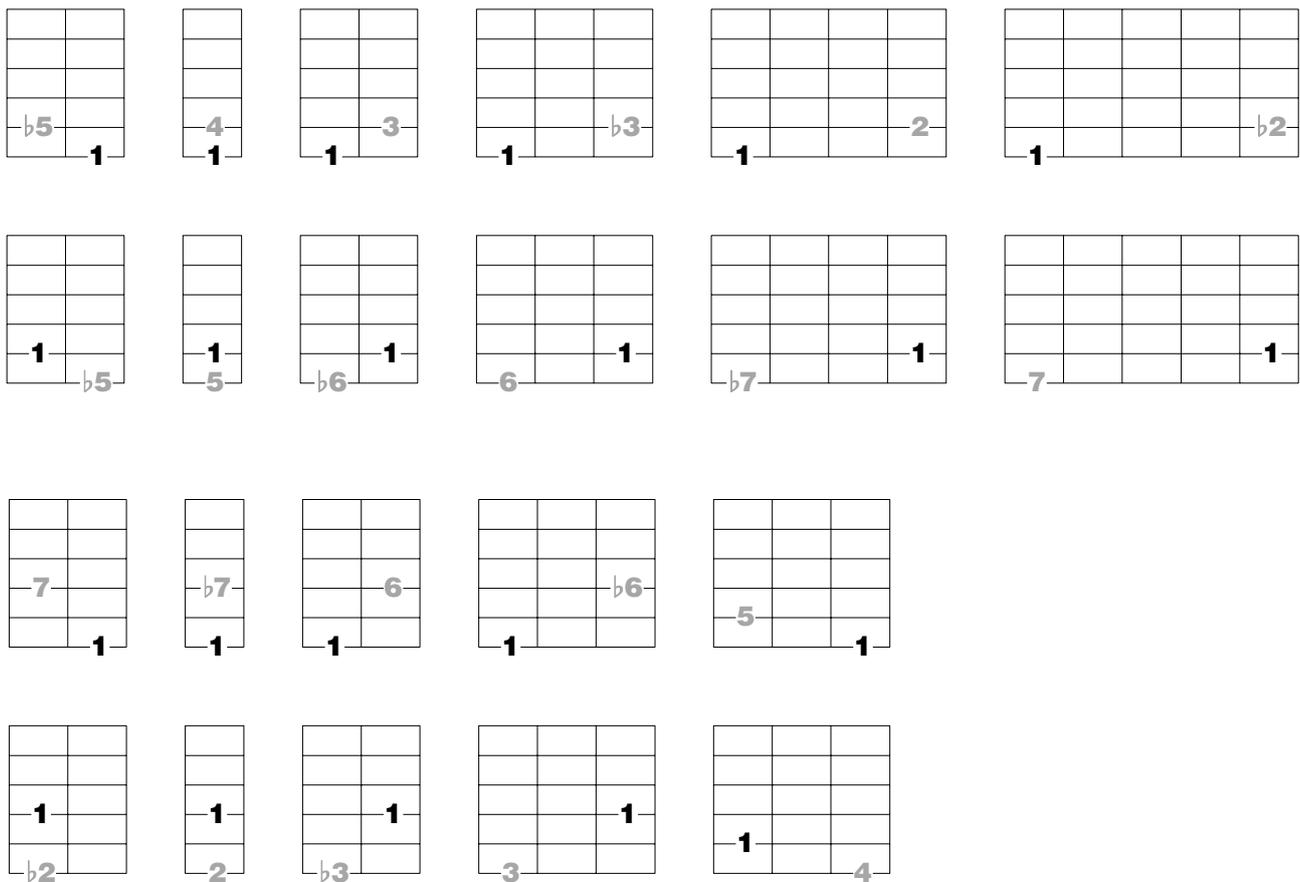# Intervals

A melodic interval is the distance between 2 pitches, measured in number of tones or semitones. The reference note is written as 1 (here in black), and the second note (in grey) is numbered according to its distance from the reference note.

This melodic distance is expressed on the guitar neck into the distance between 2 notes, measured in number of frets and strings, as shown below.

For each pair of notes, when we swap the reference notes and the notes in grey, we obtain the inverted interval, thus always forming the same diagram. Intervals and inverted intervals form here the pairs of vertically aligned diagrams.

Melodic intervals and inversions

Intervals whose sum equals an octave are called complementary intervals. The octave is represented here by the notes numbered 1 in black, forming here a constant diagram.

Dividing this octave, we have the different notes in grey forming a first interval with the low note (here on the 6th string) and a second interval with the high note (on the 4th string) called complementary interval. These two intervals are represented with brackets and their numerical notation.

We see on the diagrams below the sum of these two intervals forming the octave. All possible divisions of the octave are represented by these 7 diagrams.

Intervals and complementary intervals

The diagrams below represent the possible positions on the neck of the notes (in grey) dividing the octave (in black). These diagrams group the different qualities of the same type of interval, for example the 3 possible qualities of a fifth: perfect (5), diminished (♭5), and augmented (♯5).

The octave pitch is not taken into account here: an 9th interval will be assimilated to a 2nd interval, of 11th to a 4th interval, etc.

Intervals table