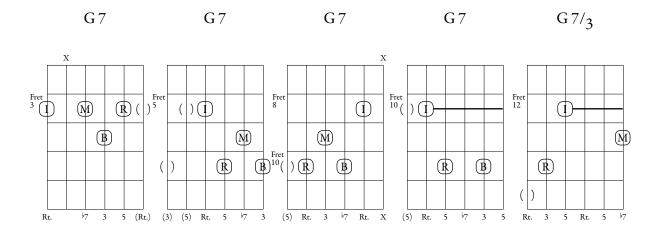


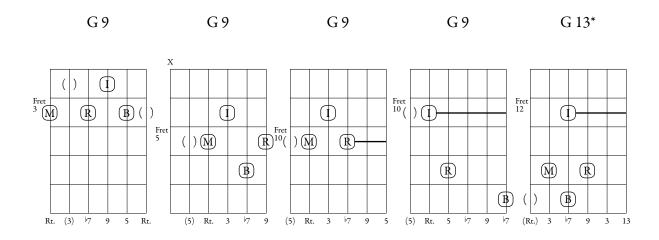
** C Major 7 and A minor 9 are the same.

Minor 9th chords can not be used as a III minor 7!

Example: In the key of C Major, E minor = III minor 7.

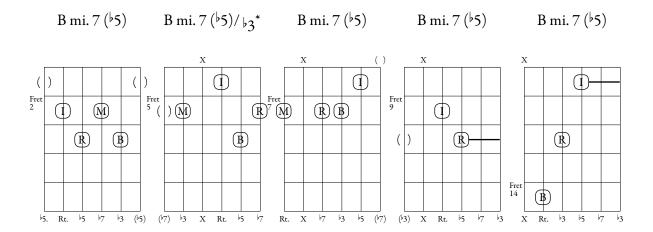
7th and 9th Chords





* When a 6th is added to a 9th chord, a 13th chord is the result.

Minor 7th 5



*B minor 7 ($^{\flat}$ 5) and D minor 6 are the same.

7

The Major Scale Patterns

THE MAJOR SCALE PATTERNS

This is an introduction to the major scale patterns and how they relate to the pentatonic scale patterns.

Again, the fretboard is divided into five areas to produce five different fingerings of the same scale. They will be numbered one through five.

Notice that each major scale pattern contains three pentatonic scale patterns. Each pattern relates to the I, IV, V chord, and in turn, the substitutes for these chords.

On paper it looks like this:

"C"	Major Scale	

С	D	E	F	G	A	В	С
I	II	III	IV	V	VI	VII	I

I = "C" Pentatonic Scale

C D E * G A * C

I II III V VI I

IV = "F" Pentatonic Scale

F G A * C D * F

I II III V VI I

V = "G" Pentatonic Scale

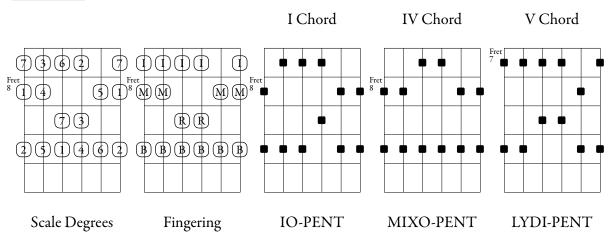
G A B * D E * G

I II III V VI I

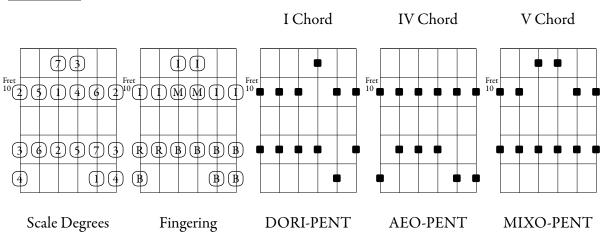
^{*} The pentatonic scales contain no 4th or 7ths! That is what gives them their sound. It is the half step intervals (the 4th and 7th) that produce the tension as well as the specific identity of a chord or scale.

Major Scale Patterns in "C"

Pattern #1

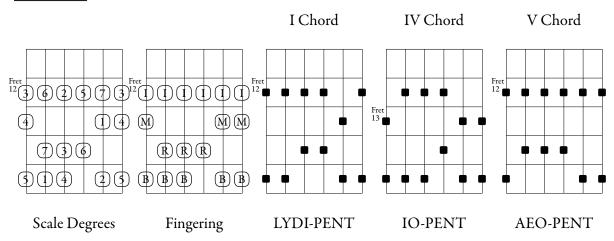


Pattern #2

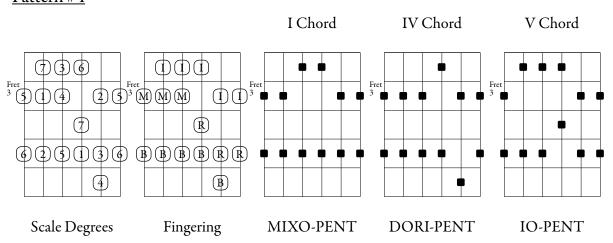


Major Scale Patterns in "C"

Pattern #3

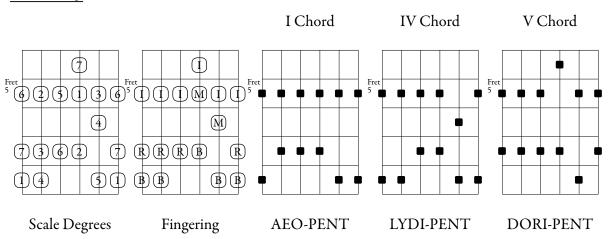


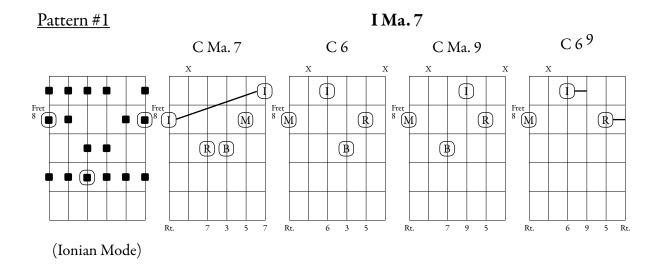
Pattern #4

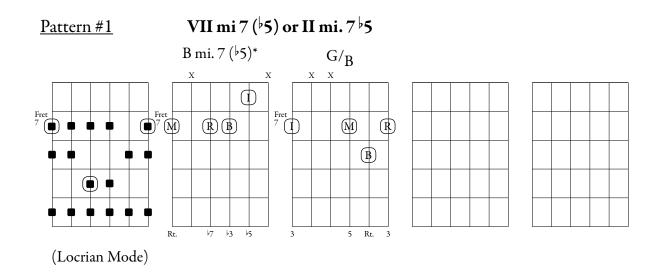


Major Scale Patterns in "C"

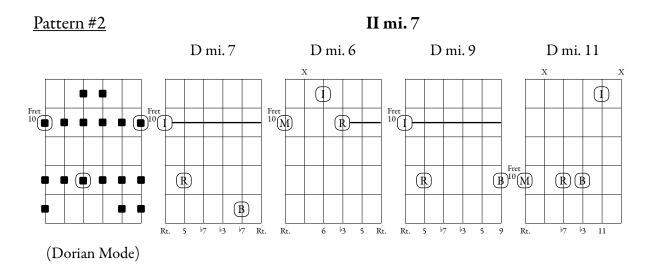
Pattern #5

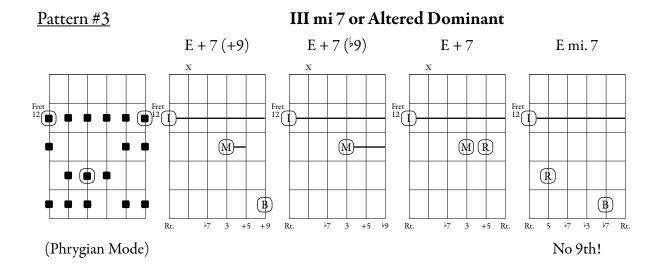




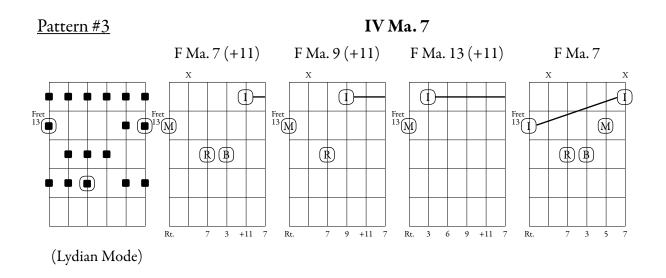


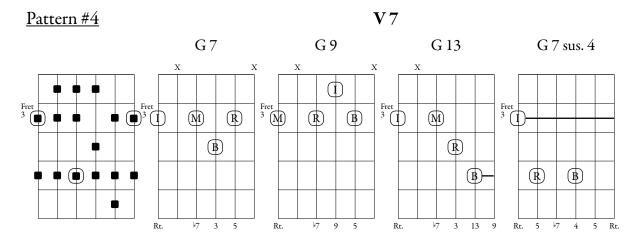
^{*} The real scale for mi. 7 ($^{\flat}$ 5) chords is the melodic minor from the 6th degree. ($^{\flat}$ 5) D mel. mi. produces B mi. 7 ($^{\flat}$ 5), B mi. 9 ($^{\flat}$ 5), B mi. 11 ($^{\flat}$ 5), B mi. 11 ($^{\flat}$ 13).



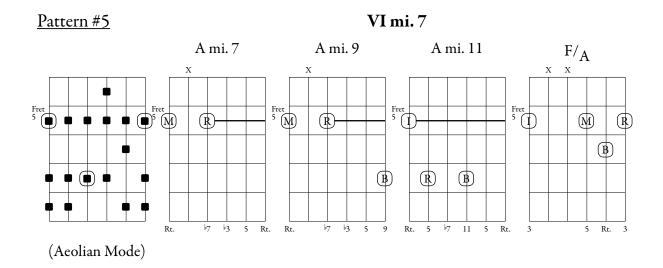


In a pinch, the phrygian mode can be used with altered dominant chords just remember that it isn't the true source of these chords.





(Mixolydian Mode)



Song Analysis, Example I

SONG ANALYSIS

To aid in the familiarization and understanding of song charts, three different examples are presented in this and the following two sections. Included in the examples are charts for each song, followed by several pages of chord possibilities, and then a detailed breakdown and analysis of the charts themselves.

EXAMPLE I: JULIA

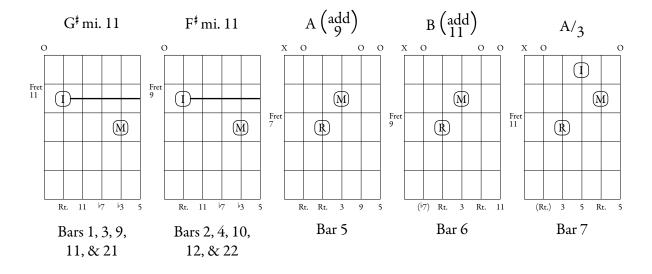
Notice on the following chart of *Julia* that it sticks very closely to the Major scale in the Key of "E".

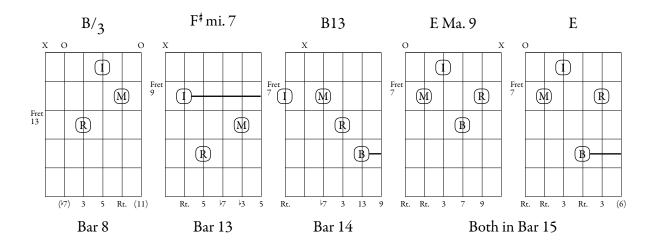
Such tunes are often referred to as "diatonic," referring to the use of only the eight tones of a standard major or minor scale without (chromatic) deviations.

<u>Julia</u>

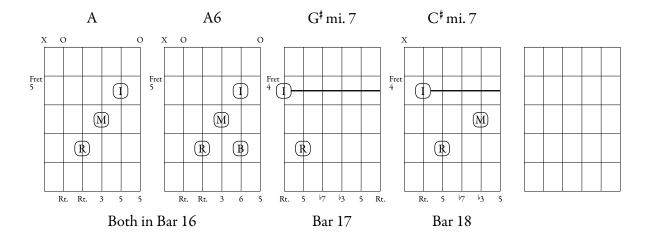


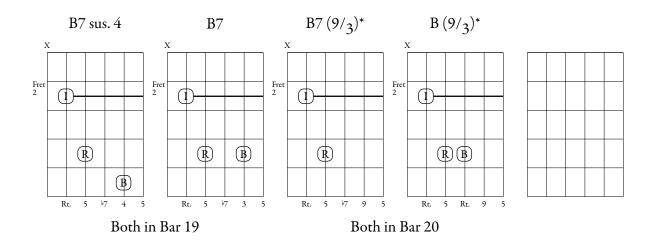
Chords for Julia





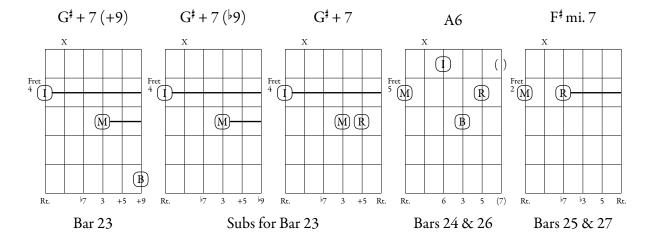
More Chords for Julia

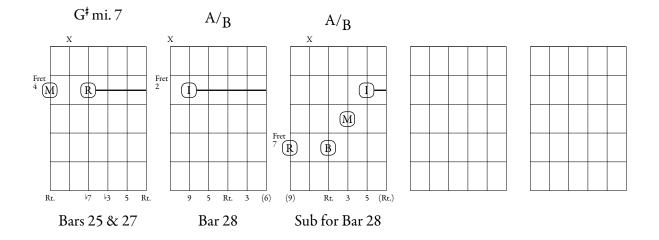




^{*} 9/3 is sometimes referred to as "sus. 2."

Still More Chords for Julia





Song Analysis: Julia

The following is a bar-by-bar breakdown of the *Julia* chord chart. Notice that each bar has a circled number.

The symbols **A**, **B**, & **C** are just for reference; they are sometimes called "rehearsal letters."

- Bar ① means repeat.
 - "E Pedal" means play a low "E" note under the chords until further notice.
 - P refers to time only usually called a "push," here it means push the "F $^{\sharp}$ mi. 11."
- Bar ② "E Pedal" continues under "F# mi. 11."
- Bars 2 means repeat the previous two bars.
- ③&④ Notice the modal effect of the first four bars this is basically the Ionian mode.
- Bar ③ "A Pedal" indicates to play a low "A" note under the chords until further notice.
 - " $\binom{add}{9}$ " means the chord has no 7th.
 - \mathcal{P} means push the "B(add)."
- Bar 6 "B(add)" means the chord has no 7th or 9th.

- Bar \bigcirc "A/3" is an "A" with a "C#" on the bottom.
- Bar ® The same as bar ©, "B/3" = "B" with " D^{\sharp} " on the bottom.

 Again notice the modal sound with the "A" pedal; this is the sound of the Lydian mode.
- Bars ^③ Back to the "E" pedal, push "F[#] mi. 11."

10, 11, & 12

Bar ¹³ "No Pedal" means cancel the previous instruction to play the pedal notes.

"F[#] mi. 7" is the "II mi. 7" chord.

Bar ¹ "B13" is the "V7" chord.

Bar ⁽⁵⁾ "E Ma. 9" is the "I Ma. 7" chord.

Bar [®] "A" is the "IV Ma. 7" chord.

Bar © "G[#] mi. 7" is the "III mi. 7" chord. (It cannot have a 9th or 13th!)

Bar ® "C[#] mi. 7" is the "VI mi. 7" chord.

Bar ¹⁹ "B sus." is the "V 7" chord.

Bar ② "9/3" means the 3rd has been replaced by the 9th, sometimes called a "sus. 2."

Bars The same as bars ① and ②.

21)& 22)

Bar ② " $G^{\sharp} + 7 (+9)$ " is a " G^{\sharp} 7" with a raised 5th ("E") and a raised 9th ("B"). The " G^{\sharp} " triad contains "C", which is not in the "E" major scale. In other words, it is chromatic to the key of "E" major. However, the ± 5 , the $\frac{1}{9}$, and the ± 9 , are all found in the Phrygian mode of the major scale.

Bar 24 "A6" could be "A Ma. 13."

Bar 🖾 Two beats per chord.

Bar 🖾 "A6" could be "A Ma. 7 (+11)" — it's Lydian.

Bar 27

means repeat back to the top of the chart.

9 Song Analysis, Example II

Example II: Freddie the Freeloader

Freddie the Freeloader, by Miles Davis, is a good illustration of an elementary I, IV, V Blues progression, with the added twist of a VII7 chord. Although the tune is simple, the analysis of the scale applications for improvisation reveals many possibilities.

It is easy to modify the basic chords to accommodate the melody, therefore diagrams of those chords are provided.

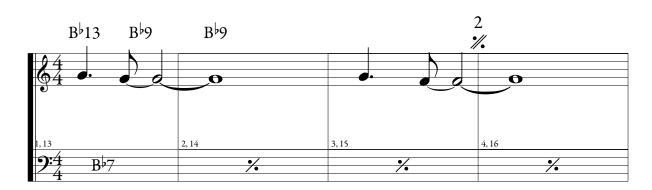
It may be found that the addition of the VII7 chord ("AV7") forces the player to focus instead of routinely playing through the usual I, IV, V Blues progression.

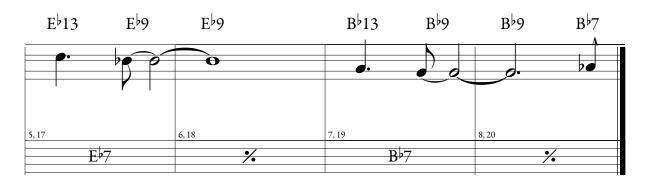
<u>Freddie the Freeloader</u>

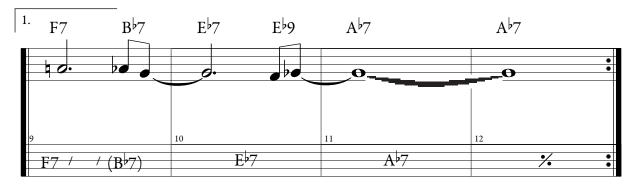
Miles Davis

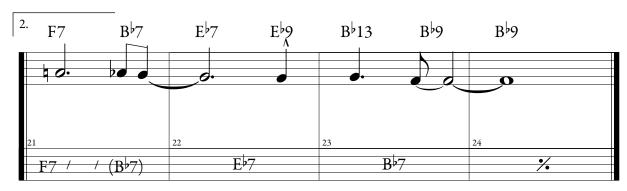
Freddie the Freeloader

(Med. Slow) **Miles Davis**

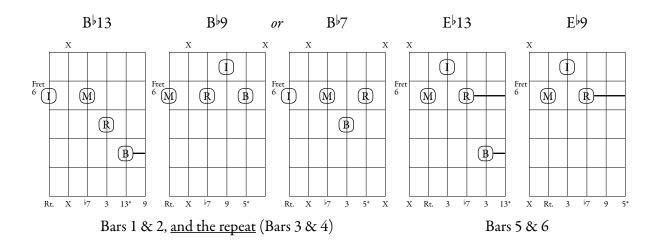


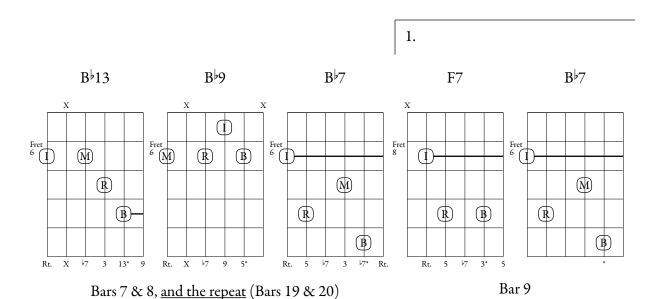






Chord Melody for Freddie the Freeloader



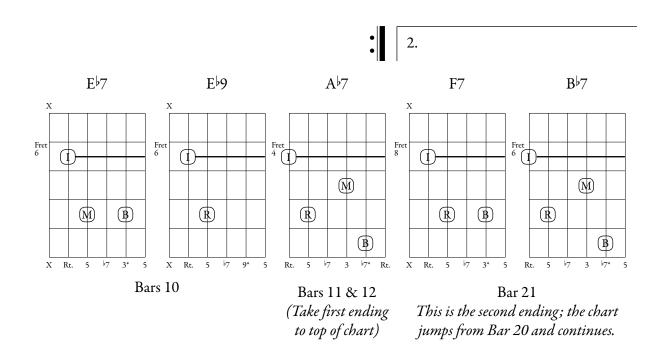


* Melody notes

After the first ending, the chart jumps from here to Bar 21, the second ending.

(This is the first ending.)

