

General Musicianship and Studio Techniques

Week 4 - Harmonisation - minor scales and chords

Revision - Harmonising the major scale

Degree	Notes (C Major scale)											Chord Notes	Chord Name
I	C	D	E	F	G	A	B	C	D	E	F	C-E-G	C Major
ii	C	D	E	F	G	A	B	C	D	E	F	D-F-A	D minor
iii	C	D	E	F	G	A	B	C	D	E	F	E-G-B	E minor
IV	C	D	E	F	G	A	B	C	D	E	F	F-A-C	F Major
V	C	D	E	F	G	A	B	C	D	E	F	G-B-D	G Major
vi	C	D	E	F	G	A	B	C	D	E	F	A-C-E	A minor
vii°	C	D	E	F	G	A	B	C	D	E	F	B-F-D	B diminished

Harmonising the natural major scale



Degree	Notes (A natural minor scale)											Chord Notes	Chord Name
i	A	B	C	D	E	F	G	A	B	C	D	A-C-E	A minor
ii°	A	B	C	D	E	F	G	A	B	C	D	B-F-D	B diminished
III	A	B	C	D	E	F	G	A	B	C	D	C-E-G	C Major
iv	A	B	C	D	E	F	G	A	B	C	D	D-F-A	D minor
v	A	B	C	D	E	F	G	A	B	C	D	E-G-B	E minor
VI	A	B	C	D	E	F	G	A	B	C	D	F-A-C	F Major
VII	A	B	C	D	E	F	G	A	B	C	D	G-B-D	G Major

Harmonising the natural minor scale

Degree	Notes (A natural minor scale)												Chord Notes	Chord Name
i	A	B	C	D	E	F	G	A	B	C	D		A-C-E	A minor
ii°	A	B	C	D	E	F	G	A	B	C	D		B-F-D	B diminished
III	A	B	C	D	E	F	G	A	B	C	D		C-E-G	C Major
iv	A	B	C	D	E	F	G	A	B	C	D		D-F-A	D minor
v	A	B	C	D	E	F	G	A	B	C	D		E-G-B	E minor
vii	A	B	C	D	E	F	G	A	B	C	D		F-A-C	F minor
VII	A	B	C	D	E	F	G	A	B	C	D		G-B-D	G Major



Note the relationship between these chords and C Major chords. They are the same. This is why A natural minor is the relative minor to C Major. The key difference is which degree of the scale, and therefore their function, changes: for example, chord V (our dominant) is E minor and not G Major.

Harmonising the harmonic minor scale



Degree	Notes (A harmonic minor scale)												Chord Notes	Chord Name
i	A	B	C	D	E	F	G#	A	B	C	D		A-C-E	A minor
ii°	A	B	C	D	E	F	G#	A	B	C	D		B-D-F	B diminished
III ⁺	A	B	C	D	E	F	G#	A	B	C	D		C-E-G#	C Augmented
iv	A	B	C	D	E	F	G#	A	B	C	D		D-F-A	D minor
V	A	B	C	D	E	F	G#	A	B	C	D		E-G#-B	E Major
VI	A	B	C	D	E	F	G#	A	B	C	D		F-A-C	F Major
vii°	A	B	C	D	E	F	G#	A	B	C	D		G#-B-D	G# diminished

Harmonising the melodic minor scale



Degree	Notes (A melodic minor scale)												Chord Notes	Chord Name
i	A	B	C	D	E	F#	G#	A	B	C	D		A-C-E	A minor
ii	A	B	C	D	E	F#	G#	A	B	C	D		B-D-F	B minor
III ⁺	A	B	C	D	E	F#	G#	A	B	C	D		C-E-G#	C Augmented
IV	A	B	C	D	E	F#	G#	A	B	C	D		D-F#-A	D major
v	A	B	C	D	E	F#	G#	A	B	C	D		E-G#-B	E minor
vi [°]	A	B	C	D	E	F#	G#	A	B	C	D		F#-A-C	F# diminished
vii [°]	A	B	C	D	E	F#	G#	A	B	C	D		G#-B-D	G# diminished

