

Basic Theory Quick Reference: Figured Bass

Figured bass was developed in the Baroque period as a practical short hand to help continuo players harmonise a bass line at sight. The basic principle is very easy:

*each number simply denotes an **interval** above the bass note*

The only complication is that not every note of every chord needed is given a figure. Instead a convention developed of writing the minimum number of figures needed to work out the harmony for each bass note.

The continuo player presumes that the bass note is the root of the chord unless the figures indicate otherwise. The example below shows the figuring for common chords - figures that are usually omitted are shown in brackets:

root position	root position seventh	first inversion	first inversion seventh	second inversion	second inversion seventh	third inversion seventh
(⁵ / ₃)	(⁷ / ₅ / ₃)	(⁶ / ₃)	(⁶ / ₅ / ₃)	6 4	(⁶ / ₄ / ₃)	(⁶ / ₄ / ₂)

Accidentals

Where needed, these are placed after the relevant number. Figures are treated exactly the same as notes on the staff. In the example below the F# does not need an accidental, because it is in the key signature. On the other hand, the C# does to be shown because it is not in the key signature. An accidental on its own always refers to the third above the bass note.

(⁵ / ₃)	(⁵ / ₃)#

For analytical purposes we will combine Roman Numerals (i.e. **I** or **V**) with figured bass to show the inversion.

The image shows three musical examples in C major. The first two are first inversion chords (I⁶), and the third is a second inversion chord (V⁴/₃).

Cadential 6/4

Second inversion chords are unstable and in the Western Classical Tradition they tend to resolve rather than stand as a proper chord on their own. In the example below, the 6/4 above the G could be described as a C chord in second inversion. In reality, though, it resolves onto the G chord that follows and can better be understood as a decoration (double appoggiatura) onto this chord.

The image shows a cadential 6/4 chord (C major in second inversion) resolving to a G chord (C major in first inversion).

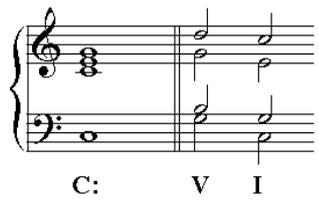
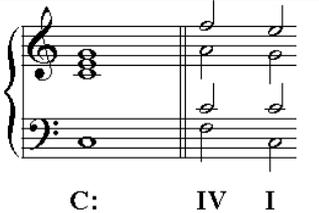
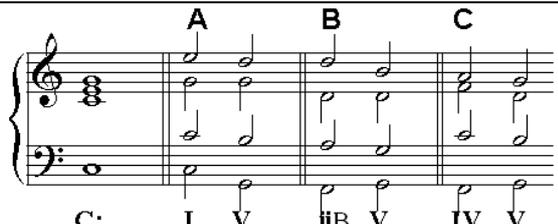
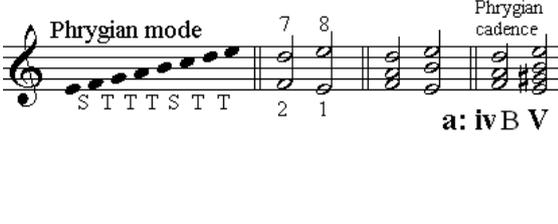
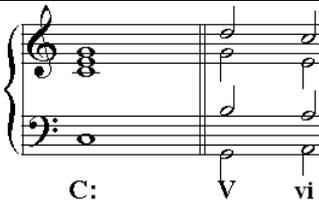
The figuring for common suspensions is shown below, again with numbers that are usually omitted placed in brackets.

The image shows three types of suspensions: 4-3, 9-8, and 7-6. The notation includes treble and bass clefs, a key signature of one sharp (F#), and figured bass notation below the notes.

- The **4-3 suspension** modifies a *root position* chord – a suspended fourth replaces the third to which it then resolves.
- The **9-8 suspension** adds a second (or ninth) above the bass in a *root position* chord before resolving down onto the root note.
- The **7-6 suspension** modifies a *first inversion* chord – a suspended seventh replaces the sixth to which it then resolves.

Basic Theory Quick Reference: Cadences

The following table summarises the most common cadence types. While a cadence is primarily defined by chord progression (e.g. V-I), in order to be a cadence in the full sense of the term, it must be marked as the end of a phrase or subphrase (e.g. a longer note length, a following rest etc.). A V-I progression that is not marked in this way could be called a cadential progression but not a cadence.

Cadences ending on the tonic		
<i>Perfect</i>	The most common type of cadence at the end of a section or piece. Establishes or confirms the key.	 <p>C: V I</p>
<i>Plagal</i>	Much less common after the Renaissance, but found in some liturgical music and often called the 'Amen' cadence.	 <p>C: IV I</p>
Cadences ending on the dominant		
<i>Imperfect</i>	Any cadence that ends on V is imperfect, but the most common is the tonic to dominant progression.	 <p>C: I V</p>
<i>Phrygian</i>	A special kind of imperfect cadence with the progression IVB-V in the minor. It has its origins in modal music, arising from cadences in the Phrygian mode.	 <p>Phrygian mode S T T T S T T 7 8 2 1 a: iv B V Phrygian cadence</p>
Other		
<i>Interrupted</i>	An alternative to the perfect cadence (ending on vi rather than I), this unexpected 'interruption' is very common in the playful Classical era.	 <p>C: V vi</p>