Chord Melody for Freddie the Freeloader - Continued



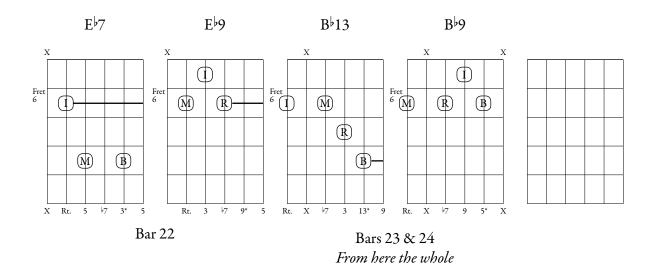
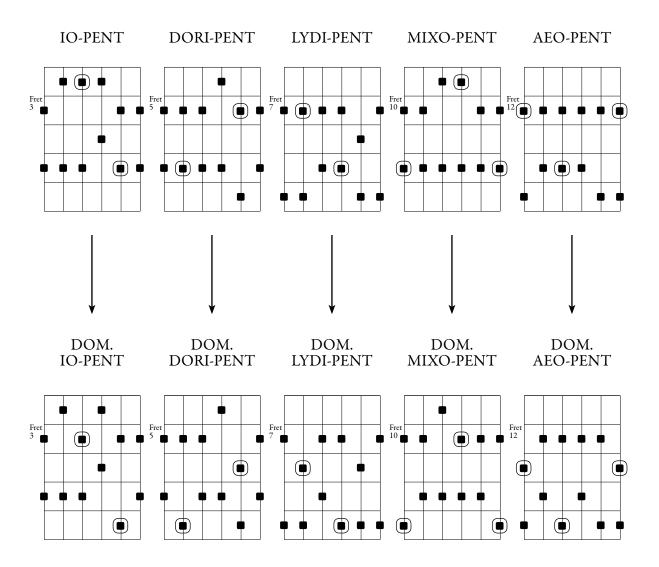


chart starts over again.

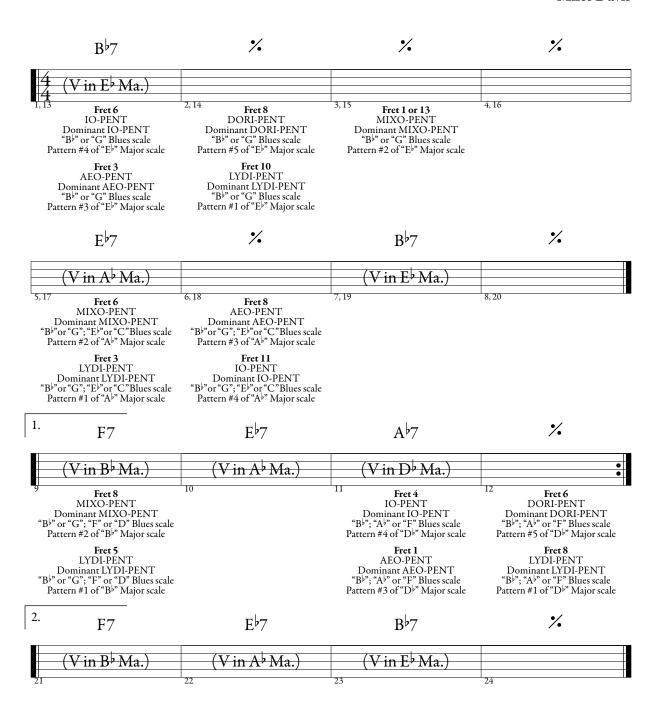
The Dominant Pentatonic Scale



By changing the <u>6th</u> Degree to a "7th" (raising the 6th by one fret), the Pentatonic scale is changed to one that specifically fits Dominant 7th chords, "G6" to "G7."

Freddie the Freeloader

Miles Davis



10 Song Analysis, Example III

EXAMPLE III: THE LOW DOWN

The Low Down is a tune that combines elements of the Blues with the major scale-type chord progressions. The key is basically "C" Major, but liberties have been taken.

Here is a look at how the normal members of the major scale chord family have been modified; as well as the new scale sources from which these chords are built:

<u>Normal</u>	Modified	Scale Source
I = "C" Ma. 7	"C7"	"F" Major scale
II = "D" mi. 7	"D7"	"G" Major scale
III = "E" mi. 7	"E7"	"A" Major scale
IV = "F" Ma. 7	"F7"	"B ^b ," Major scale
V = G7	"G+7"	"G" Whole tone
VI = "A" mi. 7	(not)	"C" Major scale
VII = "B"mi.7(5)	(not used here)	(could be sub for "G7")
	$\sqrt{VII} = "B\sqrt{7}"$	"E ^b " Major scale

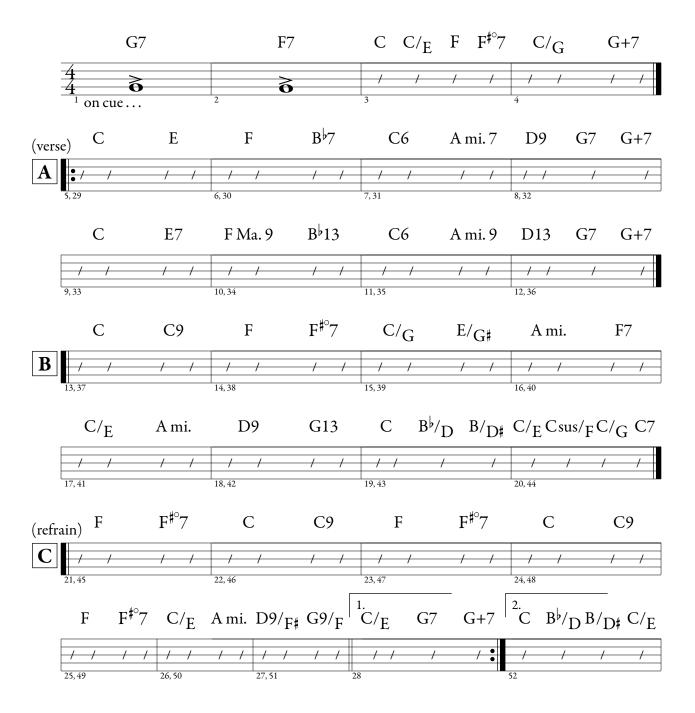
Also several passing chords are used:

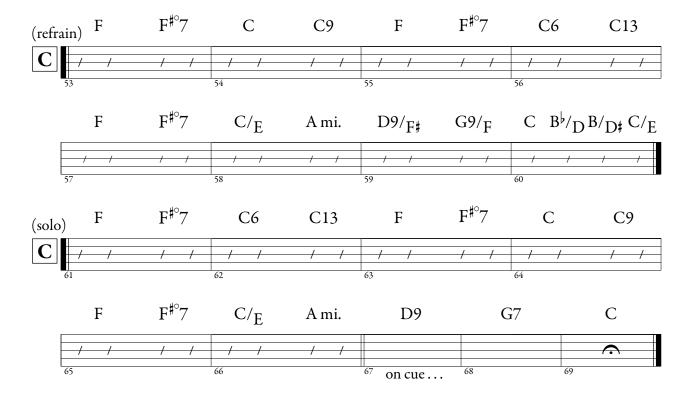
$$+IV = F^{\sharp \circ} 7$$
 F^{\sharp} Diminished scale $VII = B$

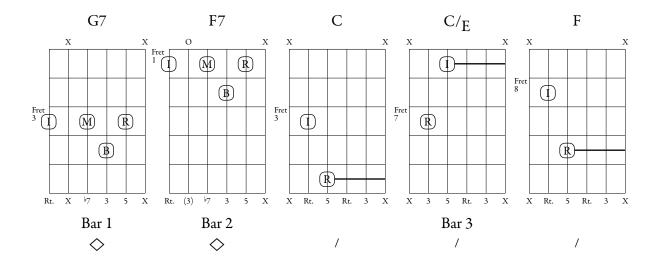
They move by so quickly that they do not have much effect on the key center of the song.

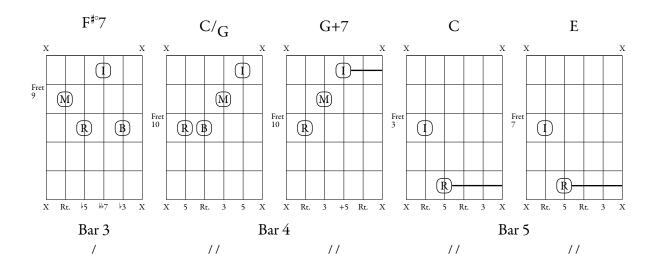
The Low Down

MM70 12/8 Feel

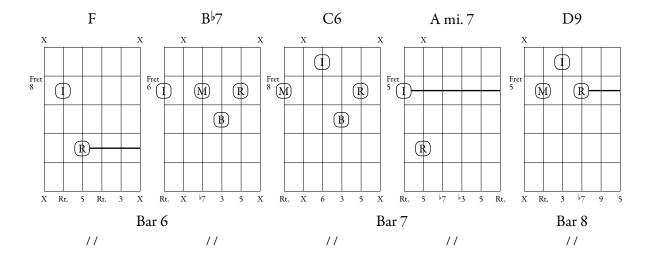


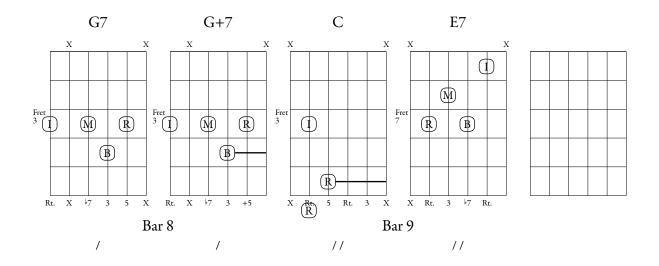


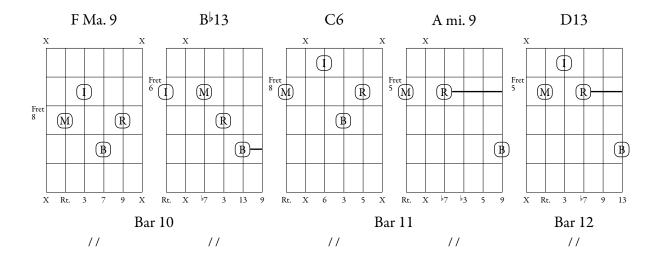


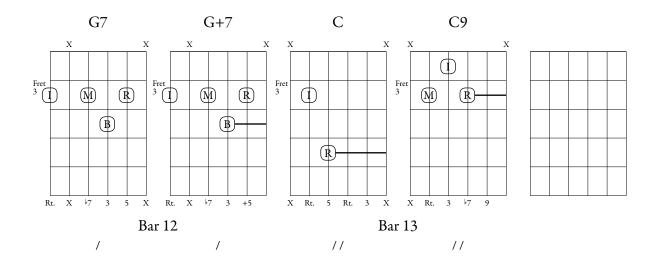


Time notation:
$$\diamondsuit$$
 = four beats
$$= one beat$$

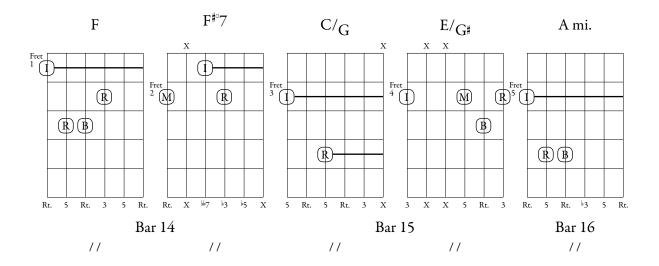


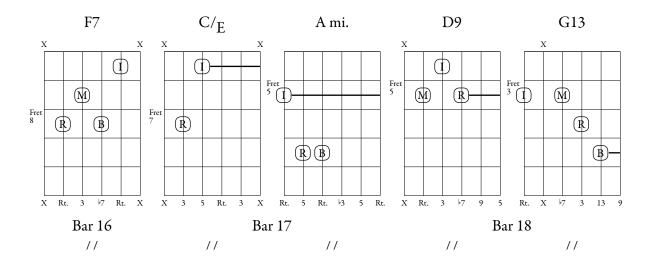


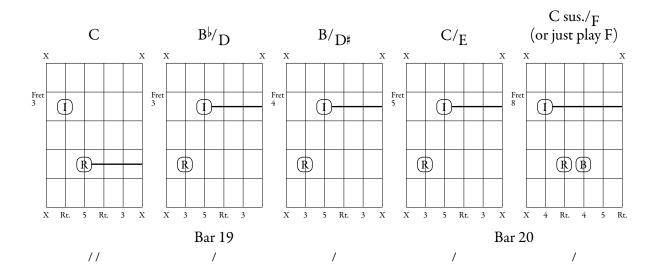


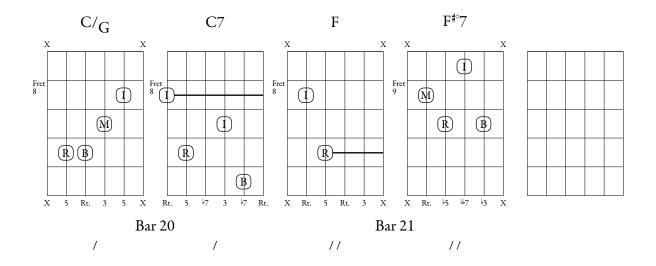


B section starts here.

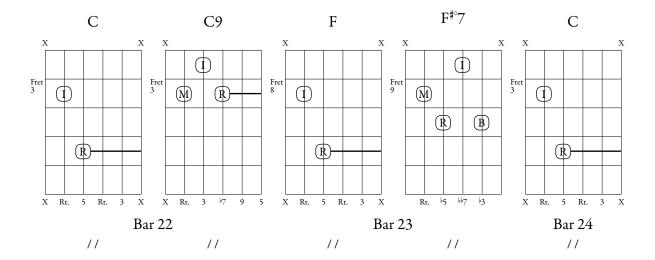


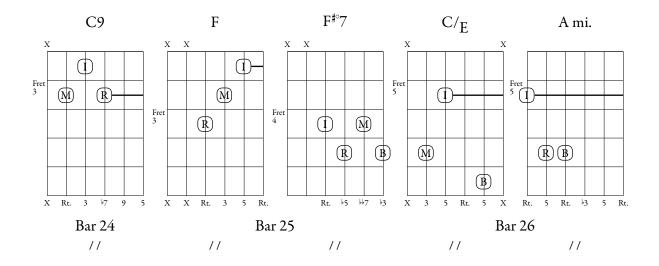


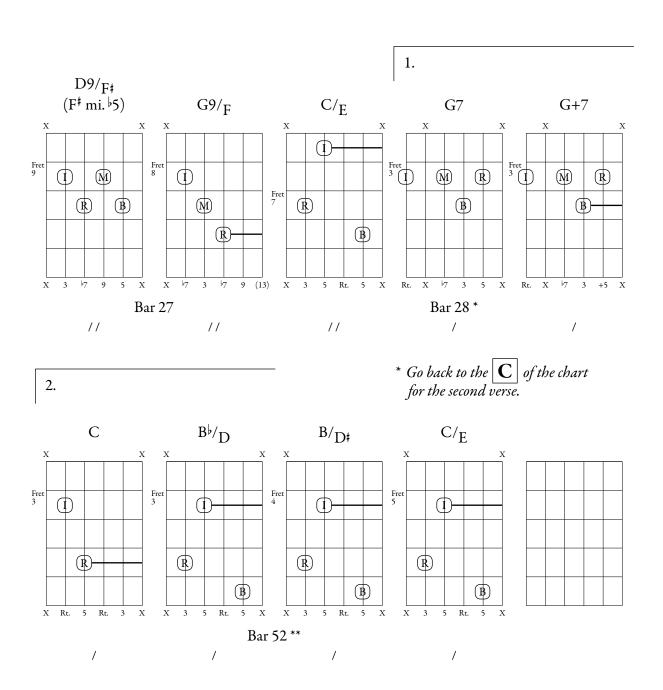




C refrain starts here.







^{**} This leads into the last chorus.

CHORD CHART ANALYSIS: THE LOW DOWN

How the chart breaks down:

MM70 Set metronome at MM70.

12/8 Feel Count: "1, 2, 3; 2, 2, 3; 3, 2, 3; 4, 2, 3" beats per bar.

- 4 means four beats per bar. Bar 1
 - "on cue" indicates that someone in the band will direct the changes.
 - " o " is a whole note; hit the chord once and let it ring.
 - " > " is a hard accent.
 - "G7" is V7 in "C".
- "F7" is IV7; the "B\" Major scale is the source. Bar 2
- "C", "C/ $_F$ ", "F", $F^{\sharp \circ}$ 7" form an ascending bass line (isolate and learn). Bar 3
- "C/G" (second inversion); "G" note in bass completes ascending line. Bar 4 "G+7" has an augmented 5th ("D $^{\sharp}$ "), which leads into a "C" chord.
- repeat mark. A Bar 5

"C" is I7; the "F" Major scale is the source.

"E" is III7; the "A" Major scale is the source.

- Bar 6 "F Ma. 7" or "Ma. 9" is IV Ma. 7; the "C" Major scale is the source. "B\dagger7" is \daggerVII7; the "E\dagger" Major scale is the source.
- Bar 7 "C6" is I Ma. 7; Diatonic to the "C" Major scale.

 "A mi. 7" is VI mi. 7; Diatonic to the "C" Major scale.
- Bar 8 "D9" is II7; the "G" Major scale is the source.

 "G7" and "G+7"* are V7; the "C" Major scale is the source for "G7."
- Bar 9 "C" is I7; the "F" Major scale is the source.

 "E7" is III7; the "A" Major scale is the source.
- Bar 10 "F Ma. 9" is IV Ma. 7; the "C" Major scale is the source.

 "B\13" is \vert VII7; the "E\vert\" Major scale is the source.
- Bar 11 "C6" is I Ma. 7; Diatonic to the "C" Major scale.

 "A mi. 9" is VI mi. 7; Diatonic to the "C" Major scale.
- Bar 12 "D13" is II7; the "G" Major scale is the source.

 "G7" and "G+7"* are V7; the "C" Major scale is the source for "G7."
- The possible scale sources and substitutes for "G+7" are:

 "G" Whole Tone scale = G+7, G+9, G7($^{+5}_{5}$), G9($^{+5}_{5}$)

 "G" 8 Note Dominant scale = G7($^{\downarrow}$ 9), G7(+9), G7($^{+11}_{5}$)

 Mode VII of "A $^{\downarrow}$ " Melodic Minor scale = G+7($^{\downarrow}$ 9), G+7(+9), G+7($^{+11}_{5}$ 9)

 Mode III (Phrygian) of "E $^{\downarrow}$ " Major scale = G7($^{\downarrow}$ 9), G7(+9), G7($^{\downarrow}$ 139)

 (Contains no Major 3rd, but works in a pinch.)

- **B** Bar 13 "C" is I Ma. 7. "C9" is I7 (helps set up move to "F").
 - "F" is IV Ma 7.

 "F $^{\sharp \circ}$ 7" is +IV dim. 7. First part of ascending bass line. Bar 14
 - "C/ $_G$ " (second inversion).

 "E/ $_{G^{\sharp}}$ " (first inversion).

 More chromatic ascending line. Bar 15
 - "A mi. 7" is VI mi. 7; "end of the line." Bar 16 "F7" is IV7.
 - Bar 17 "C/E" is descending line from "F7." "A mi." is beginning of descending 4th bass line.
 - Bar 18 "D9" More 4th bass movement.
 - Bar 19* "C" is I. " B^{\flat}/D " and " B/D^{\sharp} " are the beginning of another ascending bass line.
 - One single chord inverted to produce a bass line. Bar 20* "C/ $_E$ " & "C sus./ $_F$ "; chromatic ascending bass line. "C/G" and "C7"; 4th movement.
 - Isolate and learn Bars 19 and 20 as a "chord lick."

C Refrain.

Bar 23 "F" is IV Ma 7. "
$$F^{\sharp \circ}$$
7" is +IV dim. 7.

Bar 25 "F" is IV Ma 7. "
$$F^{\sharp \circ}$$
7" is +IV dim. 7

Bar 26
$$\text{``C/E''}$$
 Substitute for "C" & "C9" (like Bar 22), but has softer "A mi." $\text{effect and different bass line.}$

- " $C/_E$ " is last of descending bass line. Bar 28
 - "G7" & "G+7"; raised 5th ("D $^{\sharp}$ "), lifts back to Bar 5, 29 for second verse.

This is referred to as a "first ending." 1.

- Repeat back, in this case to $\boxed{\mathbf{A}}$, to the top of the verse section. Play **A**, **B**, and **C** again (Bars 29 through 51), skip the <u>first</u> ending, jump to the second ending (Bar 52) 2. and then play to the end of the tune.
- "C", "B $^{\flat}/_D$ ", "B $^{\prime}/_D$ ", "C $^{\prime}/_E$ " are similar to Bars 19 and 20 "lifts" into Bar 52 C (Refrain).

1 1 The "D" Tuning

THE "D" TUNING

The "D" tuning changes the open-string voicing of the guitar to a "D" major chord, it's sound is identical to an "E" shaped bar chord.

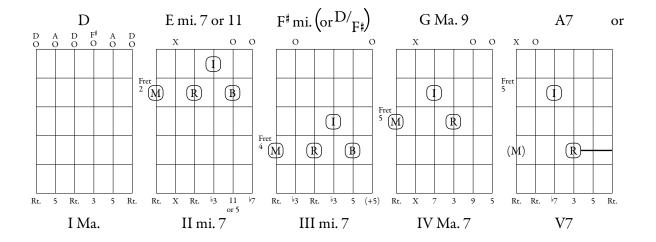
Although the tuning is beautiful-sounding, it presents the player with some real challenges.