Comparison Chart

NATURAL MINOR

	Am	B [°]	C	Dm	Em	F	G
							
a:	i	ii [°]	III	iv	v rare	VI	VII

HARMONIC MINOR

	Am	B [°]	C ⁺	Dm	E	F	G [°]
							
a:	i	ii [°]	III ⁺ rare	iv	V	VI	vii [°]

MELODIC MINOR

	Am	Bm	C ⁺	D	E	F [°]	G [°]
							
a:	i	ii rare	III ⁺ rare	IV rare	V	#vi [°] rare	vii [°]

Comparison Chart

NATURAL MINOR

	Am	B [°]	C	Dm	Em	F	G
							
a:	i	ii [°]	III	iv	v rare	VI	VII

HARMONIC MINOR

	Am	B [°]	C+	Dm	E	F	G ^{#°}
							
a:	i	ii [°]	III+ rare	iv	V	VI	vii [°]

MELODIC MINOR

	Am	Bm	C+	D	E	F ^{#°}	G ^{#°}
							
a:	i	ii rare	III+ rare	IV rare	V	#vi [°] rare	vii [°]

Harmonising the minor scale

Task:

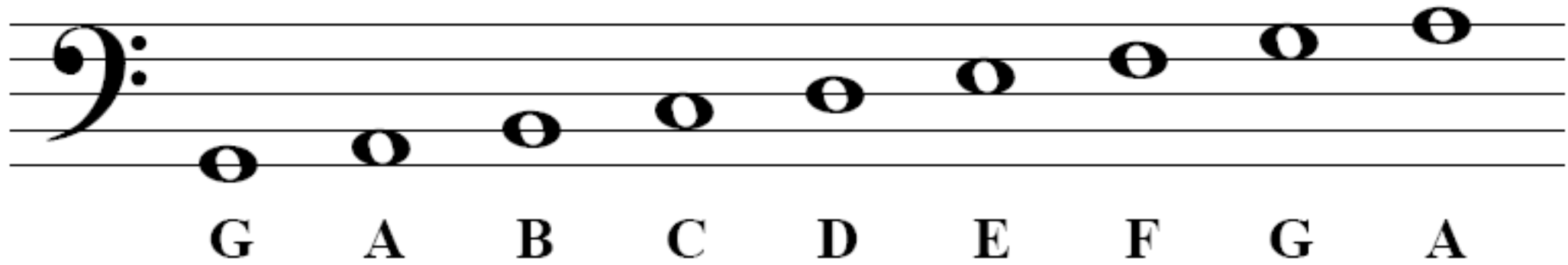
In treble clef harmonise:

- F# natural minor
- D harmonic minor
- B $\flat$ melodic minor

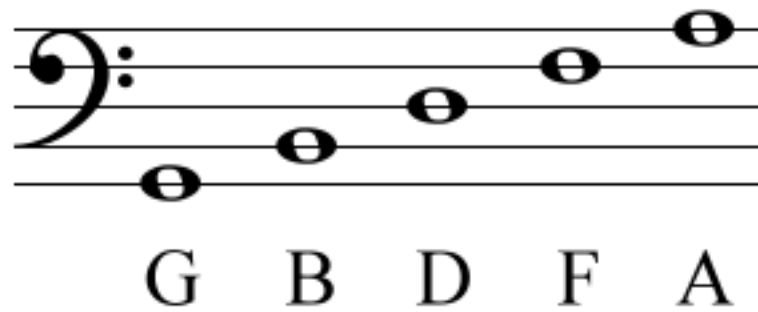
General Musicianship and Studio Techniques

Week 4 - Bass Clef and Groupings

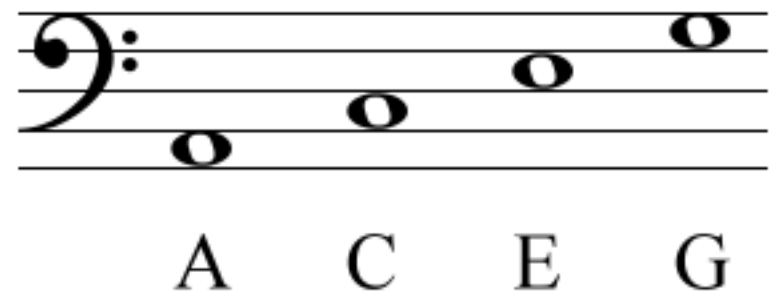
Bass Clef



Line Notes:



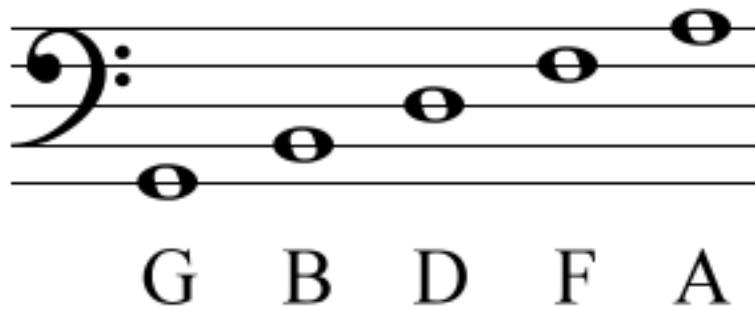
Space Notes:



Bass Clef

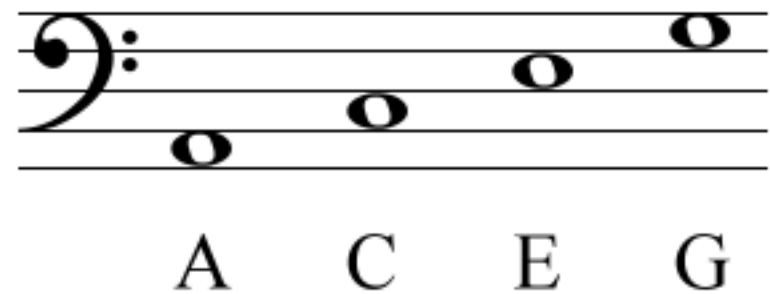
Good
Boys
Deserves
Football
Always

Line Notes:



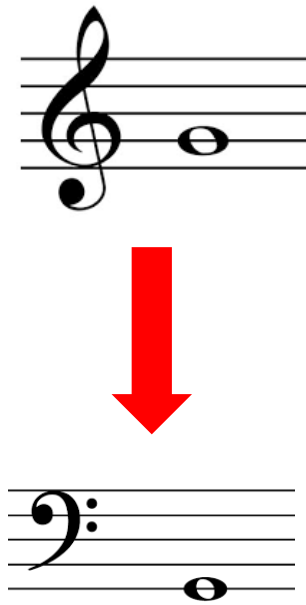
All
Cows
Eat
Grass

Space Notes:

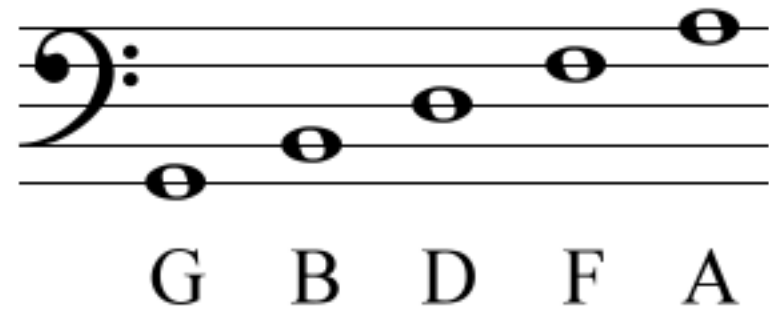


Bass Clef

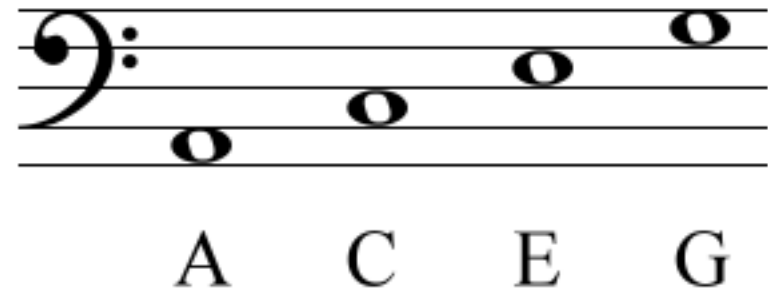
Alternatively move the treble clef down one ledger line



