Chord Structures & Cadential Formulas

Chord Structures

Something like the following graphic is presented at the beginning of nearly every theory book. This represents the character of triads built on each step of the major scale. Note that I, IV and V (the Tonic, Subdominant and Dominant) are major (and upper case), and ii, iii, and vi are minor (lower case). A triad built on the leading tone of the scale is a diminished triad, or the top three notes of the Dominant seventh chord ($V^7$).

These are designated as follows:
I - Tonic
ii - Supertonic
iii - Mediant
IV - Subdominant
V - Dominant
vi - Submediant
vii° - Leading Tone

The following represents the Root Position and First and Second Inversions of the I chord in C Major. These are labeled as: I, I₆, and I₄.

Seventh chords have an additional third at the top of the triad:
The root position and the three inversions of the seventh chord are designated as follows:

![Diagram of seventh chord inversions]

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**Cadential Formulas**

I. **Authentic cadence**: V to I.
   A. **Perfect authentic cadence (PAC)**: The chords are in root position; that is, the roots of both chords are in the bass, and the root of the final chord is in the highest voice. A PAC is a progression from V to I in major keys, and V to i in minor keys.
   
   B. **Imperfect authentic cadence (IAC)**:
      1. Root position IAC: the highest voice is not the tonic
      2. Inverted IAC: one or both chords must be inverted
      3. Leading tone IAC: V is replaced with vii°

II. **Half cadence**: any cadence ending on V, whether preceded by ii, IV, or I, or any other chord.

III. **Plagal cadence**: IV to I, also known as the "Amen Cadence"

IV. **Deceptive (or interrupted) cadence**: V to any chord except I (typically vi or VI).

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**Resources**

- [Cadence](#), Wikipedia
- [Seventh Chords and Inversions](#), Terry Ewell, Connexions
- [Triads](#), Catherine Schmidt-Jones, Connexions
- [Types of seventh chords](#), Wikipedia