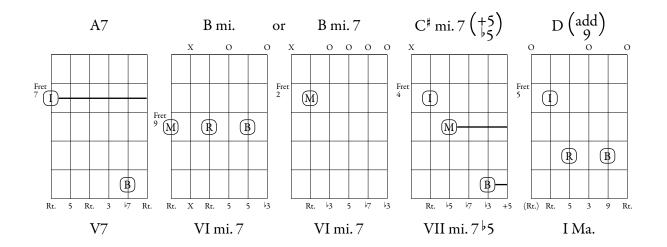
The primary difficulty arises from correlating the unique voicings to the outside world and vice-versa.

As a point of departure, diagrams of the diatonic-chord voicings from the three major scales that contain the "D" Major chord will be provided.

"D" Tuning Diatonic Chords

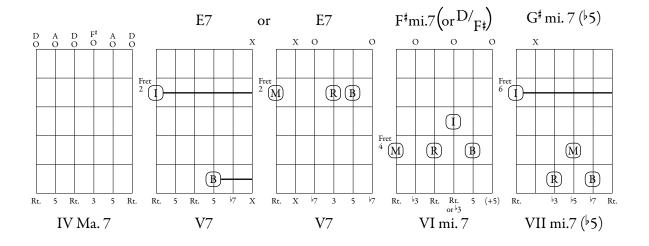
When "D" is a I Chord ("D" Major Scale)

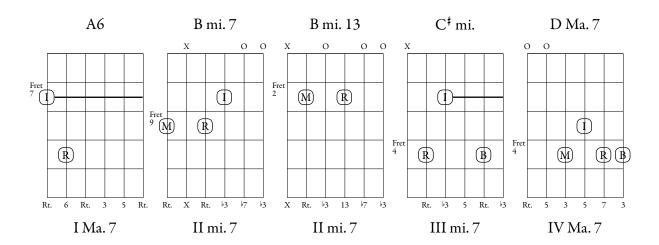




"D" Tuning Diatonic Chords

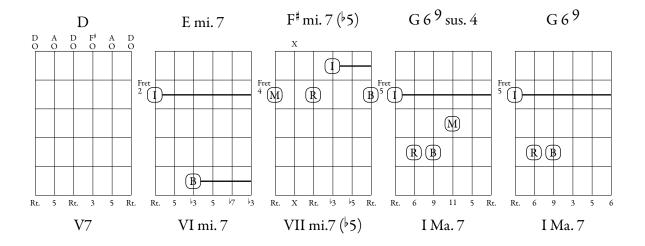
When "D" is a IV Chord ("A" Major Scale)

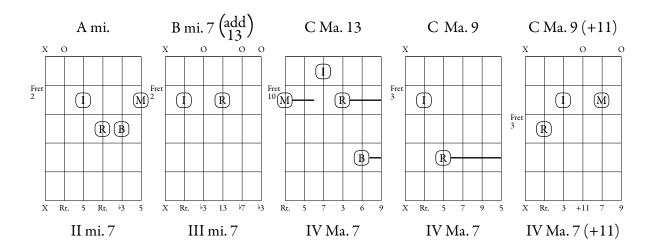




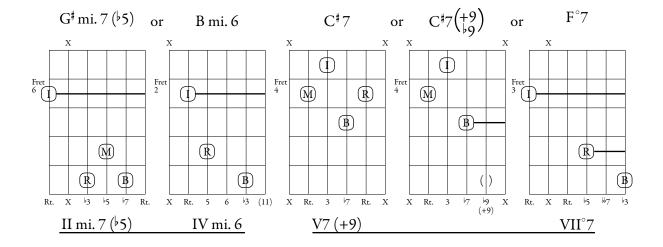
"D" Tuning Diatonic Chords

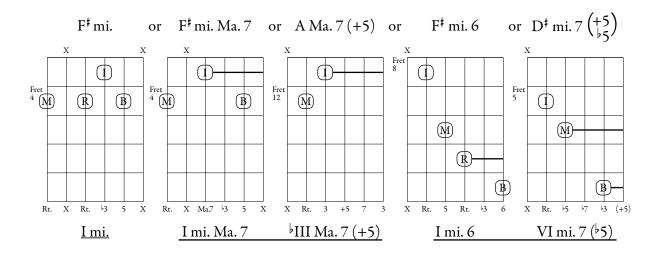
When "D" is a V Chord ("G" Major Scale)





Basic Minor Chords in the "D" Tuning





12 Beyond the Major Scale

LINE PROGRESSIONS

It is possible to create moving lines by changing one note in a given chord. Two of the most common are:

A major chord where the 5th ascends.

A minor chord where the root descends.

In the following example the notes move <u>chromatically</u>; pay careful attention to the fact that each time the note moves the <u>chord name changes</u>.

Major Chord with Ascending 5th

Minor Chord with Descending Root

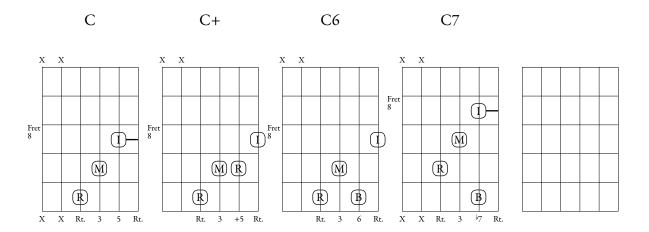
The following four pages contain chord charts diagramming the previous examples.

On the chord charts the labels "High Position, "Mid Position" and "Low Position" or "Hi-Po", "Mi-Po" and "Lo-Po", are used to designate the following:

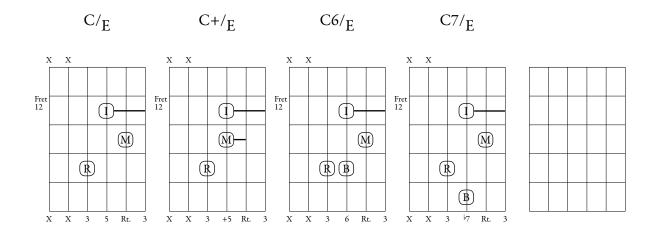
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"High Position" = "D," "G," "B," and "E" strings (top four strings)
```

"Mid Position" = "A," "D," "G" and "B" strings (middle four strings)

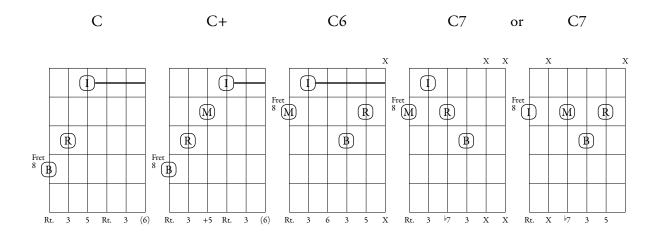
"Low Position" = "E," "A," "D," and "G" strings (bottom four strings)



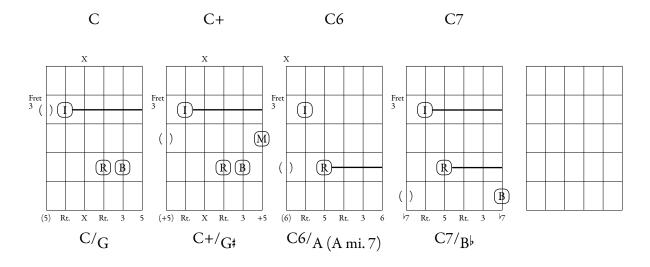
Root on "D" string.
"Hi-Po"



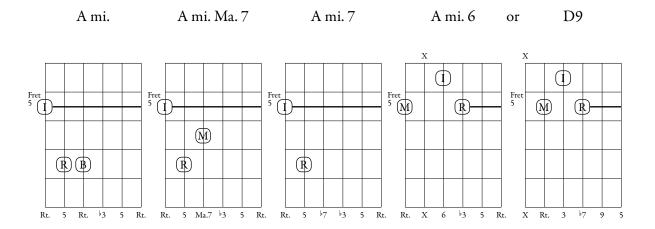
Chord's 3rd is on the "D" string. "Hi-Po"



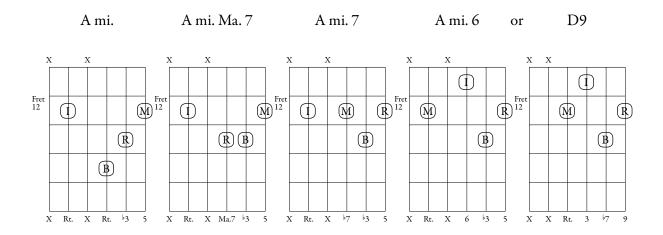
Root on "E" string.
"Lo-Po"



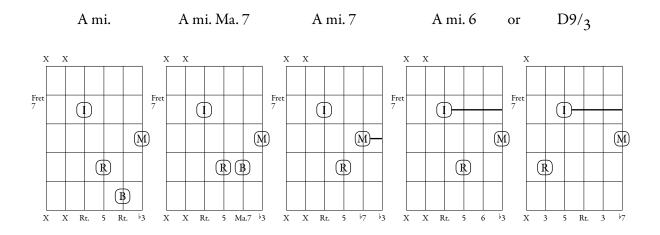
Root on "A" string. "Mi-Po"



Root on "E" string.
"Lo-Po"



Root on "A" string.
"Mi-Po"



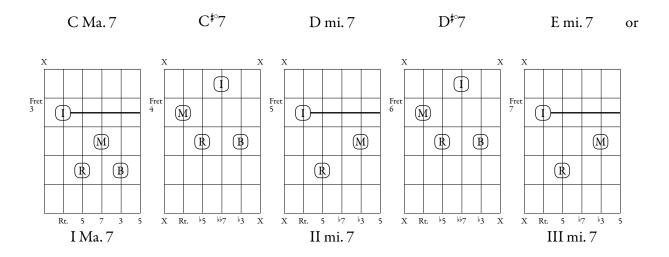
Root on "D" string.
"Hi-Po"

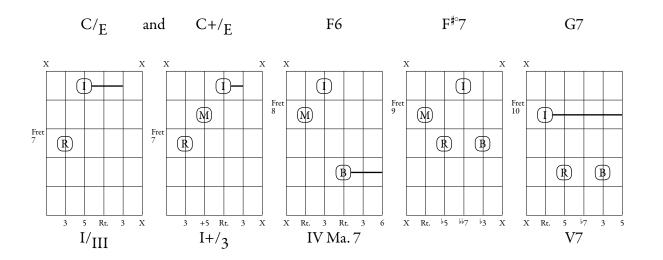
Passing Chords

On the following four pages are passing chords that fit between the regular chords of the major scale.

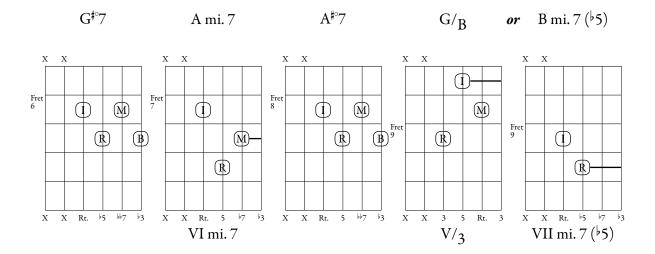
There is always more than one choice — ascending progressions lend themselves to using different passing chords from descending progressions.

Ascending Passing Chords in Major Keys

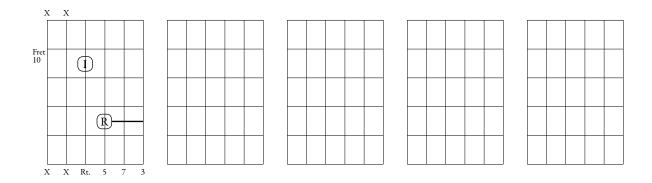




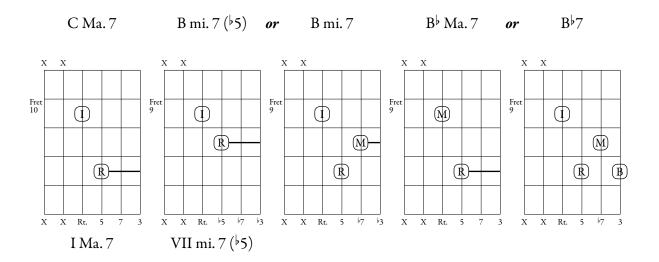
Ascending Passing Chords in Major Keys

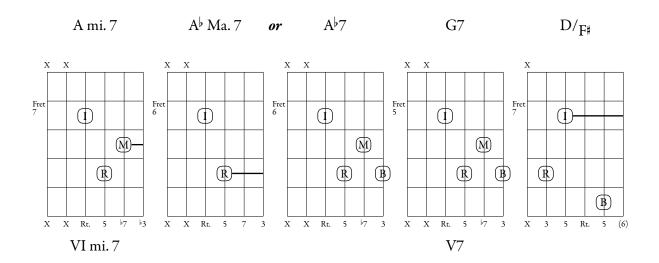


C Ma. 7

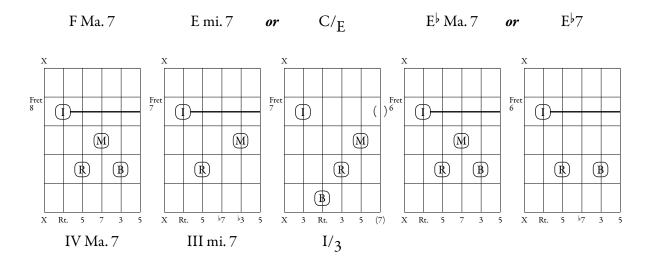


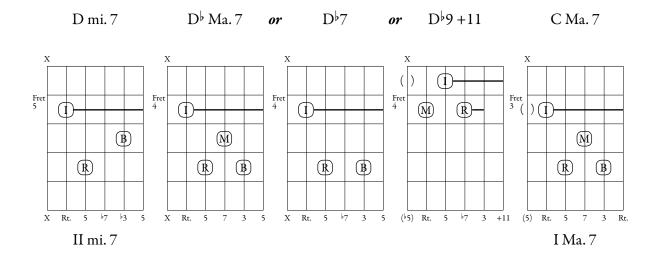
Descending Passing Chords in Major Keys





Descending Passing Chords in Major Keys





CONTRASTING MAJOR AND MINOR

When exploring the minor tonalities, it may help to compare the Definitive chords with those of the major scale:

<u>Major</u>	<u>Minor</u>
I Ma. 7	I mi. 6 or I mi. Ma 7
II mi. 7	II mi. 7 (♭5)
III mi. 7	^b III Ma. 7 +5
W.).(=	W7 • /
IV Ma. 7	IV mi. 6
V7	V7 (+9) or any alterations
V /	$\sqrt{(\pm 2)}$ of any attenuous
VI mi. 7	VI mi. 7 (\(\bigsip 5 \)
. 2 2220 /	, ())
VII mi. 7 (\$5)	VII°7 (Diminished 7th)

The Roman numerals behave the same way, more or less, in minor progressions and chord substitutions as they do in major:

I mi. 6 and VI mi 7 (
$$^{\flat}$$
5) can be swapped

I mi. Ma. 7 and $^{\flat}$ III Ma. 7 (+5) can be swapped

II mi. 7 ($^{\flat}$ 5) and IV mi. 6 can be swapped

V7 (+9) and VII $^{\circ}$ 7 can be swapped

PLAYING MINOR PROGRESSIONS

On pages 122 and 123 are some basic minor progressions. Playing them will teach the ability to hear and recognize these "colors."

Try all of the combinations shown.

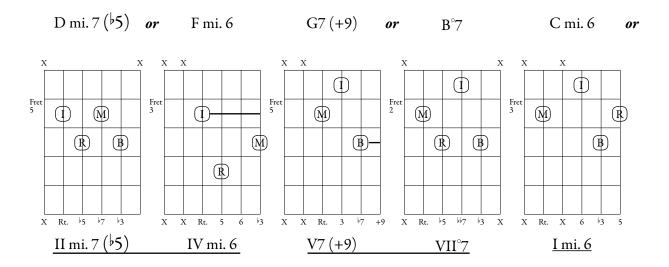
Major and minor tonalities are often mixed:

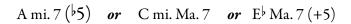
In the above example the V chord is from minor, the II and the I chord are from major.

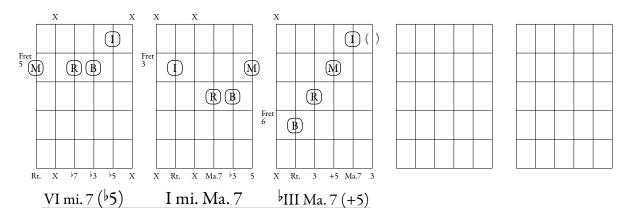
The second example above is reversed from the first, II and I are from minor and the V chord is from major.

These basic progressions are the building blocks of all our modern western music.

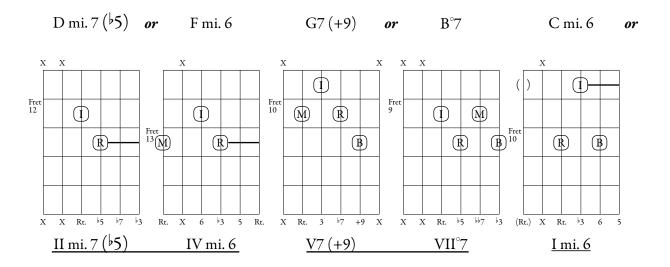
Basic Minor Progressions



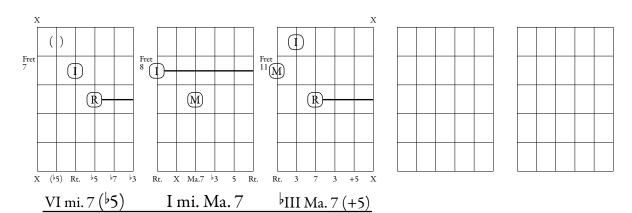




Basic Minor Progressions







P A R T

FRETBOARD HARMONY WORKBOOK

	<u>Flat</u>	Given Note	<u>Sharp</u>
	1/2 step below		1/2 step above
1.	(C^{\flat}) or B	С	C^{\sharp} or (D^{\flat})
2.		F	
3.		B^{\flat}	
4.		E^{\flat}	
5.		A^{\flat}	
6.		D^{\flat}	
7.		$G^{ u}$	
8.	(A^{\sharp}) or B^{\flat}	$C_{ ho}$	C\(\psi\) or (B\(\psi\))
9.		E	
10.		A	
11.		D	
12.		G	
13.		D^{\sharp}	
14.		G^{\sharp}	
15.		C [#]	
16.		В	
17.		F [#]	
18.		A^{\sharp}	

	<u>Flat</u>	Given Note	<u>Sharp</u>
	1/2 step below		1/2 step above
1.	$(E^{ uldet})$ or D^{\sharp}	E	F or (E [#])
2.		A	
3.		D	
4.		G	
5.		\mathbf{D}^{\sharp}	
6.		G^{\sharp}	
7.		C [‡]	
8.		В	
9.		F^{\sharp}	
10.	Αŧ	A^{\sharp}	B or (C^{\flat})
11.		С	
12.		F	
13.		B^{\flat}	
14.		E^{\flat}	
15.		A^{\flat}	
16.		$\mathrm{D}^{\!\!\!\!\!\;\!$	
17.		G^{\flat}	
18.		Cþ	

	<u>Flat</u>	Given Note	<u>Sharp</u>
	1/2 step below		1/2 step above
1.		A^{\sharp}	
2.		\mathbf{F}^{\sharp}	
3.	(A^{\sharp}) or B^{\flat}	В	C or (B [#])
4.		C^{\sharp}	
5.		G [#]	
6.		D^{\sharp}	
7.		G	
8.		D	
9.		A	
10.		E	
11.		$C_{ ho}$	
12.	Fધ	$\mathrm{G}^{ abla}$	Gŧ
13.		D^{\flat}	
14.		A^{\flat}	
15.		$E^{ u}$	
16.		$\mathrm{B}^{\!\!\!\!\;b}$	
17.		F	
18.		С	

<u>Flat</u>	Given Note	<u>Sharp</u>
1/2 step below		1/2 step above
1. G	A^{\flat}	Αŧ
2.	С	
3.	E^{\flat}	
4.	G^{\flat}	
5.	A	
6.	C^{\sharp}	
7.	F	
8.	$\mathrm{B}^{\!\!\!\;\flat}$	
9. G¤	G^{\sharp}	А
10.	E	
11.	F^{\sharp}	
12.	В	
13.	D	
14.	D^{\flat}	
15.	C_{\flat}	
16.	D^{\sharp}	
17.	G	
18.	A^{\sharp}	

THE CHROMATIC SCALE

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

~	<u>Go Flat</u>	Start here	<u>Go Sharp</u> →
		\downarrow	
1.	$C, D^{\downarrow}, D, E^{\downarrow}, E, F, G^{\downarrow}, G, A^{\downarrow}, A, B^{\downarrow}, B$	С	$C^{\sharp}, D, D^{\sharp}, E, F, F^{\sharp}, G, G^{\sharp}, A, A^{\sharp}, B, C$
2.		F	
3.		B^{\flat}	
4.		E^{\flat}	
5.		A^{\flat}	
6.		D^{\flat}	
7.		G^{\flat}	
8.	$C,D^{\flat},D,E^{\flat},E,F,G^{\flat},G,A^{\flat},A,B^{\flat}$	$C_{ ho}$	$C_{1}, C_{2}, D, D_{3}, E, F, F_{3}, G, G_{3}, A, A_{4}, B, C$
9.		E	
10.		A	
11.		D	
12.		G	
13.		D^{\sharp}	
14.		G^{\sharp}	
15.		C^{\sharp}	
16.		В	
17.		\mathbf{F}^{\sharp}	
18.		A [#]	

THE CHROMATIC SCALE

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

←	<u>Go Flat</u>	Start here	<u>Go Sharp</u> →
		\downarrow	
1.	$E, F, G^{\flat}, G, A^{\flat}, A, B^{\flat}, B, C, D^{\flat}, D, E^{\flat}$	E	$F, F^{\sharp}, G, G^{\sharp}, A, A^{\sharp}, B, C, C^{\sharp}, D, D^{\sharp}, E$
2.		A	
3.		D	
4.		G	
5.		D^{\sharp}	
6.		G^{\sharp}	
7.		C^{\sharp}	
8.		В	
9.		F [#]	
10.		A^{\sharp}	
11.		С	
12.		F	
13.		$\mathrm{B}^{ abla}$	
14.		$\mathrm{E}^{ abla}$	
15.		$A^{ u}$	
16.		$D_{ ho}$	
17.		$G_{}^{\flat}$	
18.		C_{\flat}	

THE CHROMATIC SCALE

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

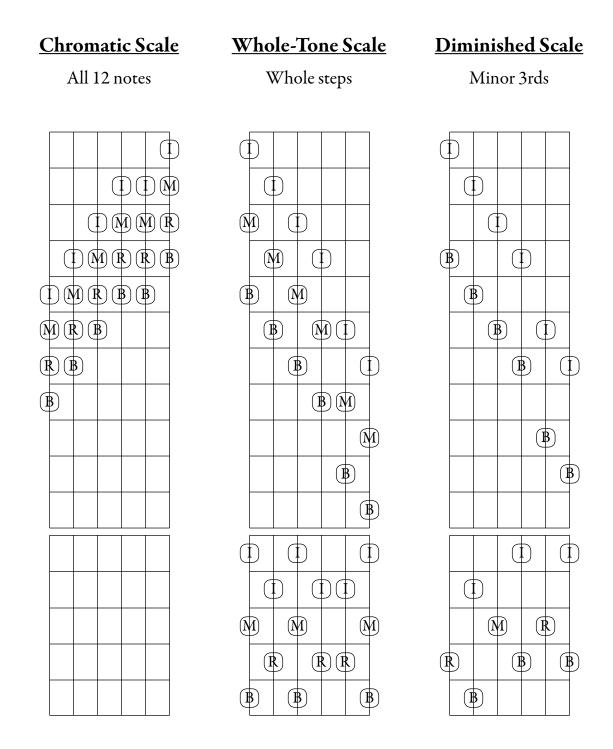
—	<u>Go Flat</u>	Start here	<u>Go Sharp</u>
		\downarrow	
1.	$B^{\flat},B,C,D^{\flat},D,E^{\flat},E,F,G^{\flat},G,A^{\flat},A^{\natural}$	A^{\sharp}	B, C, C [‡] , D, D [‡] , E, F, F [‡] , G, G [‡] , A, A [‡]
2.		F^{\sharp}	
3.		В	
4.		C^{\sharp}	
5.		G^{\sharp}	
6.		D^{\sharp}	
7.		G	
8.		D	
9.		A	
10.		E	
11.		C_{\flat}	
12.		G^{\flat}	
13.		$D_{ ho}$	
14.		A^{l_p}	
15.		E^{\flat}	
16.		B^{\flat}	
17.		F	
