Learning / Research for Music

“What is A Chord in Music? How To Build Chords and Chord Progressions” on Youtube

https://www.youtube.com/watch?v=T2gw9Fcc_w0

Chords: Where three or more notes play at the same time (It sets emotion in music).

Harmony: When two notes are played at the same time

Triads: The most common chords; They contain three notes from the major scale

Major, Minor, diminished, and augmented

e.g.) C c C^{+} c^{o}

Uppercase Lowercase Uppercase Lowercase

Root: 1st note of scale, 3rd note of scale, 5th note of scale, etc.

e.g.) C E G → If we move this shape around, we can get different chords in the key of C major

Intervals: the distance between two tones

Octave: the distance between one note and another note that’s double its frequency

➔ Two musical notes that are eight tones apart on a scale

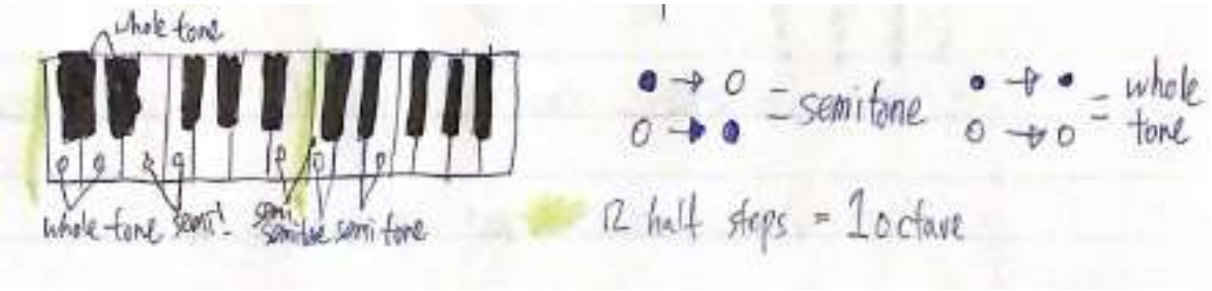
Formula for Major chords:

4 semitones between the 1st two notes and 3 semitones between the 2nd two notes.

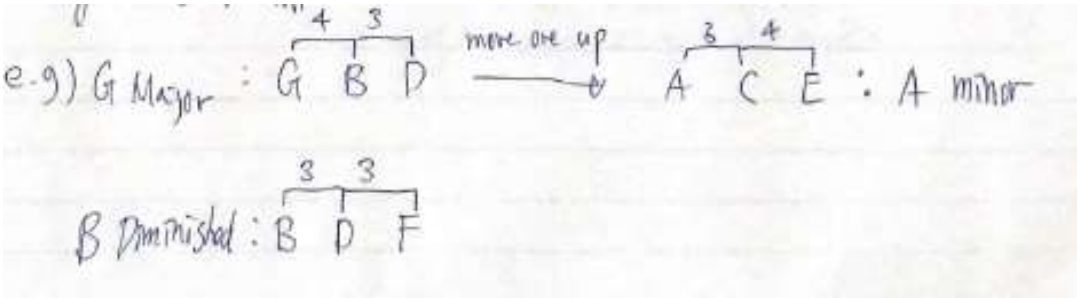
Formula for Minor chords:

3 semitones between the 1st two notes and 4 semitones between the 2nd two notes.

** You can flip the formula between Major and Minor by switching 3 and 4.



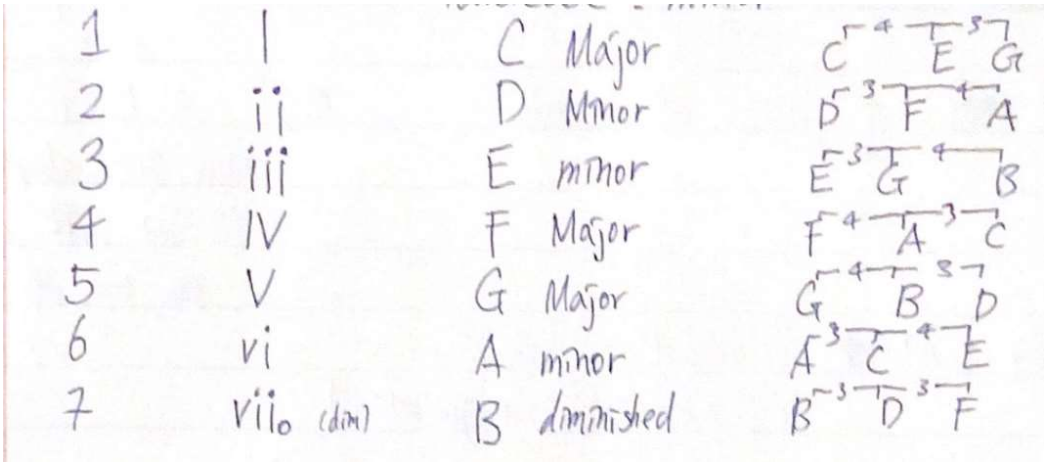
How to tell Major vs. Minor: Analyze the formula



Chord Qualities to a Major scale:

Ma – mi – mi – Ma – Ma – mi – dim.