Line Notes:



Space Notes:



Bass Clef

Task:

In bass clef harmonise:

- G major
- G harmonic minor
- E natural minor
- A $\flat$ melodic minor

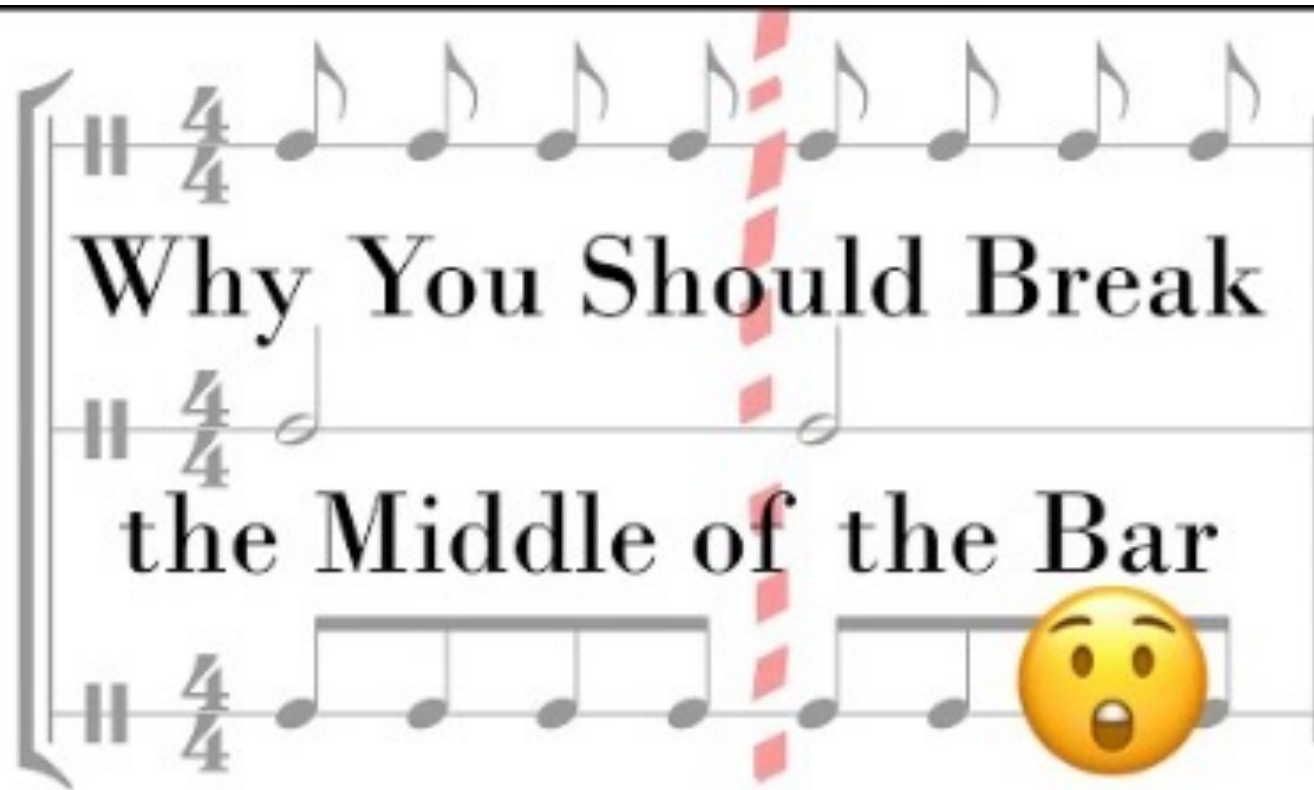
Groupings

Beaming (Grouping of Notes)