18.	_	С	

THE CHROMATIC SCALE

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

-	<u>Go Flat</u>	Start here	<u>Go Sharp</u> →
		\downarrow	
1.	$A^{\flat}, A, B^{\flat}, B, C, D^{\flat}, D, E^{\flat}, E, F, G^{\flat}, G, A^{\flat}$	A	$A^{\sharp}, B, C, C^{\sharp}, D, D^{\sharp}, E, F, F^{\sharp}, G, G^{\sharp} \text{ or } A$
2.		С	
3.		E^{\flat}	
4.		G^{\flat}	
5.		A	
6.		C [#]	
7.		F	
8.		B^{\flat}	
9.		G	
10.		E	
11.		F^{\sharp}	
12.		В	
13.		D	
14.		D^{\flat}	
15.		C_{\flat}	
16.		D^{\sharp}	
17.		G	
18.		A^{\sharp}	

SYMMETRICAL SCALES



SYMMETRICAL SCALES

Chromatic Scale	Whole-Tone Scale	Diminished Scale		
All 12 notes	Whole steps	Minor 3rds		

Symmetrical Scales

Chromatic Scale	Whole-Tone Scale	Diminished Scale
All 12 notes	Whole steps	Minor 3rds

SYMMETRICAL SCALES

Chromatic Scale	Whole-Tone Scale	Diminished Scale		
All 12 notes	Whole steps	Minor 3rds		

Symmetrical Scales

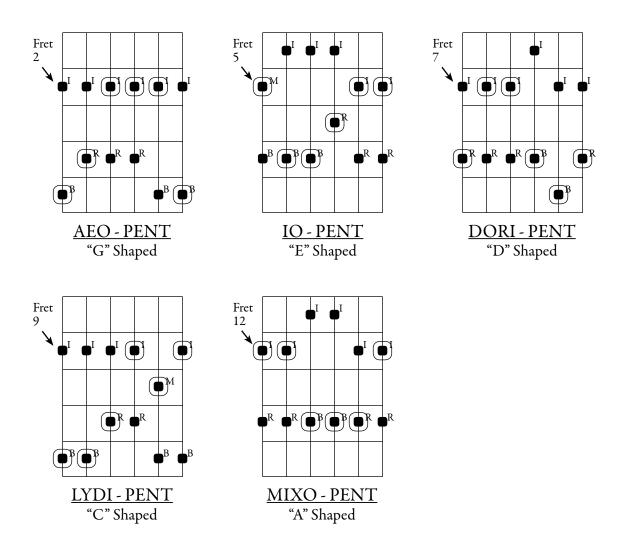
Chromatic Scale All 12 notes	Whole-Tone Scale Whole steps	<u>Diminished Scale</u> Minor 3rds		

SYMMETRICAL SCALES

Chromatic Scale	Whole-Tone Scale	Diminished Scale		
All 12 notes	Whole steps	Minor 3rds		

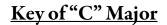
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

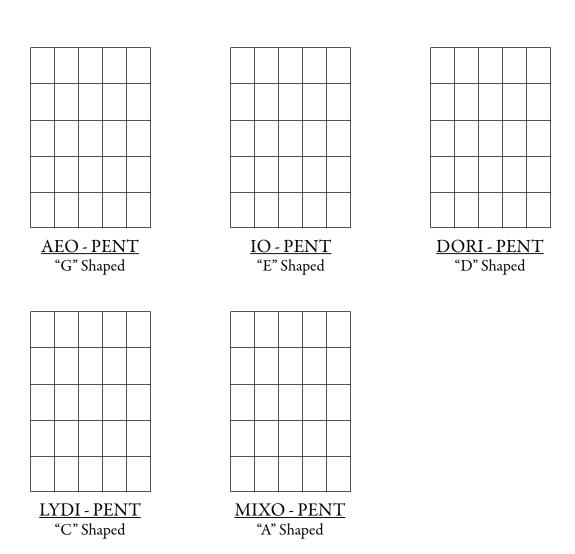
Key of "A" Major



This is an expample of the following exercises. Use the "E" and "A" shaped bar chords to help locate the proper fret numbers.

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

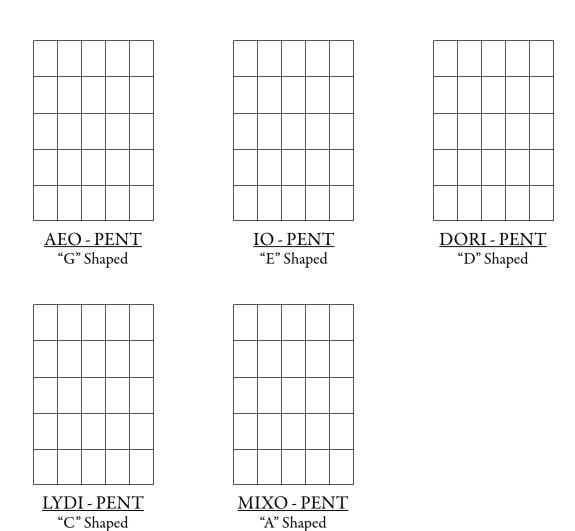




Hint: An "E" shaped "C" chord lies at fret number eight. An "A" shaped "C" chord lies at fret number three.

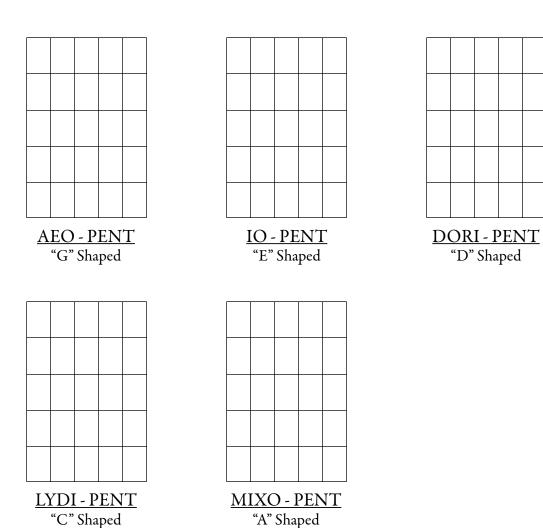
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "B" Major



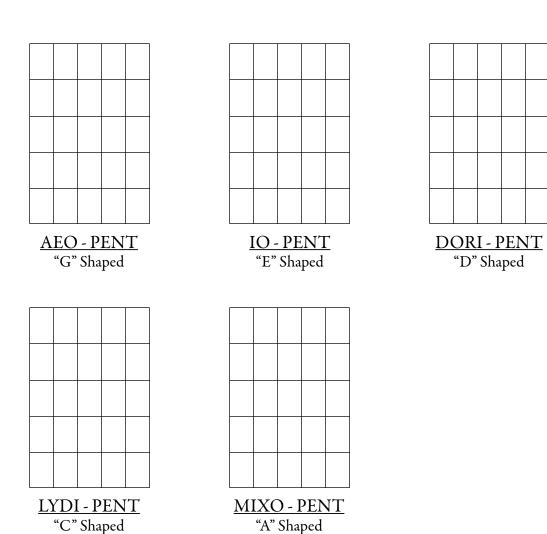
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "F[#]" Major



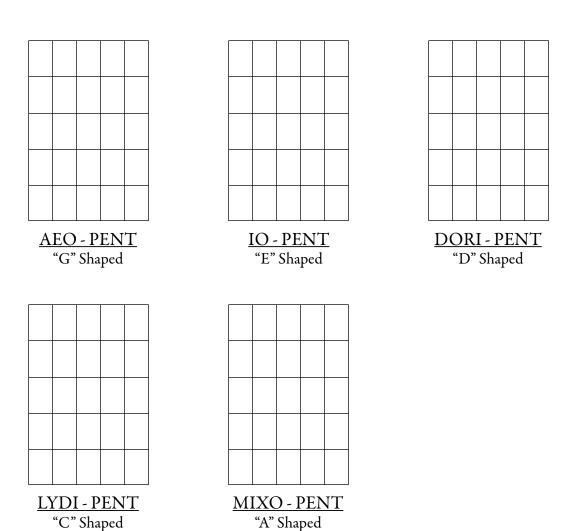
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "C[‡]" Major



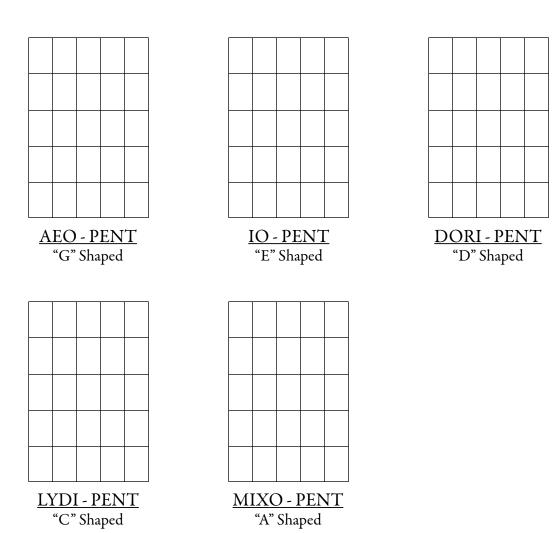
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "D" Major



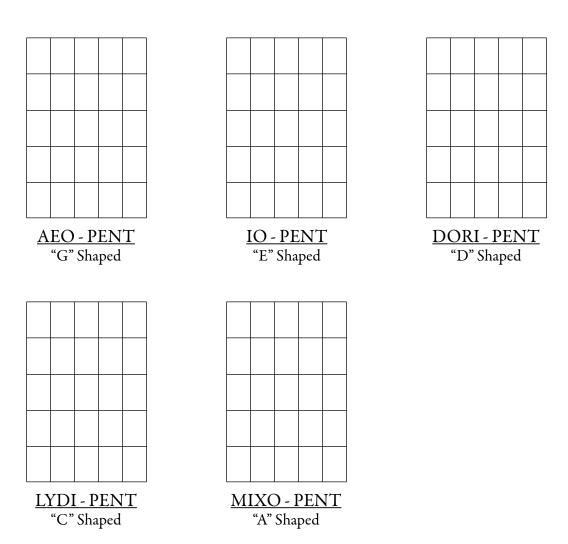
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "G" Major



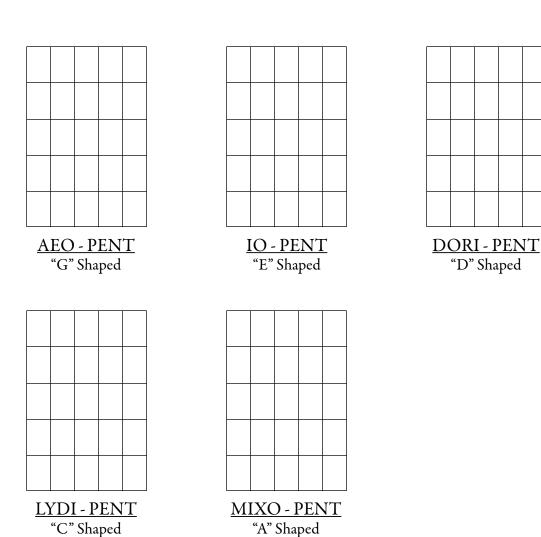
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "E" Major



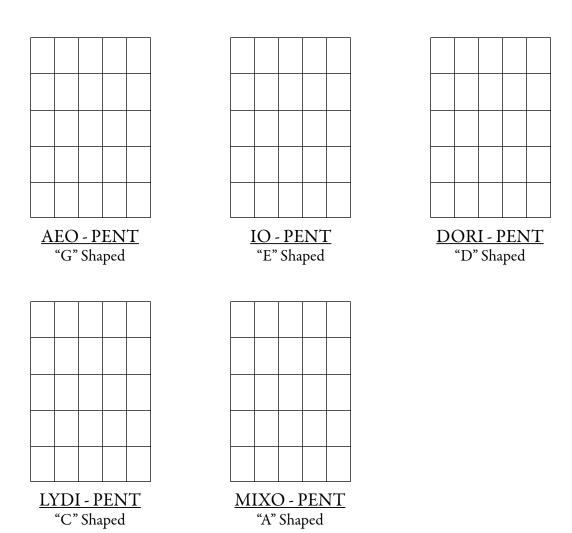
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "B[|]," Major



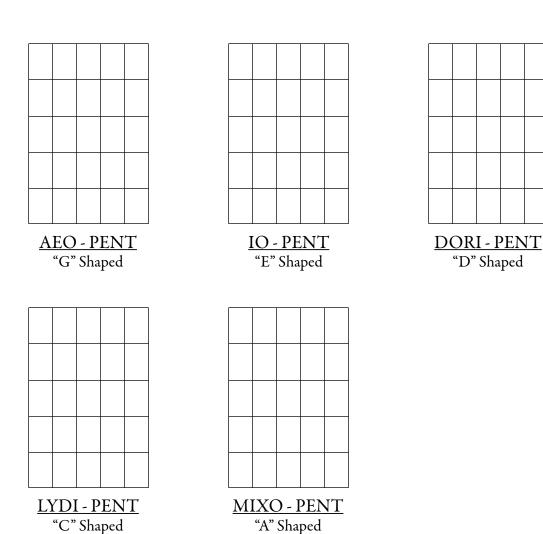
Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "F" Major



Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "E" Major

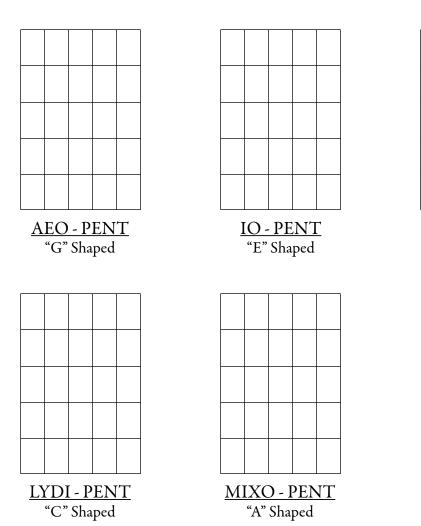


Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "G\" Major

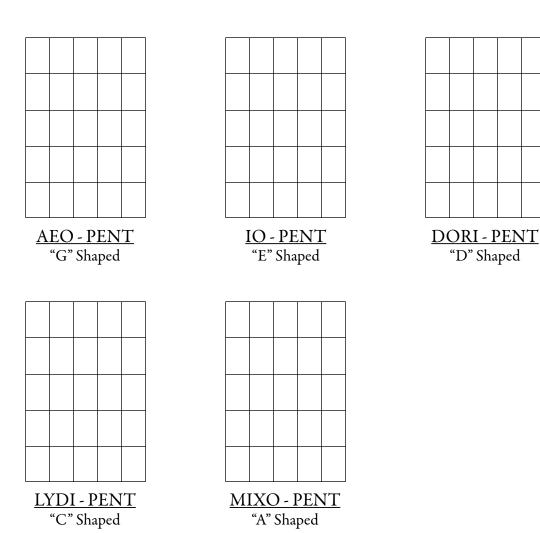
DORI - PENT

"D" Shaped



Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "A" Major



RELATIVE MINOR

Fill in the missing chords.

<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.
C Ma.	A mi.	G Ma.	E mi.	C [‡] Ma.	
F Ma.			A mi.		B mi.
B♭ Ma.	G mi.		D mi.	F [#] Ma.	
E [,] ma.			G mi.		A [#] mi.
A [,] Ma.			D [#] mi.	C♭ Ma.	
D ^b Ma.			G [#] mi.		G ^þ mi.
G♭ Ma.		E Ma.	C [#] mi.	D♭ Ma.	
C♭ Ma.			B mi.		A ^þ mi.
E Ma.			F [#] mi.	E♭ Ma.	
A Ma.			A [#] mi.		B ^þ mi.
D Ma.	B mi.		C♭ mi.	F Ma.	
G Ma.			G♭ mi.		C mi.
D [#] Ma.			D♭ mi.	E Ma.	
G [#] Ma.			A♭ mi.		A mi.
C [#] Ma.			E mi.	D Ma.	
B Ma.			B [,] mi.		G mi.
F [#] Ma.			F mi.	D [#] Ma.	
A [#] Ma.			C mi.		G [#] mi.

RELATIVE MINOR

Fill in the missing chords.

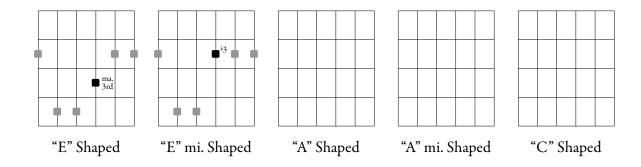
<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.
	A [#] mi.	C Ma.		B♭ Ma.	
F [#] Ma.		F Ma.			F [#] mi.
	B mi.	B♭ Ma.		B Ma.	
C [#] Ma.			E♭ mi.		C [#] mi.
G [#] Ma.			A ^b mi.		G [#] mi.
	D [#] mi.		D♭ mi.	D [#] Ma.	
	G mi.	G ^þ Ma.		G Ma.	
D Ma.		C♭ Ma.			D mi.
	A mi.	E Ma.		A Ma.	
E Ma.			A mi.		E mi.
	C [♭] mi.		D mi.	C♭ Ma.	
G♭ Ma.			G mi.		G ⁾ , mi.
	D ^þ mi.	E♭ Ma.		D♭ Ma.	
A ^þ Ma.		G [‡] Ma.			A [,] mi.
	E ^b mi.	C [‡] Ma.		E♭ Ma.	
B [,] Ma.			B mi.		B [,] mi.
	F mi.		F [#] mi.	F Ma.	
C Ma.			A [#] mi.		C mi.

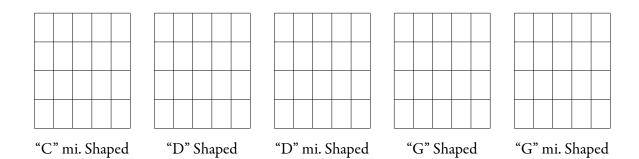
RELATIVE MINOR

Fill in the missing chords.

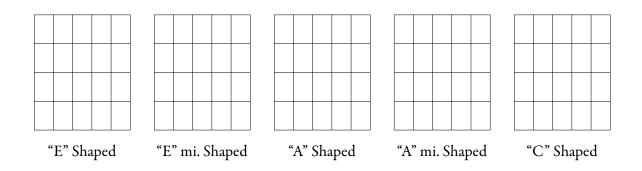
<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.	<u>Major</u>	Rel. Mi.
	C mi.		C mi.	C Ma.	
E Ma.	C IIII.		F mi.	O 1714.	E mi.
	F mi.		B ^b mi.	F Ma.	
A ^{l,} Ma.		E♭ Ma.			A [♭] mi.
	B ⁾ , mi.	A [,] Ma.		B♭ Ma.	
D [,] Ma.		D♭ Ma.			D♭ mi.
	G♭ mi.		G♭ mi.	G♭ Ma.	
A Ma.			C [♭] mi.		A mi.
	C ^{l,} mi.		E mi.	C♭ Ma.	
D Ma.		A Ma.			D mi.
	E mi.	D Ma.		E Ma.	
G Ma.		G Ma.			G mi.
	D [#] mi.		D [#] mi.	E♭Ma.	
B Ma.			G [#] mi.		B mi.
	G [♯] mi.		C [#] mi.	A ^þ Ma.	
F [#] Ma.		B Ma.			F [#] mi.
	C [♯] mi.	F [#] Ma.		C [#] Ma.	
B [,] Ma.		B♭ Ma.			A [#] mi.

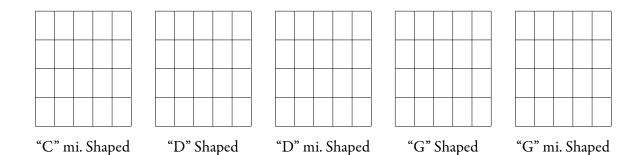
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3rd.



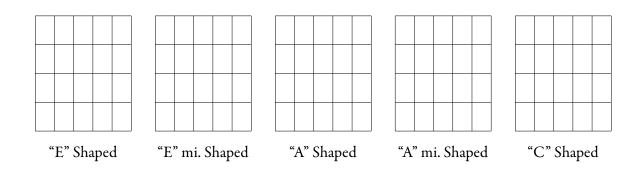


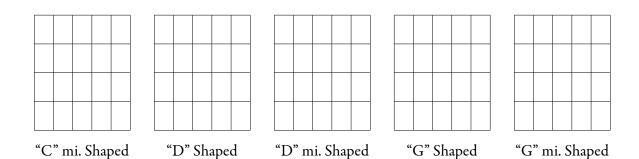
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing <u>3rd</u>.



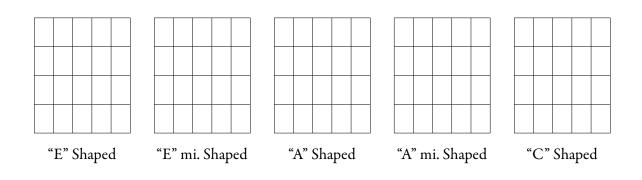


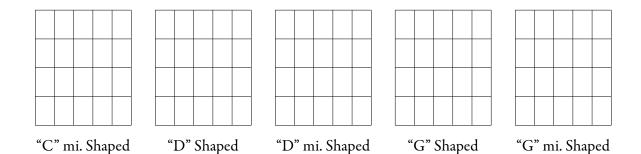
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3rd.



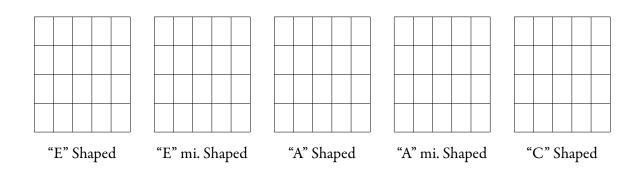


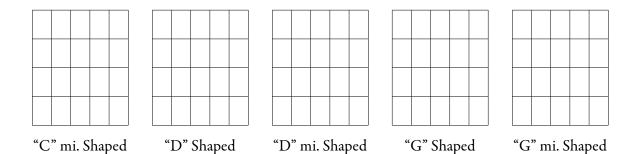
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing <u>3rd</u>.



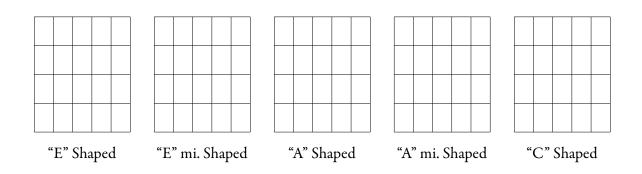


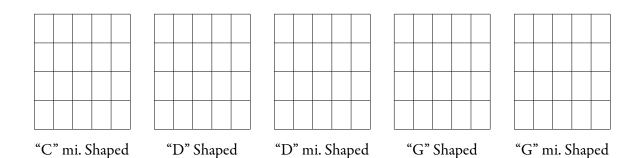
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3rd.





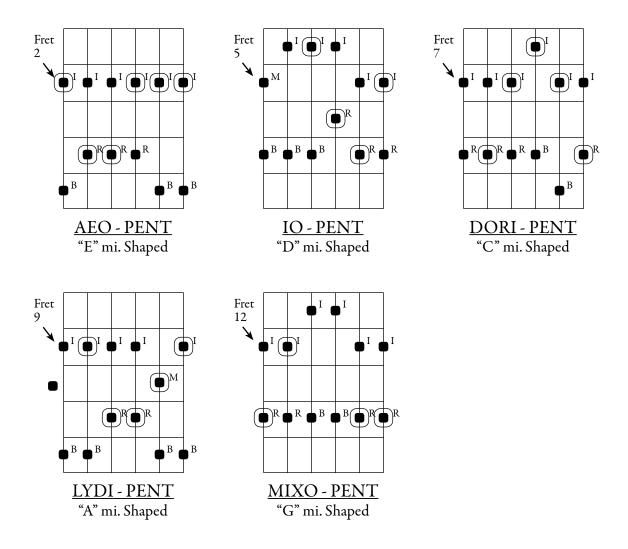
Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing <u>3rd</u>.





Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

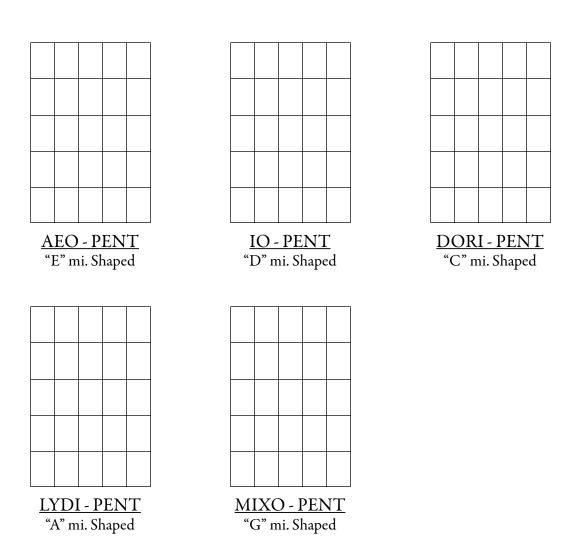
Key of "F[#]" Minor, relative to "A" Major



This is an example of the following exercises. Use the "E" and "A" minor shapes to help locate the proper fret numbers.

Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

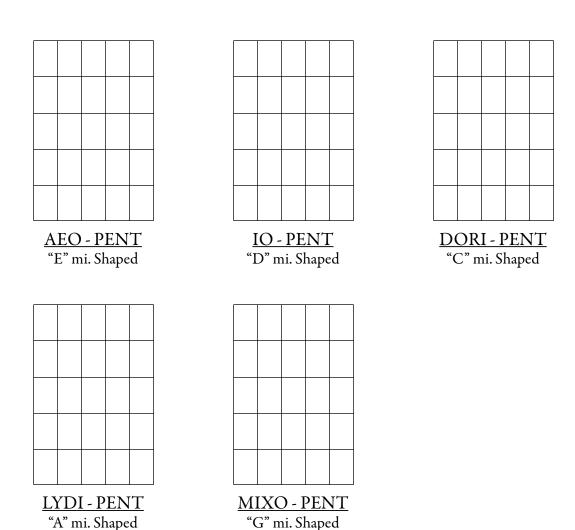
Key of "C" Minor, relative to "E^{|,}" Major



Hint: An "E" minor-shaped "C" minor chord lies at fret number eight. An "A" minor-shaped "C" minor chord lies at fret number three.

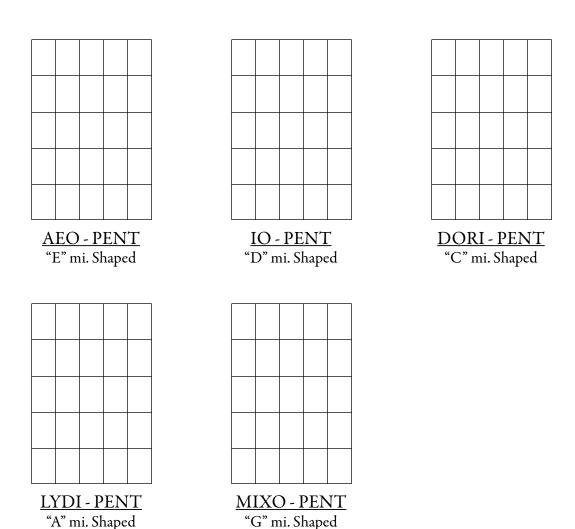
Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "F" Minor, relative to "A," Major



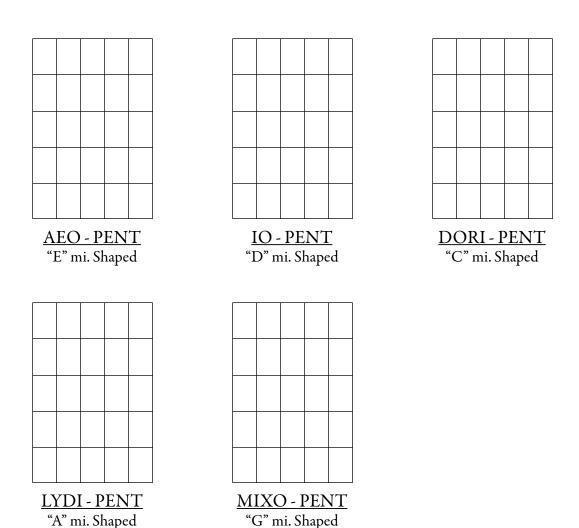
Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "B[|]," Minor, relative to "D[|]," Major



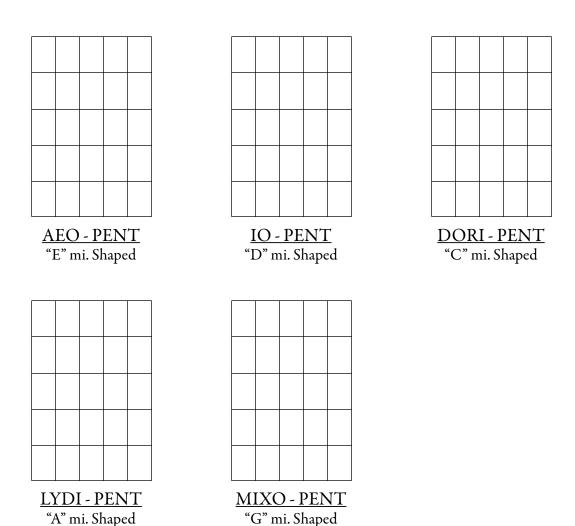
Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "E^{\barger*}" Minor, relative to "G^{\barger*}" Major



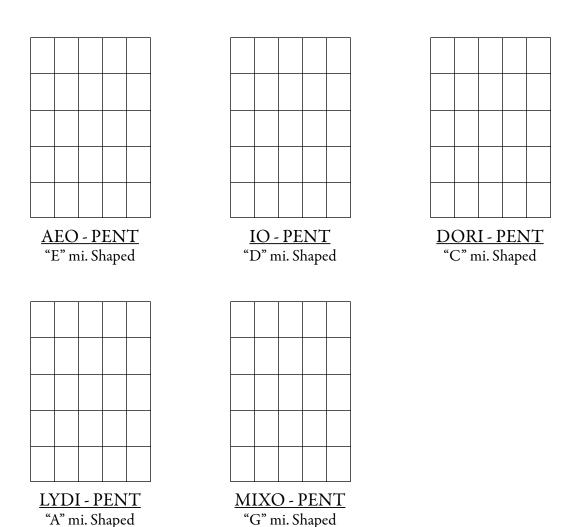
Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "A" Minor, relative to "C" Major



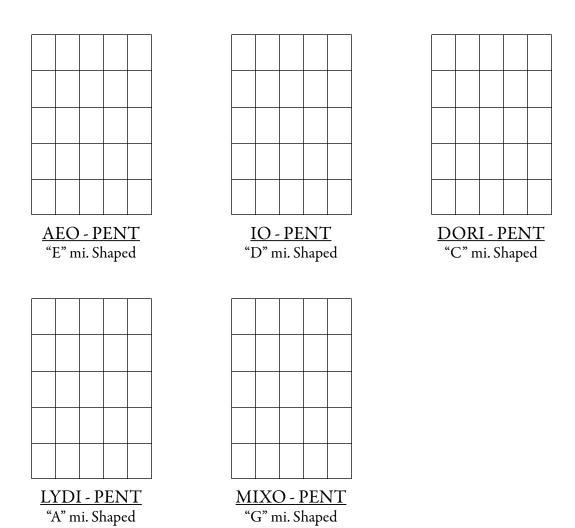
Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "D" Minor, relative to "F" Major



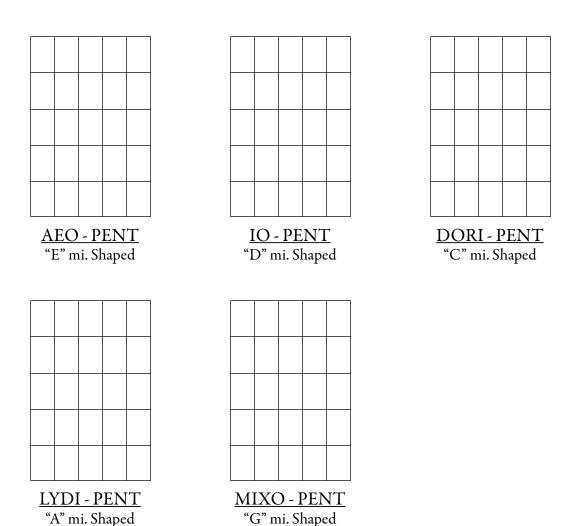
Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "G" Minor, relative to "B\" Major



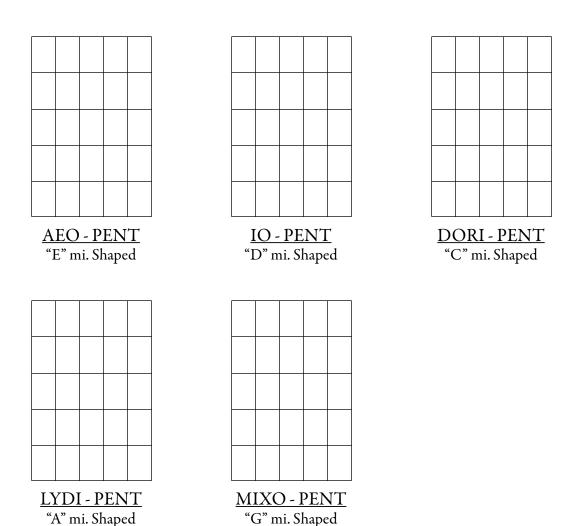
Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "E" Minor, relative to "G" Major



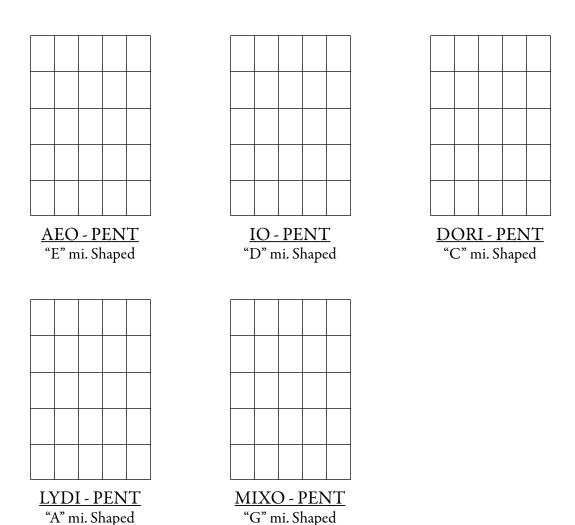
Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "B" Minor, relative to "D" Major



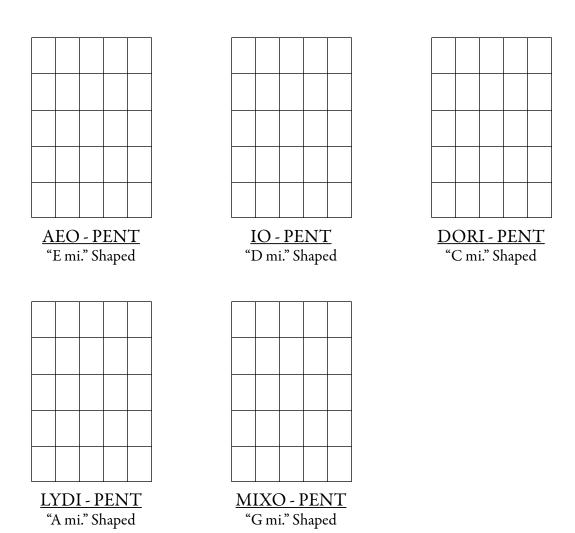
Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "C[#]" Minor, relative to "E" Major



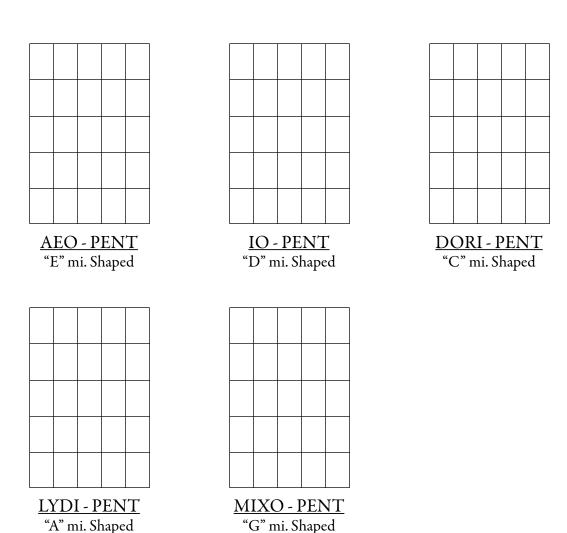
Draw the *relative minor* Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "A[‡]" Minor, relative to "C[‡]" Major



Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "G[‡]" Minor, relative to "B" Major



I, IV, V Progressions

Fill in the blanks as shown in the example.

I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}
C	F	G	F			B♭			Εþ			A ^þ		
G	C	D		F			B♭			Εþ			A♭	
F	B♭	С			F			B♭			Εþ			Αþ

IV	\mathbf{V}	I	IV	V	I	IV	V	I	IV	V	I	IV	V	I
A [#]			F [#]			В			C [‡]			G [#]		
	A#			F [#]			В			C [#]			G [#]	
		A [#]			F [#]			В			C [‡]			G [#]

\mathbf{V}	IV	I	V	IV	I	V	IV	I	\mathbf{V}	IV	I	V	IV	I
D^{\sharp}			G			D			A			Е		
	D [#]			G			D			A			Е	
		D^{\sharp}			G			D			A			Е

I, IV, V Progressions

Fill in the blanks as shown in the example.

I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}
G [#]	C [#]	D^{\sharp}	C [#]			В			F [#]			A [#]		
D [#]	\mathbf{G}^{\sharp}	A [#]		C [#]			В			F [#]			A [#]	
C [#]	F [#]	\mathbf{G}^{\sharp}			C [#]			В			F [#]			A [#]

IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I
A^{\flat}			E			B♭			F			С		
	Αþ			Εþ			B♭			F			С	
		A ^þ			E			B♭			F			С

\mathbf{V}	IV	I	\mathbf{V}	IV	I									
E			A			D			G			D [#]		
	Е			A			D			G			D [#]	
		E			A			D			G			D^{\sharp}

I, IV, V Progressions

Fill in the blanks as shown in the example.

I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	V	I	IV	V
\mathbf{D}^{\sharp}	G [#]	A [#]	G			D			A			E		
A [#]	\mathbf{D}^{\sharp}	E [#] or F		G			D			A			Е	
G [#]	C [#]	\mathbf{D}^{\sharp}			G			D			A			E

IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I	IV	\mathbf{V}	I
A^{\sharp}			F [#]			В			C [#]			G [#]		
	A [#]			F [#]			В			C [#]			G^{\sharp}	
		A [#]			F [#]			В			C [#]			G [#]

\mathbf{V}	IV	I	\mathbf{V}	IV	I	\mathbf{V}	IV	I	\mathbf{V}	IV	I	\mathbf{V}	IV	I
С			F			B♭			Εþ			Αþ		
	С			F			B♭			Εþ			Αþ	
		С			F			B♭			E			A^{\triangleright}

Follow this example to fill out the remaining exercises, working from left to right.

Key of "A" Major

Key of "G" Major

I = A	IV = D	V = E	I = G	IV = C	V = D
AEO at fret 2	LYDI at fret 2	DORI at fret 2	IO at fret 3	MIXO at fret 3	LYDI at fret 3
IO at fret 5	MIXO at fret 5	LYDI at fret 4	DORI at fret 5	AEO at fret 5	MIXO at fret 5
DORI at fret 7	AEO at fret 7	MIXO at fret 7	LYDI at fret 7	IO at fret 8	AEO at fret 7
LYDI at fret 9	IO at fret 10	AEO at fret 9	MIXO at fret 10	DORI at fret 10	IO at fret 10
MIXO at fret 12	DORI at fret 12	IO at fret 12	AEO at fret 12	LYDI at fret 12	DORI at fret 12

I IV

Ю	MIXO	LYDI	DORI	AEO	MIXO	LYDI	IO	AEO	MIXO	DORI	IO	AEO	LYDI	DORI
LYDI	IO	AEO	MIXO	DORI	IO	AEO	LYDI	DORI	IO	MIXO	LYDI	DORI	AEO	MIXO
MIXC	DORI	10	AEO	LYDI	DORI	IO	MIXO	LYDI	DORI	AEO	MIXO	LYDI	IO	AEO

Fill in the blanks, working from left to right.

Key of "A" Major

Key of "G" Major

I =	IV =	V =	I =	IV =	V =
at fret					
at fret					
at fret					
at fret					
at fret					

I IV V I IV V I IV V I IV V

Ю			DORI			LYDI			MIXO			AEO		
	IO			DORI			LYDI			MIXO			AEO	
		IO			DORI			LYDI			MIXO			AEO

Fill in the blanks, working from left to right.

Key of "E" Major

Key of "C" Major

I =	IV =	V =	I =	IV =	V =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret

IV V I IV V I IV V

1	MIXO			AEO			IO			DORI			LYDI		
		MIXO			AEO			IO			DORI			LYDI	
			MIXO			AEO			IO			DORI			LYDI

Fill in the blanks, working from left to right.

Key of "B" Major

Key of "F" Major

I =	IV =	V =	I =	IV =	V =
at fret					
at fret					
at fret					
at fret					
at fret					

I IV V I IV V I IV V I IV V

AEO			IO			DORI			LYDI			MIXO		
	AEO			IO			DORI			LYDI			MIXO	
		AEO			IO			DORI			LYDI			MIXO

Fill in the blanks, working from left to right.

Ke	y of "A [,] " Ma	jor	<u>Ke</u>	y of "E [,] " Ma	<u>jor</u>
I =	IV =	V =	I =	IV =	V =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret

I	IV	V	I	IV	V	I	IV	V	I	IV	V	I	IV	V
DORI			LYDI			MIXO			AEO			IO		
	DORI			LYDI			MIXO			AEO			IO	
		DORI			LYDI			MIXO			AEO			IO

Fill in the blanks, working from left to right.

Key of "B[|]," Major

Key of "D" Major

1 =	IV =	$\mathbf{V} =$	1 =	IV =	V =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret

I IV V I IV V I IV V I IV V

L	YDI			MIXO			AEO			IO			DORI		
		LYDI			MIXO			AEO			IO			DORI	
			LYDI			MIXO			AEO			IO			DORI

Follow this example to fill out the remaining exercises, working from left to right.

Key of "A" Minor

Key of "G" Minor

I = A mi. $IV = D m$	\mathbf{v} i. $\mathbf{V} = \mathbf{E} \mathbf{m} \mathbf{i}$.	I = G mi.	IV = C mi.	V = D mi.
----------------------	---	-----------	------------	-----------

MIXO at fret 3	DORI at fret 3	IO at fret 3	MIXO at fret 1	DORI at fret 1	IO at fret 1
AEO at fret 5	LYDI at fret 5	DORI at fret 5	AEO at fret 3	LYDI at fret 3	DORI at fret 3
IO at fret 8	MIXO at fret 8	LYDI at fret 7	IO at fret 6	MIXO at fret 6	LYDI at fret 5
DORI at fret 10	AEO at fret 10	MIXO at fret 10	DORI at fret 8	AEO at fret 8	MIXO at fret 8
LYDI at fret 12	IO at fret 13/1	AEO at fret 12	LYDI at fret 10	IO at fret 11	AEO at fret 10

IV V I IV V I IV V I IV V

M	IXO	DORI	IO	AEO	LYDI	DORI	10	MIXO	LYDI	DORI	AEO	MIXO	LYDI	IO	AEO
I	0	MIXO	LYDI	DORI	AEO	MIXO	LYDI	Ю	AEO	MIXO	DORI	IO	AEO	LYDI	DORI
D	ORI	AEO	MIXO	LYDI	IO	AEO	MIXO	DORI	10	AEO	LYDI	DORI	IO	MIXO	LYDI

Fill in the blanks, working from left to right.

