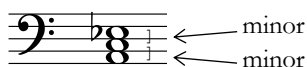


TRIADS

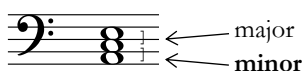
A **triad** is a chord that has three distinct members, or **degrees**:

- ♦ the **root**, which gives its name to the triad
- ♦ the **third**, found a third above the root
- ♦ the **fifth**, found a fifth above the root

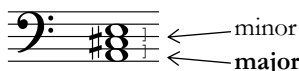
We haven't yet discussed the various qualities of **fifths**, but you can think of a triad as a stack of two thirds, or possibly cookies, shown in Example 1. Four **qualities** of triad are common: major, minor, diminished, and augmented.



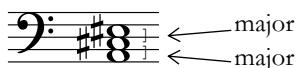
diminished triad



minor triad



major triad



augmented triad



Example 1. Triads as stacked thirds, or cookies.

The two most common and most harmonically stable triads are the **major** and the **minor**, and they take their names from the **third** above the root: In a **minor** triad, the third above the root is **minor**, the fifth is perfect (we'll define that later). In a **major** triad, the third above the root is **major**, the fifth is perfect.

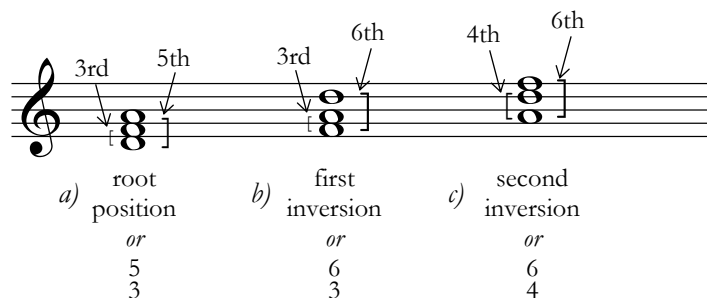
Major and minor triads are the fundamental chords in **tonal music**. They are also the most **consonant** triads. They are more stable and have more grammatical “weight” than dissonant triads.

Diminished and augmented triads are **dissonant**, because they have a dissonant diminished or augmented fifth above the root. They are more *active*; they create tension that wants to be released (in theory speak, “resolved”) to a consonance.

Chord Position. Example 2a shows a D minor triad, with the root D on the bottom, the third F in the middle, the fifth A on top.

If we transpose the D up an octave, we get the chord in Example 2b. Like 2a, it has D, F, and A, so it is still a D minor triad, but the F is now the lowest note. By transposing the originally lowest note D up an octave, we've **inverted** the D minor triad, so that the triad third, F, is in the bass.

If we transpose the bottom F of Example 2b up an octave, **inverting** the D minor triad again, we get the chord in 2c, which has the triad fifth, A, in the bass.



Example 2. D minor triads in three positions.

These three chords are all D minor triads, because they all consist of D, F, and A. They differ with respect to **position**. A triad has **three positions**:

- ♦ If the **root of a triad** is in the bass, as in Example 2a, the triad is in **root position**
- ♦ If the **third of a triad** is in the bass, as in 2b, the triad is in **first inversion**
- ♦ If the **fifth of a triad** is in the bass, as in 2c, the triad is in **second inversion**
- ♦ **Remember**, root position is called “root position”, not “first” anything!

The three positions for triads can also be labeled according to the intervals above the lowest note. (This system comes from a tradition of 17th- and 18th-century performance where the keyboard or lute player in an ensemble was given the bass line annotated with numbers—a **figured bass**—that indicated the pitches to be filled in to complete the harmonies.)

- ♦ As Example 2a shows, the intervals above the lowest note in a **root position triad** are a fifth and a third, so it is also called a $\frac{5}{3}$ (**five-three**) chord.
- ♦ As Example 2b shows, the intervals above the lowest note in a **first inversion triad** are a sixth and a third, so it is called a $\frac{6}{3}$ (**six-three**) chord, or a $\frac{6}{4}$ (**six**) chord for short.
- ♦ As Example 2c shows, the intervals above the lowest note in a **second inversion triad** are a sixth and a fourth, so this is a $\frac{6}{4}$ (**six-four**) chord.

Chord Voicing. Example 3 shows D minor triads in different **voicings**. They all consist of the pitches D, F, A, so they're all D minor triads. And in ex. 3a, the D is always the lowest note, so all the chords in measure (a) are in root position, even though the various chord degrees are distributed differently above the bottom D. Likewise, all the chords in measure (b) are in first inversion, though in a variety of different voicings, and all the chords in measure (c) are in second inversion.

- ♦ Root position is the “default”, so if there is **no indication** of inversion, the chord is understood to be a $\frac{5}{3}$ chord.

Example 3. D minor triads in three positions, in various voicings.