Roman Numerals:



Uppercase: Major / Lowercase: Minor

Chord progressions can be played in any key; it follows the same structure.

Changing the key of the song (Transpose):

- It creates a different vibe.
- It matches a singer's voice better
- It syncs up two samples in your da.
- Instrumentalists may also find that a musical piece is easier to play if it is in a different key.

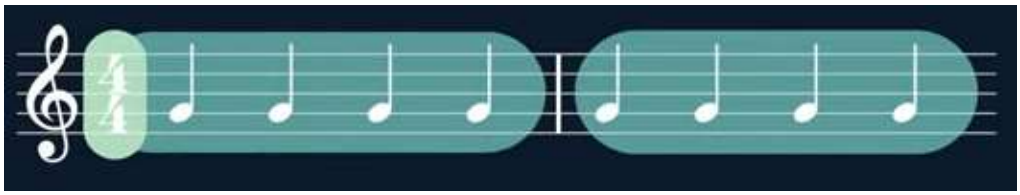
Beats:

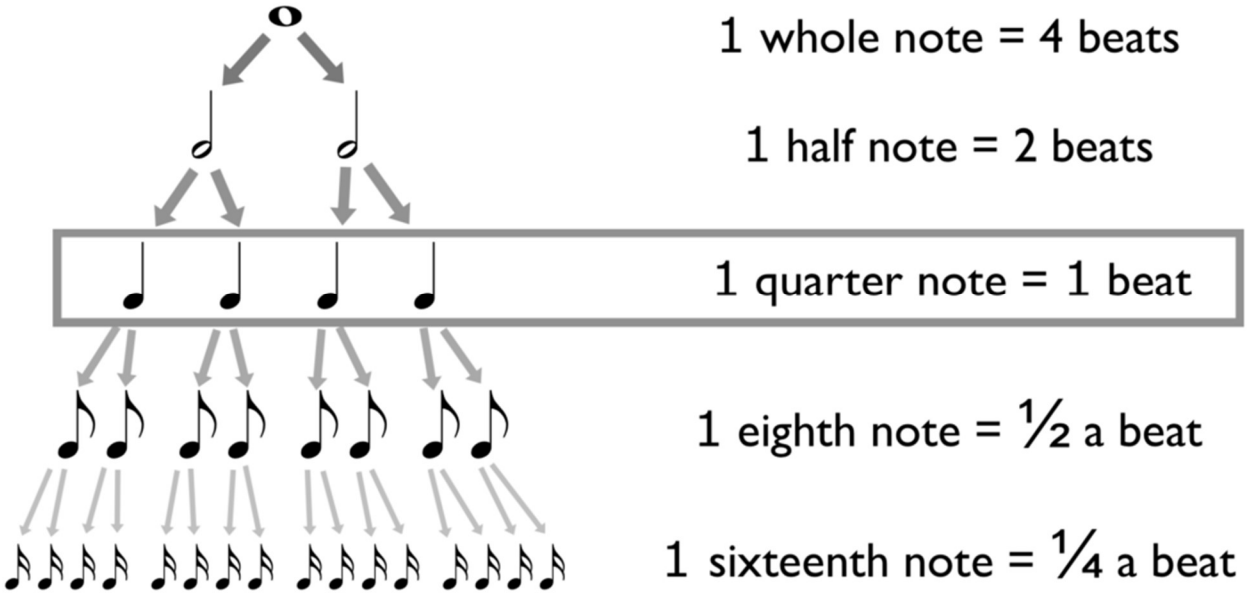
It is a constant pulse that does not change.

Beats are organized into sections → These are called measures.