Key of "C" Minor

Key of "E" Minor

I =	IV =	V =	I =	IV =	V =
at fret					
at fret					
at fret					
at fret					
at fret					

AEO			IO			DORI			LYDI			MIXO		
	AEO			IO			DORI			LYDI			MIXO	
		AEO			IO			DORI			LYDI			MIXO

Fill in the blanks, working from left to right.

Key of "B" Minor

Key of "F" Minor

I =	IV =	V =	I =	IV =	V =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret

I IV V I IV V I IV V

DORI			LYDI			MIXO			AEO			IO		
	DORI			LYDI			MIXO			AEO			IO	
		DORI			LYDI			MIXO			AEO			IO

Fill in the blanks, working from left to right.

Key of "A" Minor

Key of "E" Minor

I =	IV =	V =	I =	IV =	V =
at fret					
at fret					
at fret					
at fret					
at fret					

1	MIXO			AEO			IO			DORI			LYDI		
		MIXO			AEO			IO			DORI			LYDI	
			MIXO			AEO			IO			DORI			LYDI

Fill in the blanks, working from left to right.

Key of "B^b," Minor

Key of "D" Minor

I =	IV =	V =	I =	IV =	V =
at fret					
at fret					
at fret					
at fret					
at fret					

IV V I IV V I IV V I IV V

IO			DORI			LYDI			MIXO			AEO		
	IO			DORI			LYDI			MIXO			AEO	
		IO			DORI			LYDI			MIXO			AEO

Follow this example to fill out the remaining exercises, working from left to right.

Key of "A" Mixed

Key of "G" Mixed

Imi. = Ami. IVmi. = Dmi. VMa = EMa. Imi. = Gmi. IVmi. = Cmi. VMa = DMa.

MIXO at fret 3	DORI at fret 3	DORI at fret 2	AEO at fret 3	LYDI at fret 3	LYDI at fret 2
AEO at fret 5	LYDI at fret 5	LYDI at fret 4	IO at fret 6	MIXO at fret 6	MIXO at fret 5
IO at fret 8	MIXO at fret 8	MIXO at fret 7	DORI at fret 8	AEO at fret 8	AEO at fret 7
DORI at fret 10	AEO at fret 10	AEO at fret 9	LYDI at fret 10	IO at fret 11	IO at fret 10
LYDI at fret 12	IO at fret 13	IO at fret 12	MIXO at fret 13	DORI at fret 13	DORI at fret 12

I IV V mi. mi. Ma. mi. mi. Ma.

IO	MIXO	MIXO -1 fret	LYDI	IO	IO -1 fret	AEO	LYDI	LYDI -1 fret	DORI	AEO	AEO -1 fret	MIXO	DORI	DORI -1 fret
LYDI	Ю	IO -1 fret	AEO	LYDI	LYDI -1 fret	DORI	AEO	AEO -1 fret	MIXO	DORI	DORI -1 fret	IO	MIXO	MIXO -1 fret
LYDI	IO	IO -1 fret	AEO	LYDI	LYDI -1 fret	DORI	AEO	AEO -1 fret	MIXO	DORI	DORI -1 fret	IO	MIXO	MIXO -1 fret

Fill in the blanks, working from left to right.

Key of "A" Mixed

Key of "G" Mixed

Imi. =	IVmi.=	VMa.=	Imi. =	IVmi=	VMa.=
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret

I IV V I IV V I IV V mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. Ma.

IO			LYDI			AEO			DORI			MIXO		
	IO			LYDI			AEO			DORI			MIXO	
		IO			LYDI			AEO			DORI			MIXO

Fill in the blanks, working from left to right.

Key of "C" Mixed

Key of "E" Mixed

IVmi.=	VMa.=	IMa. =	IVmi.=	VMa.=	IMa. =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret

IV V I mi. Ma. Ma. mi. Ma. Ma.

LYDI			AEO			DORI			MIXO			IO		
	LYDI			AEO			DORI			MIXO			IO	
		LYDI			AEO			DORI			MIXO			IO

Fill in the blanks, working from left to right.

Key of "B" Mixed

Key of "F" Mixed

VMa.=	IVMa=	Imi. =	VMa.=	IVMa=	Imi. =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret

V IV I Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. mi. Ma. mi.

AEO			DORI			MIXO			IO			LYDI		
	AEO			DORI			MIXO			IO			LYDI	
		AEO			DORI			MIXO			IO			LYDI

Fill in the blanks, working from left to right.

Key of "A|," Mixed

Key of "E" Mixed

IVmi.=	VMa.=	Imi. =	IVmi.=	VMa.=	Imi. =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret

IV V I mi. Ma. mi. mi. Ma. mi.

DORI			MIXO			IO			LYDI			AEO		
	DORI			MIXO			IO			LYDI			AEO	
		DORI			MIXO			IO			LYDI			AEO

Fill in the blanks, working from left to right.

Key of "B"," Mixed

Key of "D" Mixed

Vmi.=	IVMa=	IMa.=	Vmi.=	IVMa=	IMa.=
at fret					
at fret					
at fret					
at fret					
at fret					

V IV I mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma.

MIXO			IO			LYDI			AEO			DORI		
	MIXO			IO			LYDI			AEO			DORI	
		MIXO			IO			LYDI			AEO			DORI

Fill in the blanks, working from left to right.

Key of "D" Mixed

Key of "G|," Mixed

IVMa=	Vmi.=	Imi. =	IVMa=	Vmi.=	Imi. =
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret at fr		at fret	at fret	at fret

IV V I Ma. mi. mi. Ma. mi. mi.

IO			LYDI			AEO			DORI			MIXO		
	IO			LYDI			AEO			DORI			MIXO	
		IO			LYDI			AEO			DORI			MIXO

Fill in the blanks, working from left to right.

Key of "C#" Mixed

Key of "F#" Mixed

IMa.=	IVmi.=	Vmi.=	IMa.=	IVmi=	Vmi.=
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret	at fret	at fret	at fret	at fret
at fret	at fret at fret		at fret	at fret	at fret

I IV V I IV V I IV V I IV V Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi.

LYDI			AEO			DORI			MIXO			IO		
	LYDI			AEO			DORI			MIXO			IO	
		LYDI			AEO			DORI			MIXO			IO

Use the previous exercises as a guide for completing the following Pattern Movement Circles exercises.

The circle pattern creates a visual image that mirrors the movement of the patterns on the fretboard.

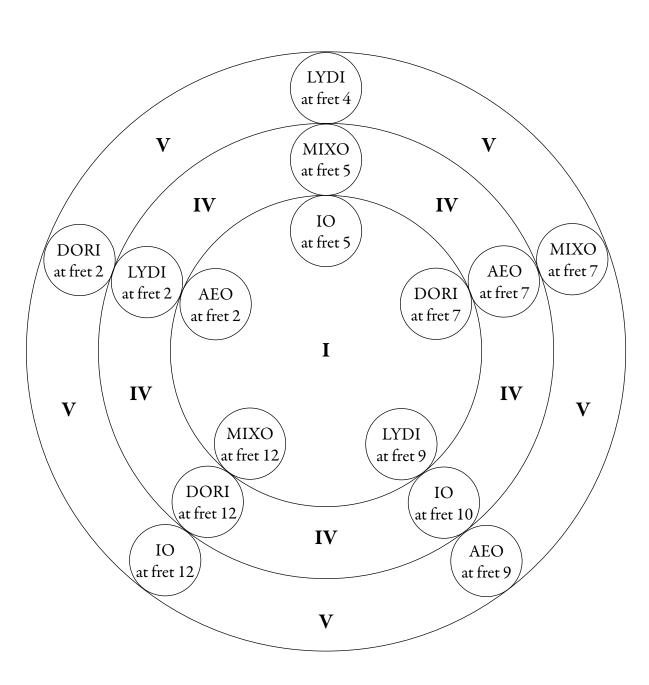
Playing the patterns next to one another produces I, IV, V movement, while remaining in the same area of the neck.

Clockwise movement in the circle produces physical movement up the neck.

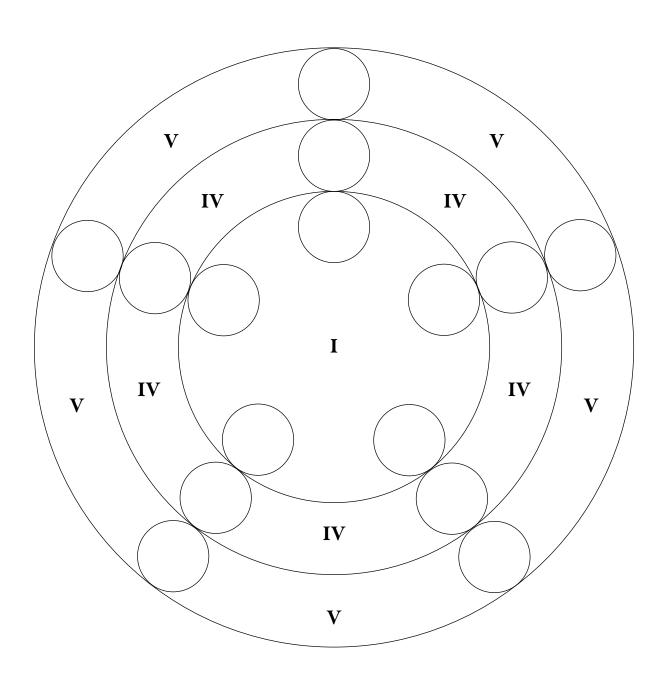
Counterclockwise movement in the circle produces physical movement down the neck.

Imagine a five-story building (the five pentatonic patterns) with three rooms (the I, IV, V progressions) on each floor — and a "magic" elevator (the pattern movement circles). This elevator enables the rider to go from floor to floor, and room to room, in any order, at any time!

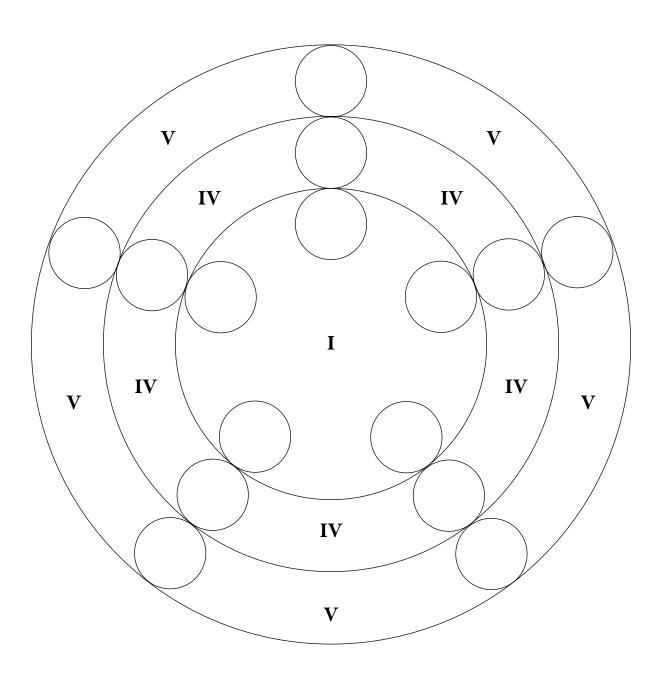
I, IV, V in the Key of "A" Major/"F#" Minor



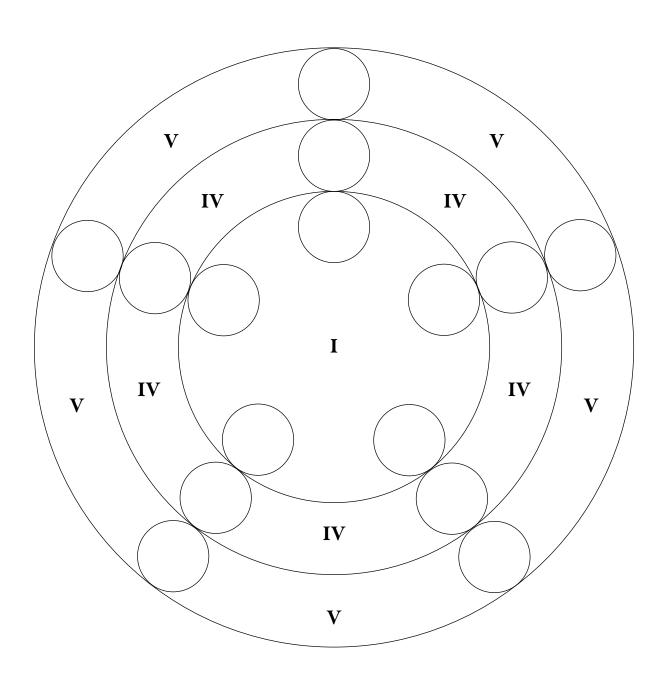
I, IV, V in the Key of "G" Major/"E" Minor



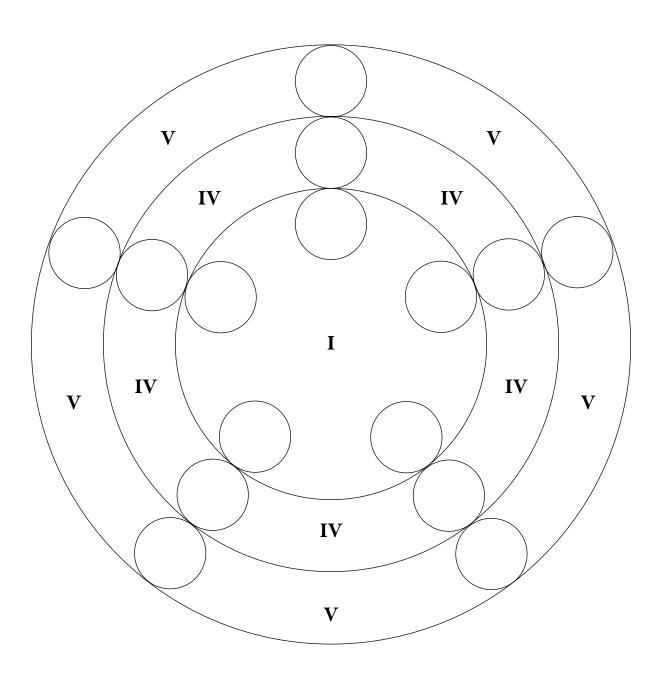
I, IV, V in the Key of "E" Major/"C[‡]" Minor



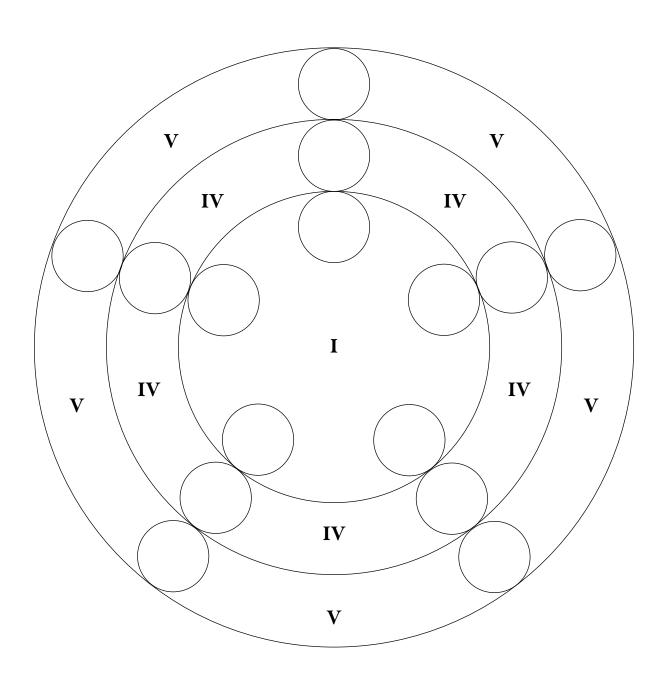
I, IV, V in the Key of "C" Major/"A" Minor



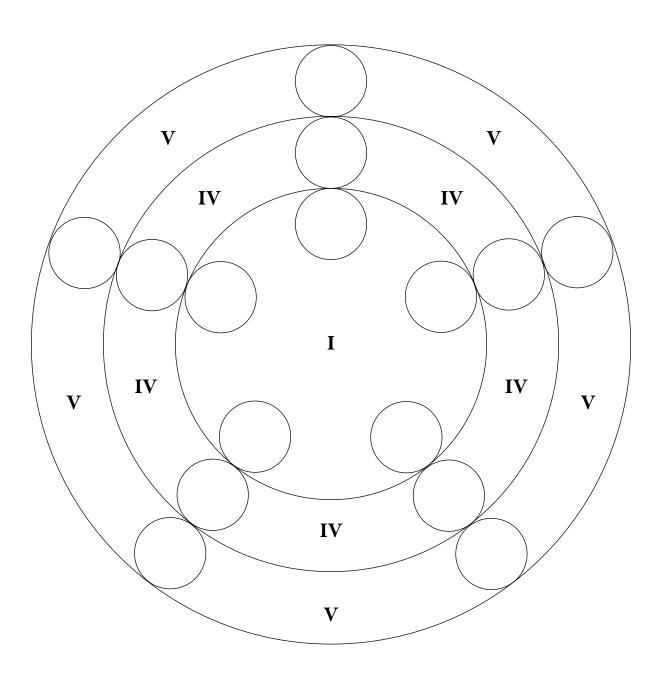
I, IV, V in the Key of "B" Major/"G[‡]" Minor



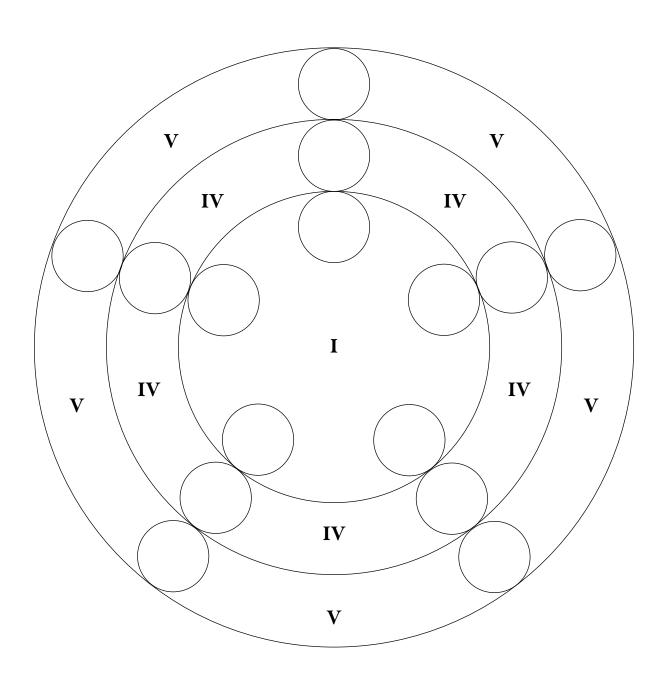
I, IV, V in the Key of "F" Major/"D" Minor



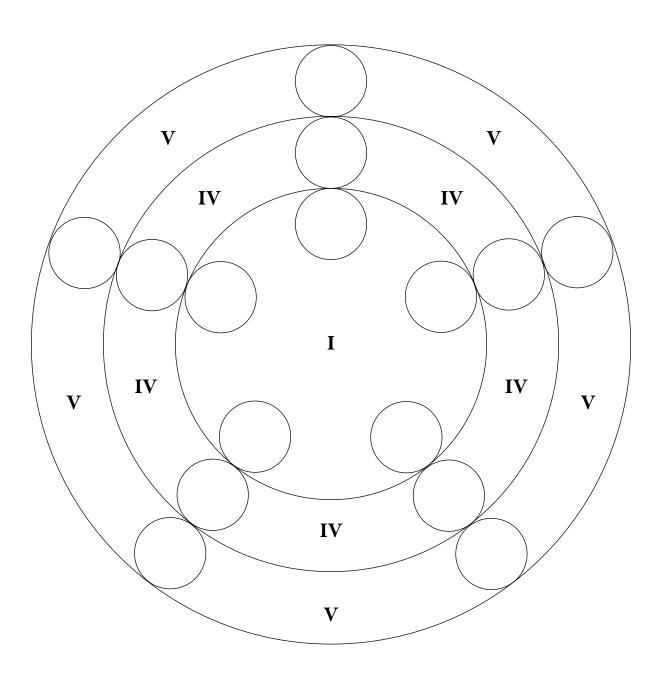
I, IV, V in the Key of "A^{|,}" Major/"F" Minor



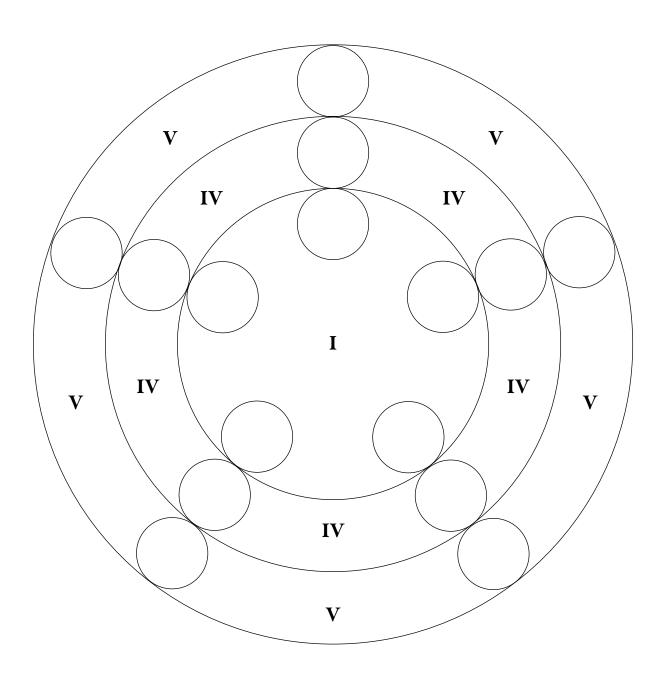
I, IV, V in the Key of "E^{|,}" Major/"C" Minor



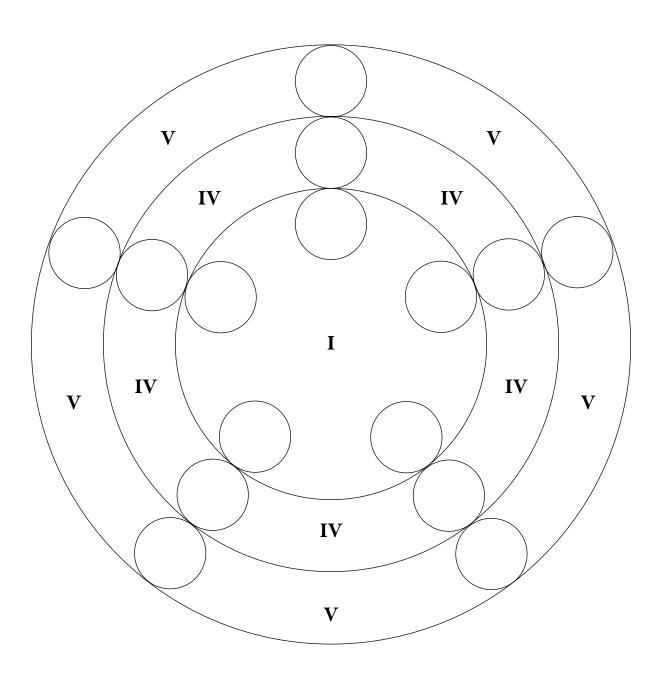
I, IV, V in the Key of "B\" Major/"G" Minor



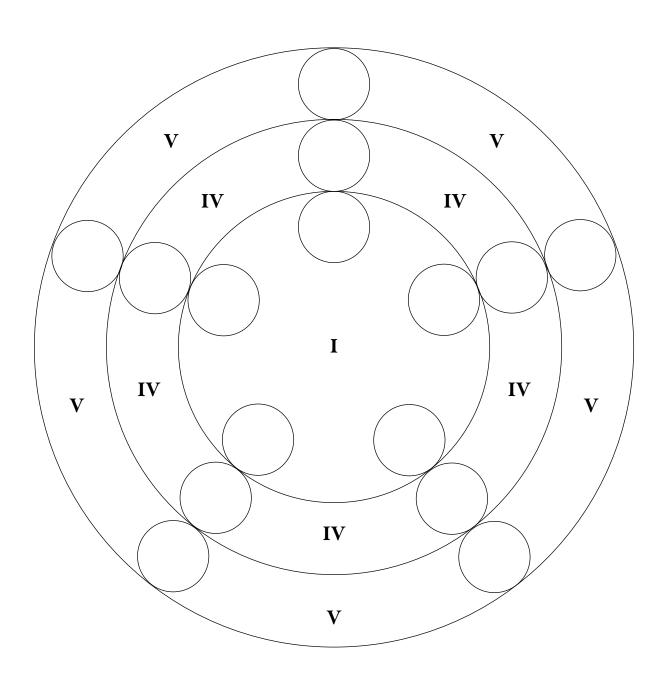
I, IV, V in the Key of "D" Major/"B" Minor