[Clinic: Beaming \(Grouping of Notes\) - Part 1 \(Clinic, 2021\)](#)

Groupings

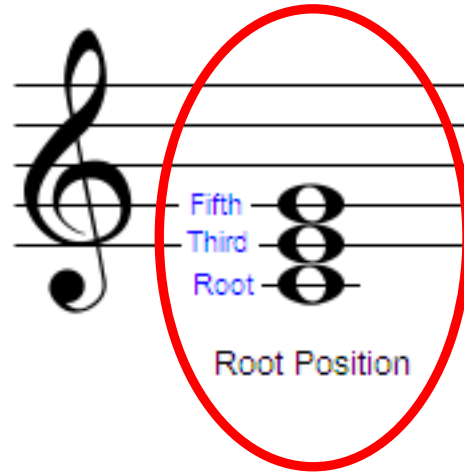


[Why you should break the middle of the bar](#)
([MusicEngravingTips, 2020](#))

General Musicianship and Studio Techniques

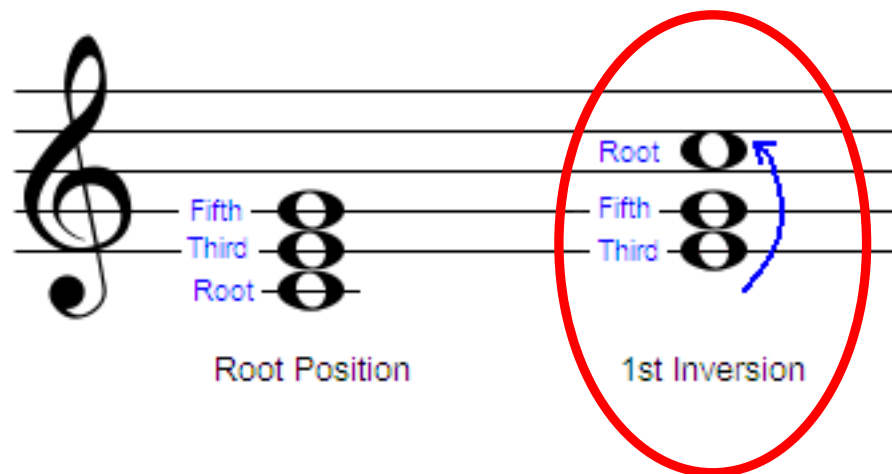
Week 4 - Inversions and Roman Numerals

Root position



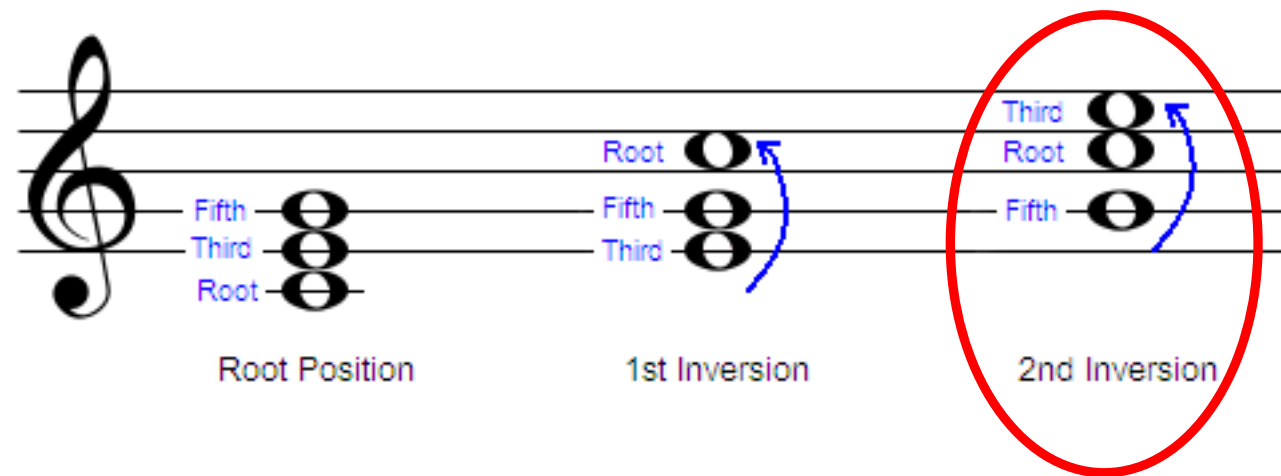
Triad Inversions Formulas			
Major	Minor	Diminished (°)	Augmented (+)
Major Third	Minor Third	Minor Third	Major Third
Minor Third	Major Third	Minor Third	Major Third