Labeling chords using lead-sheet symbols

There are two methods for labeling triads: **lead-sheet symbols** and **roman numerals**. (We will cover roman numerals a little later.) Lead-sheet symbols are used in much jazz and popular music. They are also called **pop chord symbols** or simply **chord symbols**. A lead sheet consists of the main melody in regular staff notation, usually lyrics written below the staff, and chord symbols written above the staff for accompanying instrument(s). The lead sheet does not tell the performers exactly how to play, only what chords are called for; the performer has a lot of leeway in how to “realize” the chords. Here is a lead sheet for “Scarborough Fair”.

Freely

Am G

Are you go-ing to Scar - bo-rouogh Fair? _____

C Am C D Am

- Pars-ley, sage, rose - ma - ry and thyme. _____

Am C G

Re - mem - ber me to one who lives there, _____ For

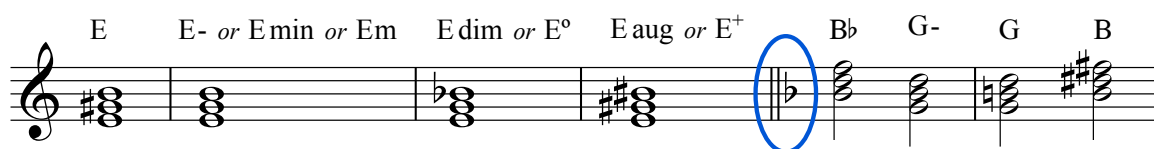
Am G Am G Am

once she was a true love of mine. _____

Lead-sheet symbols identify the root by letter (G, E \flat , etc.) followed by an indication of triad quality. The essential features of the system are clarity and brevity.

- ♦ Major triads are the most common, so they are the “default”, and the symbol is simply the root’s letter-name: E, A \flat , F \sharp , etc.
- ♦ Minor triads are indicated by the root note name followed by **min** or **–** or **m**
- ♦ Diminished triads are indicated by the root note name followed by **dim** or a small superscript circle: $^{\circ}$
- ♦ Augmented triads are indicated by the root name followed by **aug** or **+**

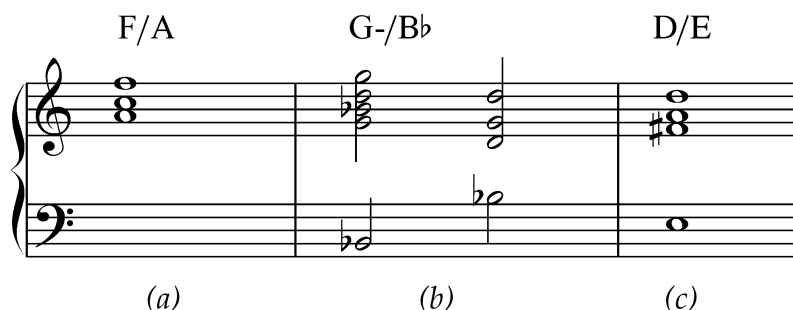
The root name is always written with a **capital** letter, regardless of triad quality:



Lead-sheet symbols “ignore” key signatures. For instance, in the key of F you must write “B \flat ” to indicate a B \flat major chord, even though the note B \flat is already specified by the key signature. The chord symbol “B” would indicate a B major chord, even though none of its notes are in the key of F.

Inversion

In lead-sheet notation, inversions are indicated using **slash notation** (rather than with numbers as in figured-bass notation). If a note other than the chord root is the lowest (bass) note, the chord symbol is followed by a forward slash and then the bass note. If there is no such notation, the chord is understood to be in root position.



- ♦ The letter following the slash indicates the bass note only—i.e. an individual pitch, not another chord!

Slash notation also allows indication of more complex harmonies, where the bass note is not a member of the triad, as in measure (c) above.

Alternative chord symbols

Major triads are sometimes indicated **E^{MAJ}** or **E^{MA}**. I **strongly discourage** this. It's unnecessary, and it reduces the contrast between the symbols for major and minor triads, making the notation less clear, not more so. But you need to recognize these labels when you see them.

Diminished triads are sometimes indicated by adding **b5** to the symbol for a minor chord. Using an E root as an example: **Emin^{b5}** or **Em^{b5}** or **E^{-b5}**.

Augmented triads are sometimes indicated with **#5** as in **E(#5)**. The parentheses are necessary to show that the # symbol does not apply to the root, but is modifying the chord fifth.

Note that the sharp or flat before the 5 means the tone is raised or lowered from the perfect fifth, not necessarily that this is a note spelled with a sharp or a flat. For example, the symbol Eb(#5) means an E-flat augmented triad, Eb-G-B \sharp ; F \sharp m^{b5} means an F \sharp diminished triad, F \sharp -A-C \flat .