

Triads: In a Major Scale

What is a Triad?

A Triad is a three note chord.

A Tertiary Triad is a three note chord built on diatonic thirds.

Intervals:

What is an Interval?

An interval is the distance between two notes measured up from the lowest note.

The intervals are named by their position in a Major Scale relative the lowest note, meaning the root of the Major Scale and the lowest note coincide.

The names of the intervals are as follows:

Root/Unison, Major 2nd, Major 3rd, Perfect 4th, Perfect 5th, Major 6th, Major 7th

When these intervals are altered by lowering, Major Intervals become Minor and Perfect become Diminished. Since lowering a Perfect 4th results in a Major 3rd there is no common usage of the term Lowered or Diminished 4th. The Major seventh can be lowered twice even though this is enharmonic with Major 6th it is commonly referred to as Diminished 7th. Raising a Perfect 5th results in an Augmented 5th.

	Gtr I Unison	Major 2nd	Major 3rd	Perfect 4th	Perfect 5th	Major 6th	Major 7th	Octave
I								1
A		0	2	3	0	2	4	
B	3	3	3	3	3	3	3	3

Inversions of intervals:

If the two notes in an interval are reversed in order, such that the upper note is now placed on the bottom, the interval is said to be inverted.

Inverting a Minor 2nd interval results in a Major 7th interval.

Inverting a Major 2nd interval results in a Minor 7th interval.

Inverting a Minor 3rd interval results in a Major 6th interval.

Inverting a Major 3rd interval results in a Minor 6th interval.

Inverting a Perfect 4th interval results in a Perfect 5th interval.

Inverting a Diminished 5th interval results in a Diminished 5th interval.

	Gtr I Octave	Minor 7th	Minor 6th	Perfect 5th	Perfect 4th	Minor 3rd	Minor 2nd	Unison
I	1	1	1	1	1	1	1	1
A								
B	3	0	2	3				

There are four types of Root Inversion triads:

The formula for a Major Triad is Root, Major 3rd, Perfect 5th or in terms of stacked intervals, Major 3rd, Minor 3rd.

Gtr I	Major Triad	Major 3rd	Minor 3rd	Major 3rd	Perfect 5th
I					
A	0	2	0	2	0
B	3	3	2	3	3

The formula for a Minor Triad is Root, Minor 3rd, Perfect 5th or in terms of stacked intervals, Minor 3rd, Major 3rd.

Gtr I	Minor Triad	Minor 3rd	Major 3rd	Minor 3rd	Perfect 5th
I					
A	0	1	0	1	0
B	3	3	1	3	3

The formula for an Augmented Triad is Root, Major 3rd, Augmented 5th or in terms of stacked intervals, Major 3rd, Major 3rd.

Gtr I	Augmented Triad	Major 3rd	Major 3rd	Major 3rd	Augmented 5th
I					
A	1	2	1	2	1
B	3	3	2	3	3

The formula for a Diminished Triad is Root, Minor 3rd, Diminished 5th or in terms of stacked intervals, Minor 3rd, Minor 3rd.

Gtr I	Diminished Triad	Minor 3rd	Minor 3rd	Minor 3rd	Diminished 5th
I					
A	4	6	4	6	4
B	8	8	6	8	8

Roman Numerals and the Chord Scale:

A triad can be constructed on each note of a Major Scale.

Roman numerals are used to identify the triad without reference to key.

C	Dm	Em	F	G	Am	B ^o	C
I	ii	iii	IV	V	vi	vii ^o	I
T			1	2	3	4	5
A	0	2	4	2	5	3	5
B	3	6	7	3	5	7	5

Triad Inversions:

If the notes of the Major Scale are numbered 1-7, the triad built on the first degree is 1 3 5 or Root, Major 3rd, Perfect 5th.

Mathematics dictates that there are other arrangements of these three tones, these are called inversions. Root, Major 3rd, Perfect 5th (135) is called Root Inversion, Major 3rd, Perfect 5th, Root (351) is called First Inversion and Perfect 5th, Root, Major 3rd (513) is called Second inversion. The previous inversions are usually voiced within the span of a Major 6th; this is called Close Voiced Inversions.

Gr1 Root Inversion	First Inversion	Second Inversion
T		
A	0	5
B	3	7

Other Inversions exist but the tones cannot exist within the span of a Major 6th, these are called Open Voiced Inversions.

The simplest types of Open Voiced Inversions are based on sixth intervals (remember sixths are inverted 3rds).

Root, Perfect 5th, Major 3rd (153); This is called Root Inversion.

Major 3rd, Root, Perfect 5th (315); This is called First Inversion.

Perfect 5th, Major 3rd, Root (531); This is called Second Inversion.

First Inversion	Second Inversion	Root Inversion
T		
A	0	5
B	3	7