First inversion

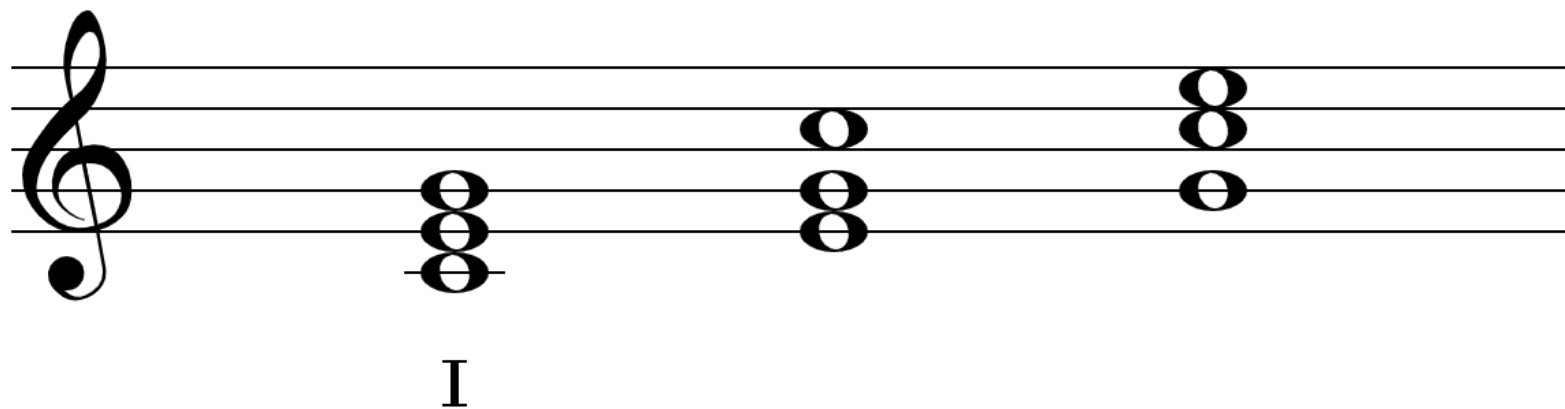


Triad Inversions Formulas			
Major	Minor	Diminished (°)	Augmented (+)
Minor Third	Major Third	Minor Third	Major Third
Perfect Fourth	Perfect Fourth	Tritone	Major Third