Measures are separated by bar lines

The most common way is four beats per measure. → 4/4

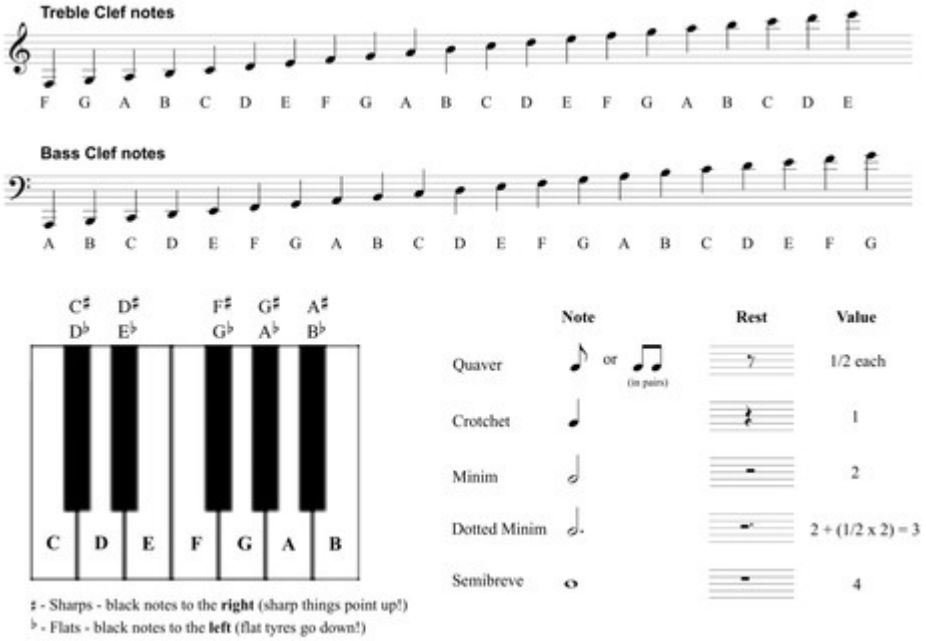




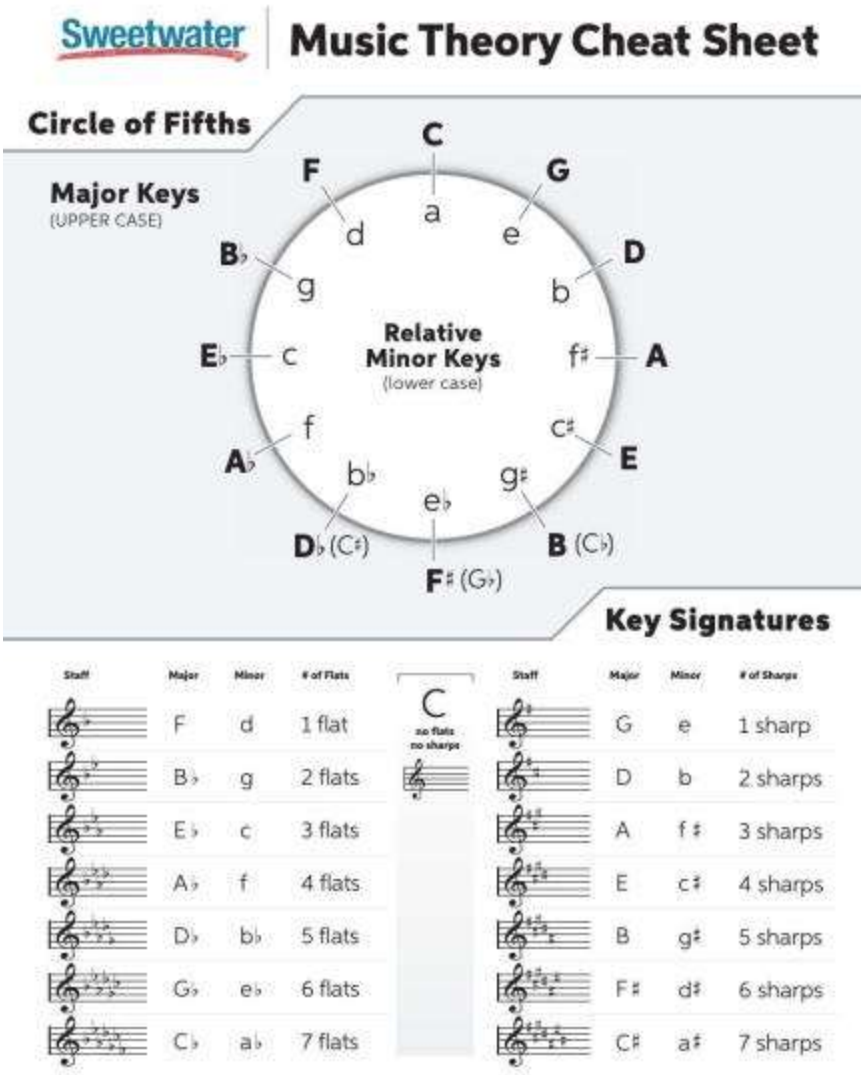
For example, 12/8, twelve beats per measure is twice fast as 4/4.

Repetition signs:

|: :|, | |, % → If you see these signs on sheet music, it is related to repeating the



specific part between the bars



The elements of music domain we had to consider for building an algorithm: chords and how to label the chords in a number list (for easier representation of chord progressions), chord qualities (implemented within the chord, major vs. minor), line (it's a sequence of chord), and structure of the song (Intro, verse, pre-chorus, chorus, outro, etc.).