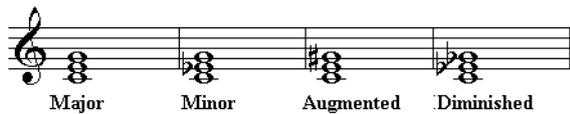


Basic Theory Quick Reference: Chords

Triad types

There are four types of triads (three-note chords) which are defined by the type of third and the type of fifth above the root as follows:

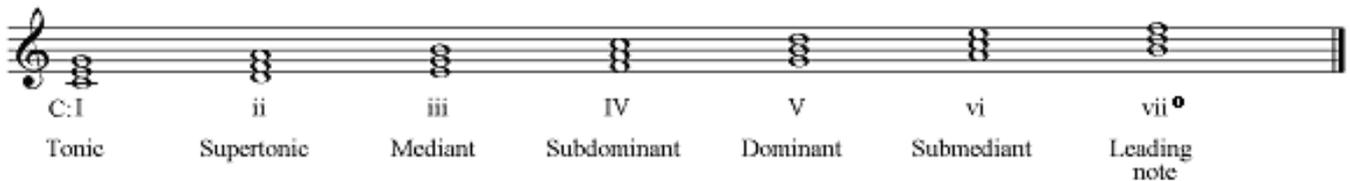
Triad	Type of third	Type of fifth
Major	Major	Perfect
Minor	Minor	Perfect
Augmented	Major	Augmented
Diminished	Minor	Diminished



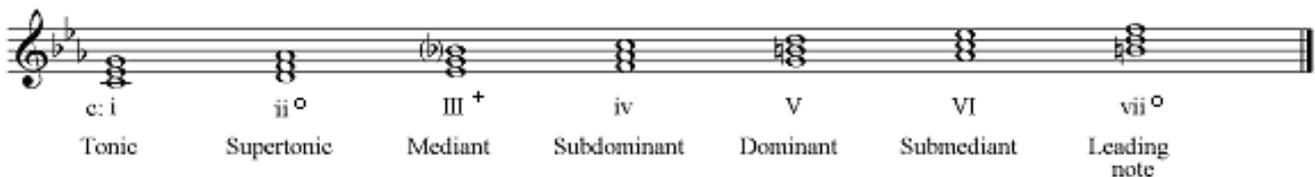
Labelling triads within a key

- The key is shown with an Arabic letter followed by a colon. Use upper case for major and lower case for minor (e.g. "A:" means A major and "g:" means G minor)
- Chords are labelled with Roman numerals as follows:
 - major chords in upper case (e.g. **I**, **IV**)
 - minor chords in lower case (e.g. **ii**, **vi**)
 - diminished chords in lower case with a superscript circle (e.g. **vii^o**)
 - augmented chords in upper case with a superscript plus sign (e.g. **III⁺**)

In a major key, **I**, **IV** and **V** are always major, chords **ii**, **iii** and **vi** are always minor and chord **vii^o** is diminished.



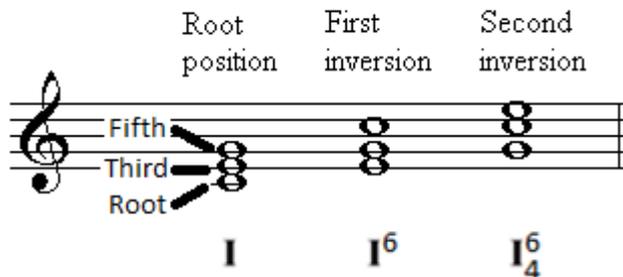
In a minor key, **i**, and **iv** are always minor, chord **V** would be minor but the leading note is sharpened in minor keys (in this case B natural in C minor) and this makes it major. Chords **III** and **VI** are usually major (although **III⁺** is augmented if the seventh is sharpened) and chords **ii^o** and **vii^o** are diminished.



Note that each degree of the scale has a name, after which the triad on that scale degree is known. Submediant, for example, means the third below the tonic.

Inversions of chords

Triads can be inverted by flipping the chord upside-down – i.e. moving the bottom note up an octave. Because triads consist of three notes, they can be inverted twice as in the example below.



- If the triad in its original position (arranged as a stack of two thirds) then the bottom note is the *root* and it is in **root position**.
- If the bottom note is the *third* of the chord, it is in **first inversion** (and a '6' is added to the Roman numeral – see figured bass guide below)
- If the bottom note is the *fifth* of the chord, it is **second inversion** (and a 6/4 is added to the Roman numeral).

The inversions of the C major triad can be rearranged without necessarily changing the inversion. For example, the first C major triad below is arranged so that the three notes are as close together as possible. A triad arranged like this is said to be in '**close position**'). In the second example below, the C major triad is spread out but the root is still at the bottom. It is the note at the bottom that determines the inversion. A C major triad with an E at the bottom, for example, is in first inversion however you arrange the two notes above the E, which is the third of the chord. Note that the figured bass remains the same regardless of whether the chord is in open or close position.



Seventh chords

The table below summarizes the main types of seventh chords and where they occur in a diatonic scale:

Common name for chord	Type of triad	Type of seventh	Occurs in major key on chords:	Occurs in minor key on chords:
<i>Major seventh</i>	major	major	I, IV	III*, VI
<i>Minor seventh</i>	minor	minor	ii, iii, vi	iv
<i>Dominant seventh</i>	major	minor	V	V
<i>Major-minor seventh</i>	minor	major		I
<i>Diminished seventh</i>	diminished	diminished		vii
<i>Half-diminished seventh</i>	diminished	minor	Vii	li

* leading note is not usually sharpened on chord iii in minor

Seventh chords can be inverted in the same way as a triad, but because there is an extra note, there are now up to three possible inversions. See next page for explanation of figured bass.

V V⁶₅ V⁴₃ V⁴₂
 Root 1st 2nd 3rd

TIP: if you want to know if a chord is based on a triad constructed from thirds, and which triad it is, you should try to rearrange it as a stack of thirds. In the example below, the root of the chord is C.