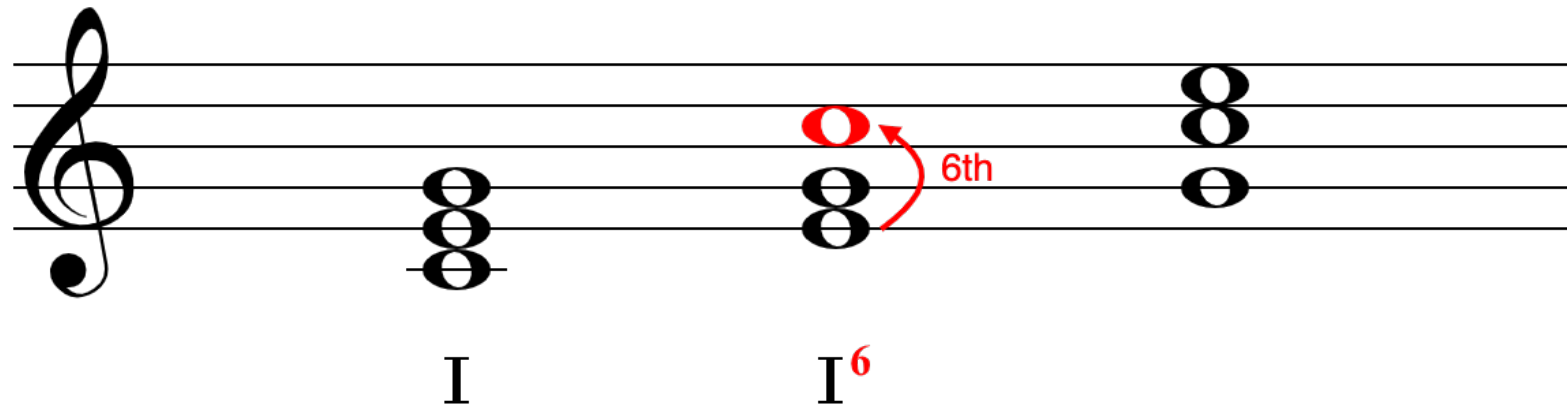
Second inversion



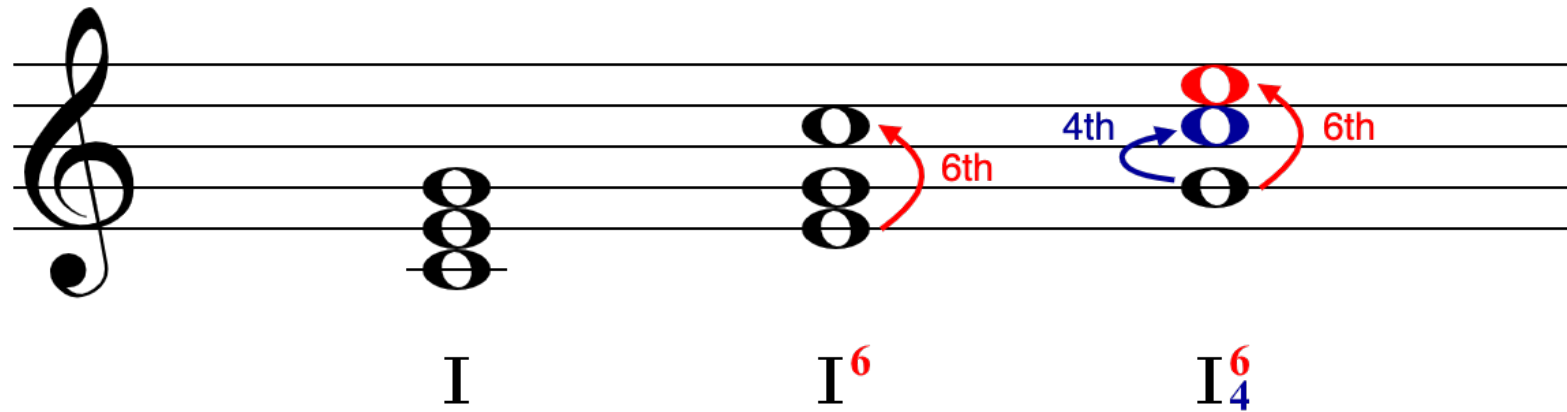
Triad Inversions Formulas			
Major	Minor	Diminished (°)	Augmented (+)
Perfect Fourth	Perfect Fourth	Tritone	Major Third
Major Third	Minor Third	Minor Third	Major Third



