# Music theory notes

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# 1 Scale degrees

- Scale degree 1 is known as the tonic.
- Scale degree 4 is known as the subdominant.
- $\bullet$  Scale degree 5 is the dominant.

### 2 Modes

Mnemonic: I Don't Punch Like Muhammad A-Li

• Ionian: C

• Dorian: D

• Phrygian: E

• Lydian: F

• Mixolydian: G

• Aeolian: A

• Locrian: B

## 3 Perfect fifths

7 semitones apart (C-G).

# 4 Major third

4 semitones apart (C-E)

#### 5 Triads

- Root position if a chord has the root note as the lowest pitch, e.g. C E G.
- $\bullet$  First inversion if a chord has the third as the lowest sounding note, e.g. E G C.
- $\bullet$  Second inversion if a chord has the fifth as the lowest sounding note, e.g. G C E.

### 5.1 C major triads

I: Tonic C maj

ii : Dmin

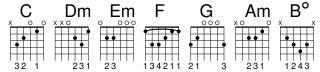
iii : Emin

IV: Subdominant Fmaj

V : Dominant: Gmaj

vi : Amin

vii : Bdim



Any diatonic melody can be harmonized with I-IV-V because every single scale degree occurs in this pool of notes.

#### 5.2 A minor triads

i : Tonic Amin

ii : Bmin

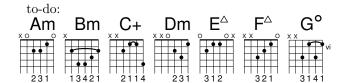
III: Caug

iv: Subdominant Dmin

V: Dominant: Emaj

VI: Fmaj

vii : Gdim



# 5.3 C Major (CEG GBD)

Major triad because it has a perfect fifth C-G, i.e., 7 semitones, and a Major third, four semitones (C-E).



### 5.4 A Minor

A-E is seven semitones but A-C has 3 semitones (=minor third), hence Minor triad.



### 5.5 D

Minor triad (D-A 7 semitones, D-F 3 semitones)



#### 5.6 E

Minor triad (E-B 7 semitones, E-G 3 semitones)



# 5.7 F Major (FAC CEG)

Major triad



# 5.8 G Major (GBD DF#A )

Major triad



#### 5.9 B

 $\label{eq:definition} Diminished fifth (6 semitones) + Minor third = Diminished triad$ 



# 6 Chords

 $\bullet\,$  I. C major: Tonic triad

• IV. G major: Dominant

• V, F major: Subdominant

### 7 Minor scales

Natural, Harmonic, and Melodic (raised 6th and 7th when ascending only).

#### 8 Interval

Perfect, Augmented, Diminished

2,3,6,7 Major Intervals: add one semitone to top note gives an augmented interval

2,3,6,7 Major Intervals: lower one semitone gives a minor interval

2,3,6,7 Major Intervals: lower one tone (two semitones) gives a diminished interval

#### 9 Cadences

The tonic note of every scale has two closely related triads: the one a fifth above the tonic is the dominant triad, and the one a fifth below is the subdominant. So every tonic tone is the center of a trio of strongly related chords, for example, F...C...G

Dominant chord to Tonic

A cadence is a melodic or harmonic progression that creates a sense of finality or a pause in the music.

Perfect cadence: A G7 followed by a C. Numerically speaking, this is chord V7 followed by chord I.

Imperfect cadence: C followed by G7. Numerically speaking this is chord I followed by chord V7, i.e. the reverse of the example above.

#### 10 Seventh Chords

These are triads with a seventh degree added.

#### 10.1 C major seventh chords

I: Tonic C maj7

ii: Dmin7

iii Emin 7

IV Subdominant Fmaj7

V Dominant seventh: G7

vi Amin7

vii B half-dim

A minor

i: Tonic Aminmaj7

ii : Bhalf-diminished

III Caug-maj7

iv Subdominant Dmin7

V Dominant: E7

VI Fmaj7

vii G#dim7

# 11 Common progressions