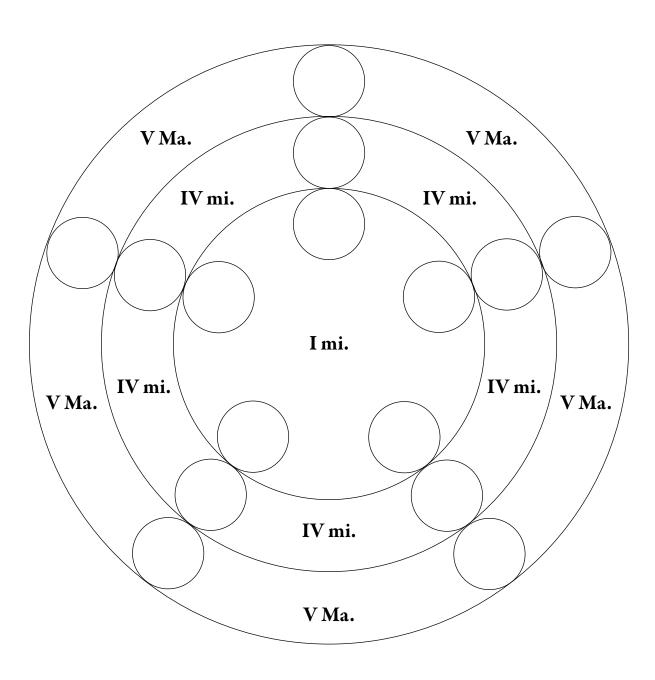
I, IV, V in the Key of "D\" Major/"B\" Minor



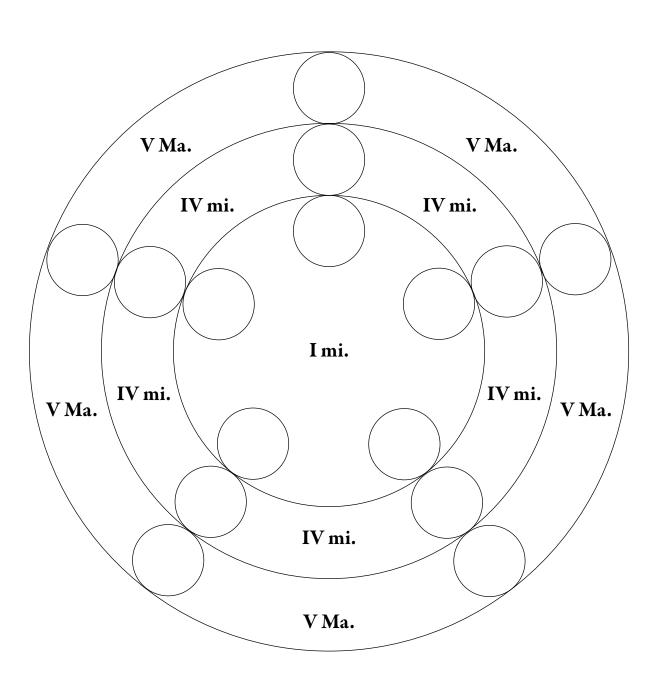
I, IV, V in the Key of "G\" Major/"E\" Minor



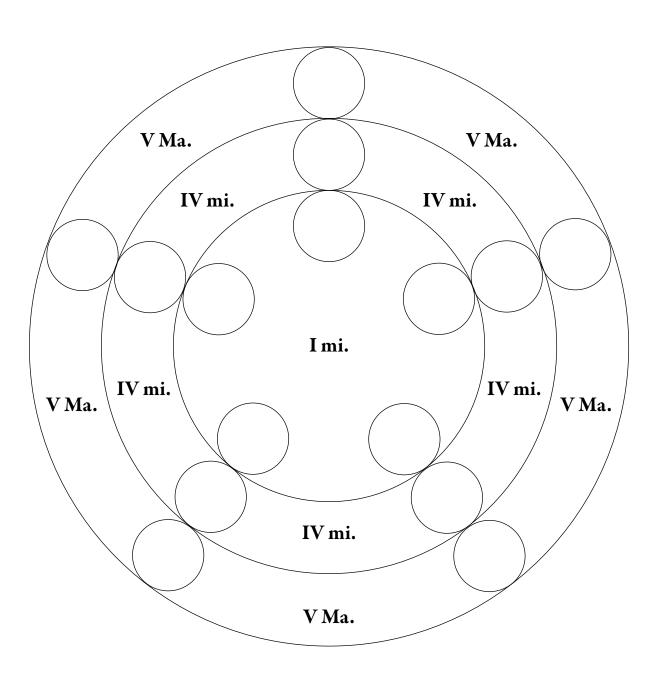
Mixed I, IV, V in the Key of "A"



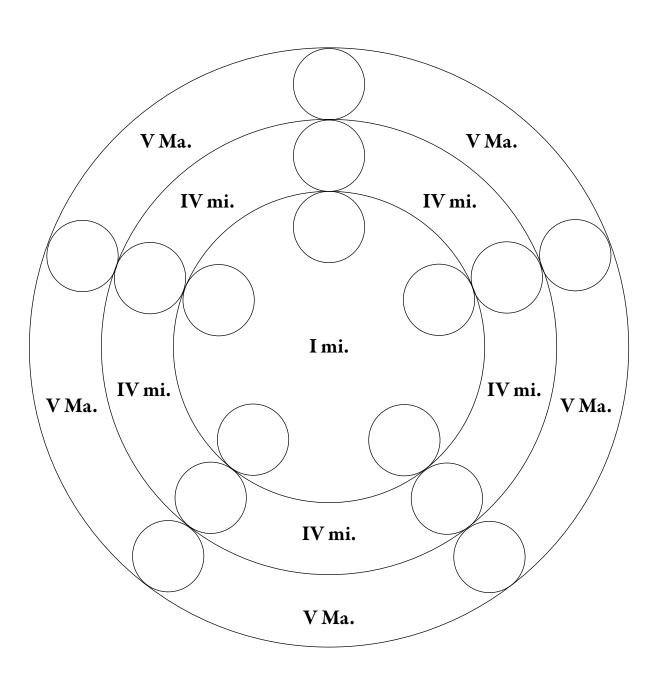
Mixed I, IV, V in the Key of "C"



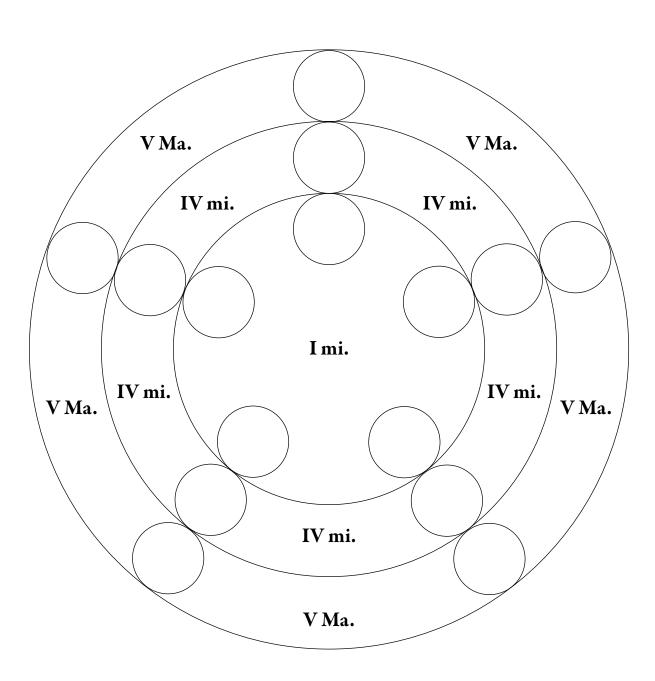
Mixed I, IV, V in the Key of "G"



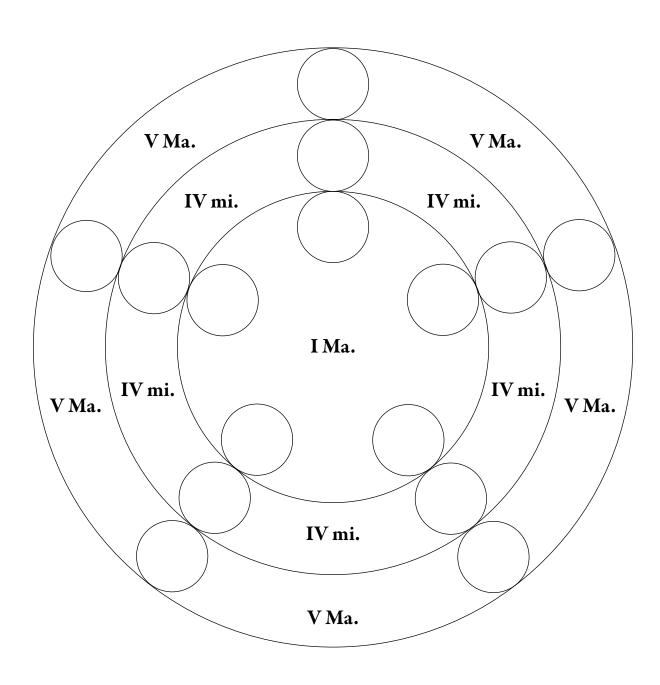
Mixed I, IV, V in the Key of "E"



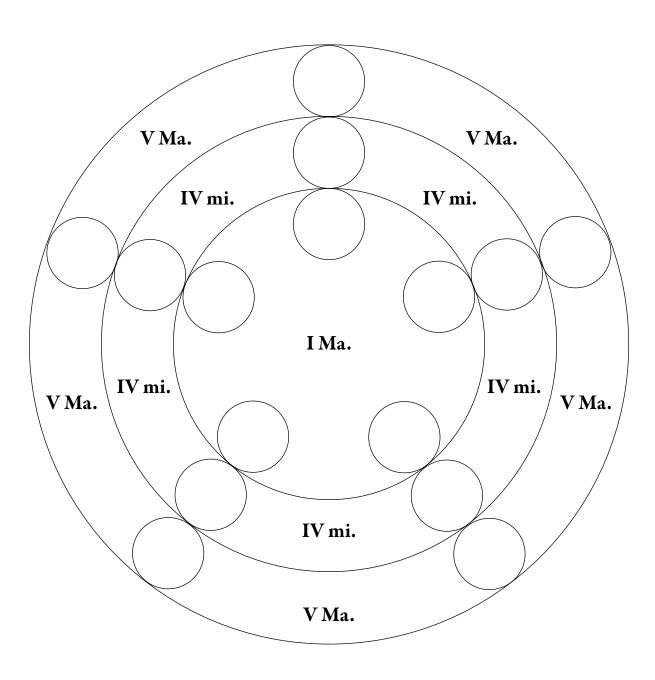
Mixed I, IV, V in the Key of "D"



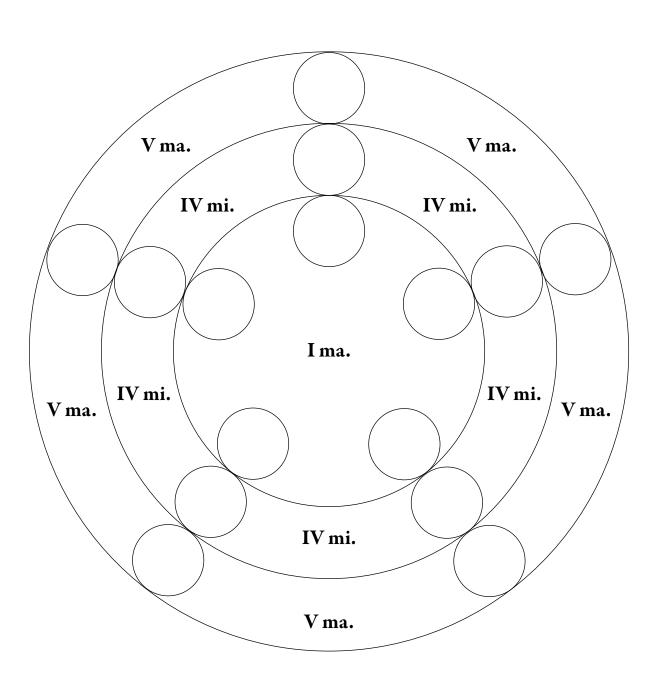
Mixed I, IV, V in the Key of "F"



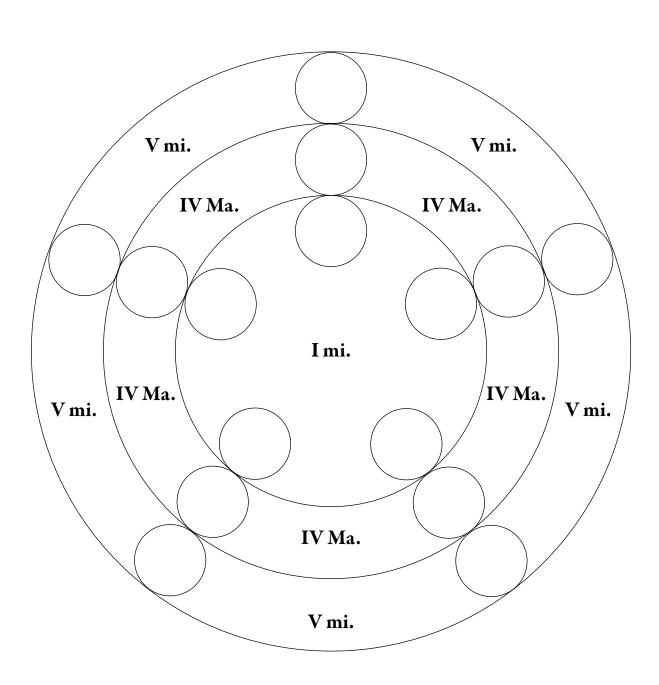
Mixed I, IV, V in the Key of "B","



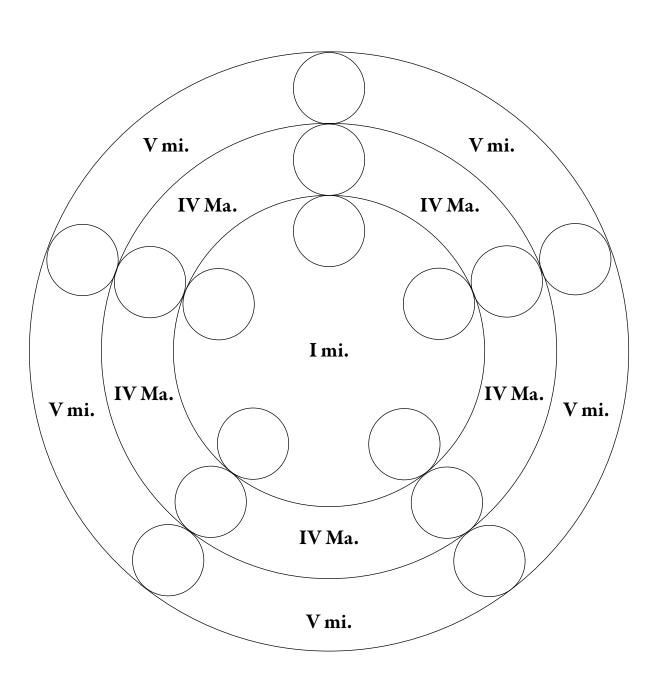
Mixed I, IV, V in the Key of " E^{\downarrow} "



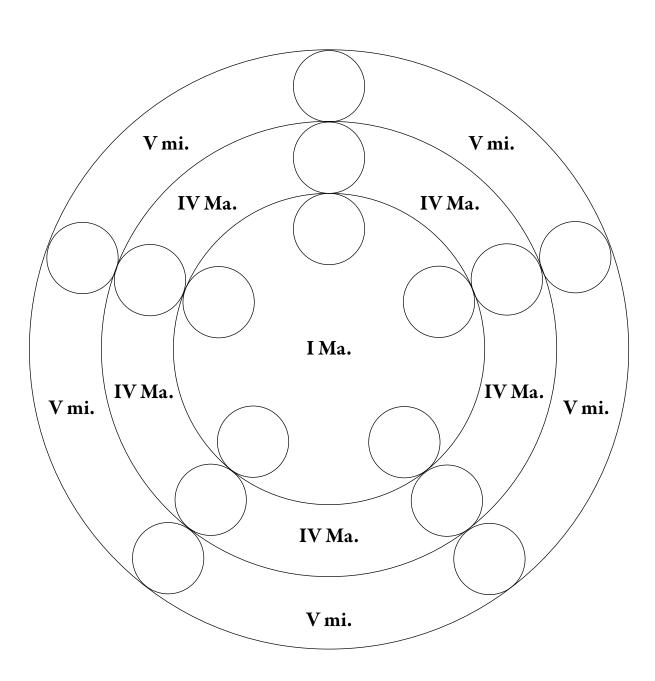
Mixed I, IV, V in the Key of "A"



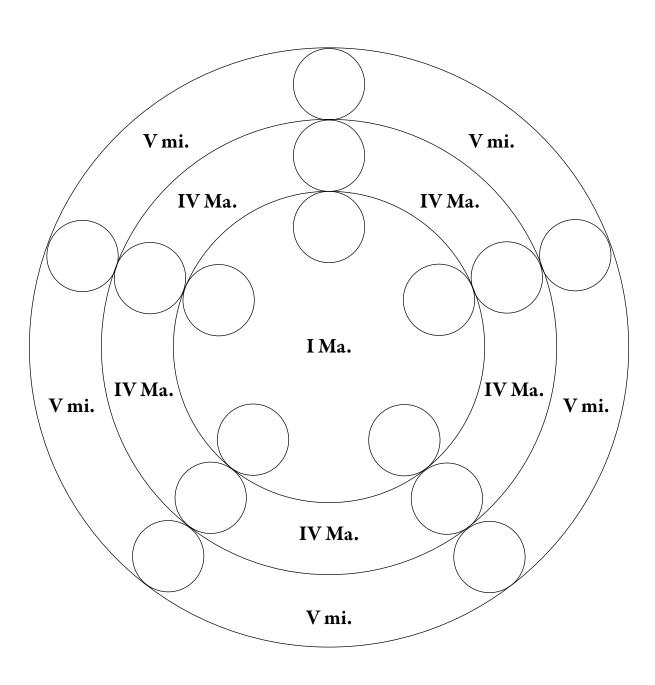
Mixed I, IV, V in the Key of "C"



Mixed I, IV, V in the Key of "G"



Mixed I, IV, V in the Key of "E"



Fill in the blanks.

Root	Ma. 2nd	Root	³ Mi. 3rd	Root	Ma. 3rd
A	В	F	$A^{ u}$	B ,	D
С		D		E^{\flat}	
Е		В	D	$A^{ abla}$	
G		G		G [#]	B [#] or C
В		Е		\mathbf{F}^{\sharp}	
D		С		$G^{ abla}$	
F		A		Cþ	
A^{\flat}		D_{p}		A [#]	Dધ
Cþ	Dþ	B ,		C [#]	
E,		G^{\flat}	Αţ	F	
G^{\flat}		Εþ		В	D [#]
B^{\flat}		C_{\flat}	Dધ	Е	
D^{\flat}		$A^{ u}$		A	
F [#]		A [#]		D	
C [#]	D [#]	G [#]		G	
G^{\sharp}		C [#]		С	
A^{\sharp}		F [#]		D_{p}	F

Fill in the blanks.

Root	<u>P. 4th</u>	Root	[♭] 5 <u>Dim. 5th</u>	Root	<u>P. 5th</u>
A	D	F	В	B^{\flat}	
С		D		E,	
Е		В		$A^{ u}$	
G		G		G [#]	
В		Е	B ^þ	F [#]	C [#]
D		С		G^{\flat}	
F		A		Cþ	þ
A^{\flat}		D_{b}	G	A [#]	[#] or
Cþ		B ^þ		C [#]	
E ^þ		G^{\flat}		F	
G^{\flat}	C ¹ , or B	Εþ		В	
B [,]		Cþ		Е	
D^{\flat}		A^{l_p}		A	
F [#]		A [#]	4	D	
C [#]		G [‡]		G	
G^{\sharp}		C [‡]		С	
A^{\sharp}		F [#]	þ	D_{p}	

Fill in the blanks.

Root	+5 <u>Aug. 5th</u>	Root	Ma. 6th	Root	¹ 7 <u>Mi. 7th</u>
A	E [#] or F	F	D	B^{l_p}	$A^{ u}$
С	G [#]	D		Εþ	
Е		В	G [#]	$A^{ u}$	
G		G		G [#]	F [#]
В	Gҍ	Е		F [#]	
D		С		G^{\flat}	
F		A		Cþ	Αţ
A^{\flat}	Eξ	D_{ρ}	B♭	A [#]	
Cþ		B ,		C [‡]	
E	Вξ	G^{\flat}		F	
G^{\flat}		Εþ		В	
B [,]		Cþ		E	
Dþ		$A^{ u}$		A	
F [#]		A [#]	G	D	
C [#]		G [#]		G	
G [#]		C [‡]		С	
A^{\sharp}		F [#]		D_{p}	C ^b , or B

Fill in the blanks.

Root Mi. 3rd P. 5th Root Ma. 3rd P. 5th Root P. 4th P. 5th

A	С	E	F	A	С	B	Eþ	F
С			D			Εþ		
Е			В			$A^{ u}$		
G			G			G [#]		
В			Е			F [#]	В	C [#]
D			С			G ^þ		
F			A			C♭	Е	G ^þ
A^{\flat}	Cþ	E^{\flat}	D^{\flat}	F	A^{\triangleright}	A^{\sharp}		
Cþ			B♭			C [#]		
Εþ			G^{\flat}			F		
G ^þ			Εþ			В		
B♭			C_{\flat}	Εþ	G^{\flat}	Е		
D_{r}	F ^b , or E	A^{\triangleright}	A^{\flat}			A		
F [#]			A^{\sharp}			D		
C [‡]			G^{\sharp}	B [#] or C	D^{\sharp}	G		
G [#]	Вધ	D^{\sharp}	C [#]			С		
A [#]			F [#]			D^{\flat}		

Minor Triads

Major Triads

Suspended Triads

Fill in the blanks.

³
Mi. 3rd P. 5th Root P. 5th Root Mi. 3rd Ma. 3rd P. 5th Root

$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		T					I		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	A	C [#] orD [,]	F [#] orG ^b	A	D	F	A	С	F
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	С			С			С		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E			E			E	G	С
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	G			G			G		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	В			В	Е	G	В		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	D			D			D		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	F			F			F		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$A^{ u}$	С	F	A^{\triangleright}			A ^þ or G [‡]	C ^b , or B	F ^b or E
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Cþ			Cþ	F	G٩	Cþ		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	E,			E			Εþ		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	G ^þ			G^{\flat}			G♭		
$egin{array}{cccccccccccccccccccccccccccccccccccc$	B♭			B ,			B♭		
C [#] C or B [#] F or E [#] G [#] C of G [#]	D_{p}			D_{p}			D^{\flat}		
G^{\sharp} C or B^{\sharp} F or E^{\sharp} G^{\sharp} G^{\sharp}	F^{\sharp}			F^{\sharp}			F [#]		
	C [#]			C [#]	F [#]	Aξ	C [#]		
A# D G A# A#	G [‡]	C or B [#]	F or E [#]	G [‡]			G [#]		
	A^{\sharp}	D	G	A [#]			A^{\sharp}		

Minor Triads (First Inversion) Major Triads (Second Inversion) Major Triads (First Inversion)

Fill in the blanks.

+5 +5 5 5 3

<u>P. 5th</u> <u>Root Ma. 3rd Root Aug. 5th Ma. 3rd Root Dim. 5th Mi. 3rd</u>

F	B♭	D	B ,	F [#] or G	D	A	E	С
D			Εþ			С		
В			A^{\flat}			Е		
G			G [#]			G		
Е	A	C [#]	F [#]	D	A [#]	В		
С			G^{\flat}			D		
A			Cþ			F		
D_{ρ}			A^{\sharp}	F [#]	D	A^{\flat}		
B♭			C [#]			C _þ		
G♭			F			Εþ		
Εþ			В			G♭		
Cþ			Е			B♭		
A^{\flat}	D_{\flat}	F	A			D_{r}		
A^{\sharp}			D			F [#]		
G [#]			G			C [#]		
C [#]			С			G [#]		
F [#]			D^{\flat}			A^{\sharp}		

Major Triads (Second Inversion)

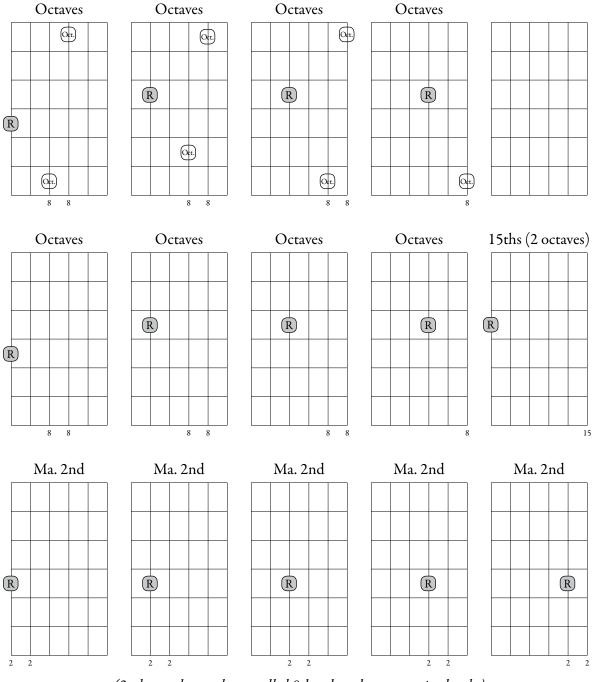
Augmented Triads (Always Major)

Diminished Triads

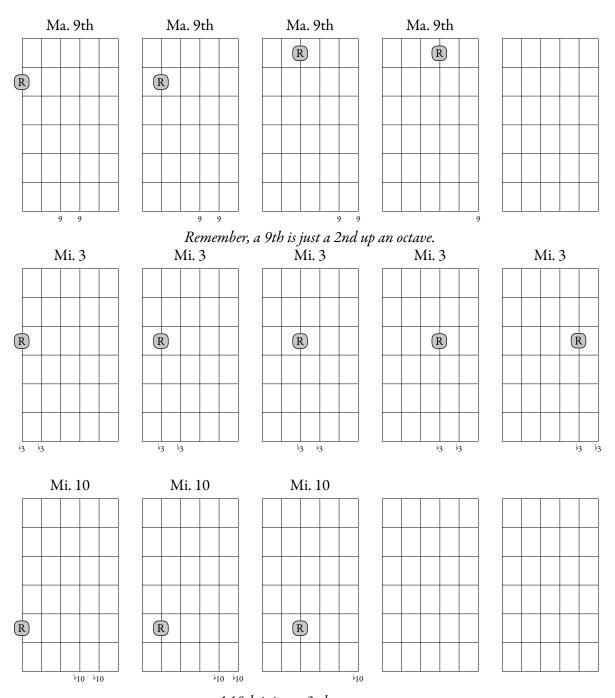
Fill in the blanks by adding or subtracting seven.

Original <u>Interval</u>	Up by one Octave	Original <u>Interval</u>	Up by one Octave	Original <u>Interval</u>	Up by one Octave
Ma. 2nd	Ma. 9th	2	9		13
mi. 3rd	mi. 10	b 3	\ 10		11
Ma. 3rd	Ma. 10th	3	10		9
P. 4th	P. 11th	4	11		10
dim. 5th	dim. 12th	b 5	\ 12		12
P. 5th	P. 12th	5	12		+12 or \(\bar{13}
Aug. 5th	Aug. 12th	+5	+12 or 13		15
Ma. 6th	Ma. 13th	6	13		1 0
mi.7th	mi. 14th	b 7	[▶] 14		¹⁴
Ma. 7th	Ma. 14th	7	14		10
8th Oc	tave 15th	8	15		13
					¹ √13 or +12
					15
					14
					10
					12
					1 2
					♭ 14

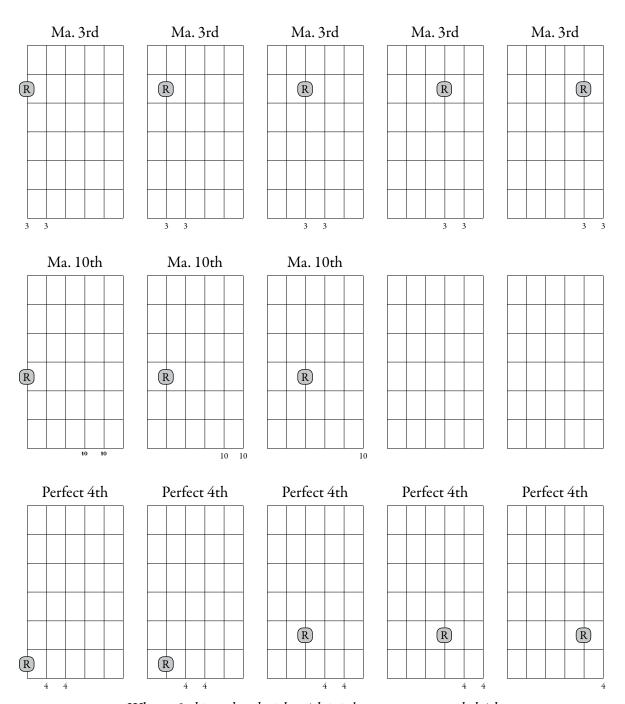
To draw the interval shapes, refer to the indicated roots, then fill in the remaining notes. Hints are provided under the correct strings; just locate the correct fret.



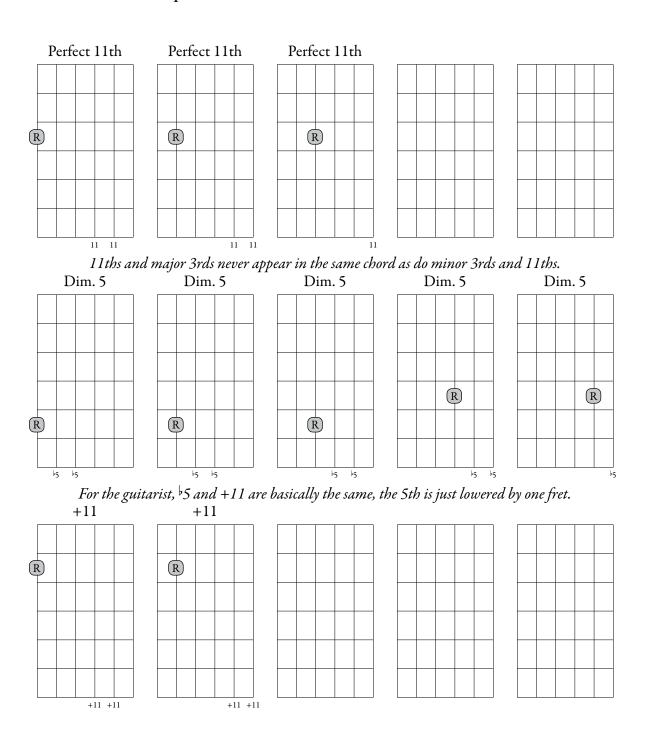
(2nds are almost always called 9ths when they appear in chords.)

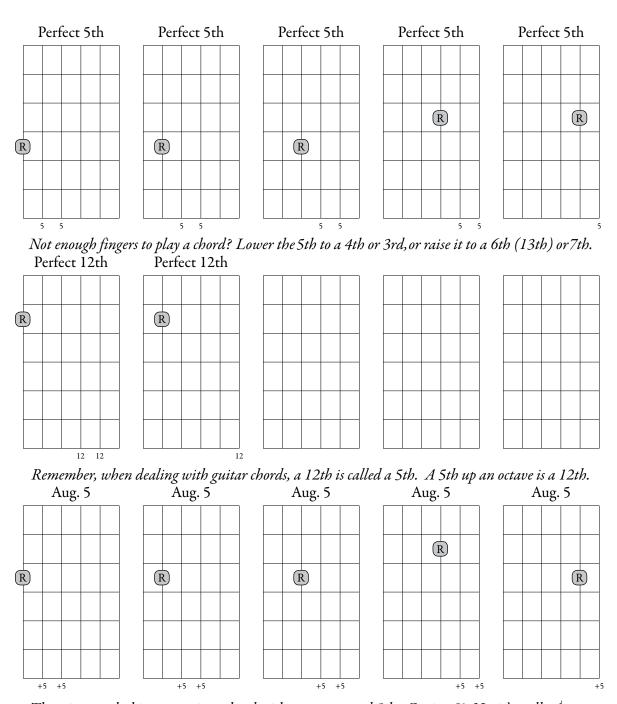


A 10th is just a 3rd up an octave.

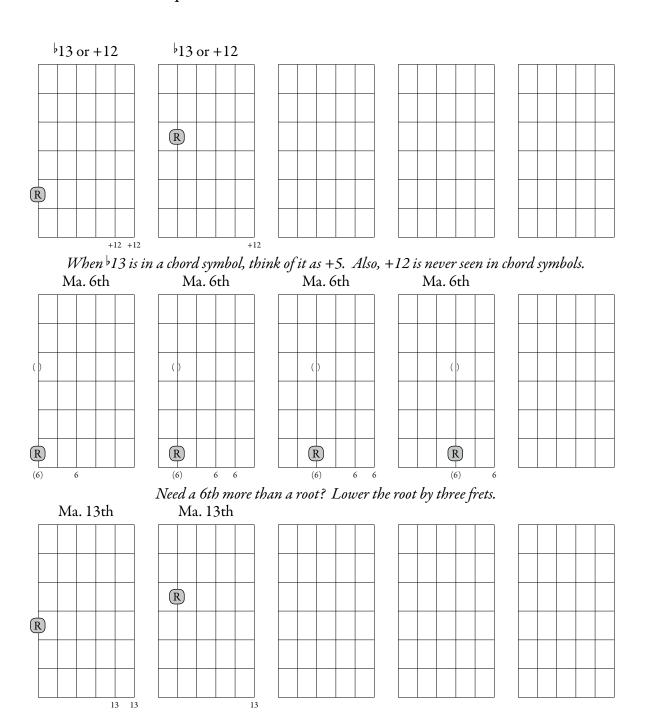


When a 3rd is replaced with a 4th it is known as a suspended 4th.

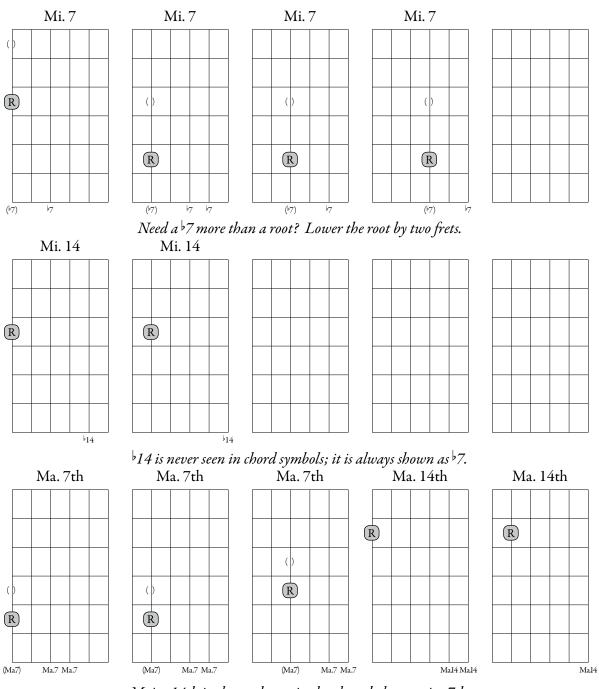




There is no such thing as a minor chord with an augmented 5th. C mi. +5? No, it's really A^{\flat} ma.



A 13th is just a 6th up an octave.



Major 14th is always shown in chord symbols as major 7th.