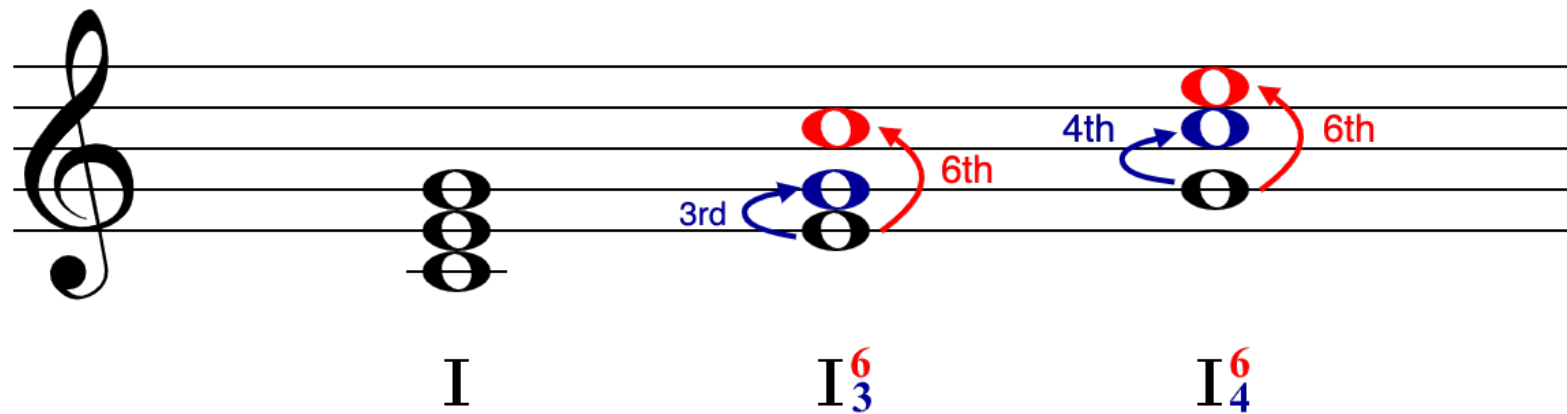
- Roman numerals can also indicate inversions



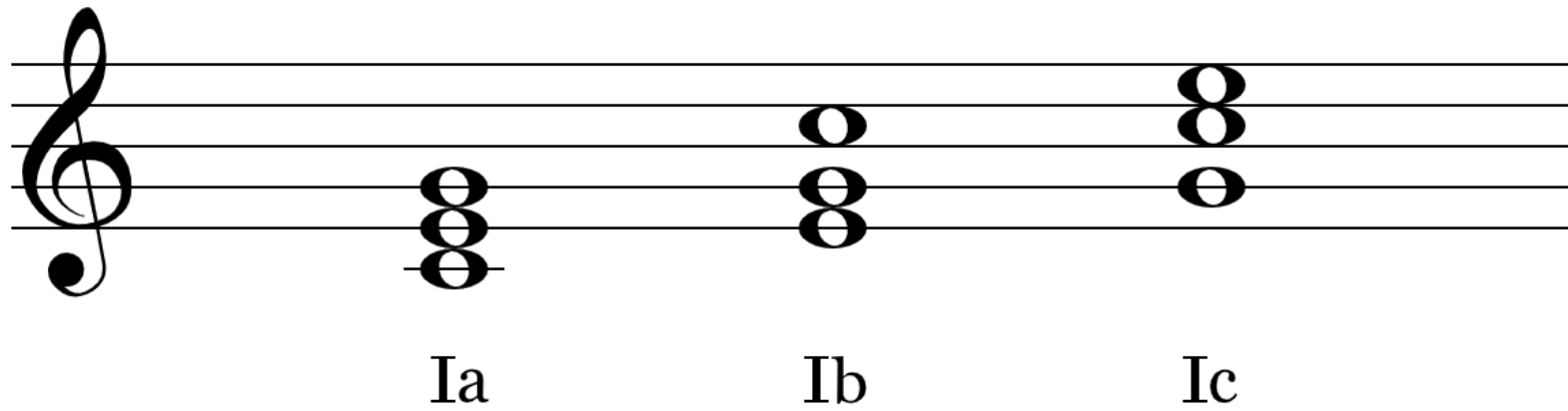
- First inversion is represented by a small 6 after the numeral. This is due to the root being a generic sixth note above the bass



- Second inversion is represented with both a small 6 and 4. This is due to the root and third being a generic sixth and fourth above the bass note



- Some theorists use both a 6 and a 3 to represent first inversion



- Others use “a” suffix to represent root, “b” for first inversion, and “c” for second inversion

Inversions and Roman Numerals

Task:

In both treble clef and bass clef write down the following chords in root, 1st, 2nd positions and include their roman numerals using the shortcut cmd + L

- D major
- E $\flat$ minor
- C $\sharp$ minor
- F major

