

No Bull Music Theory for Guitarists – Volume 3 Answer Key

Volume 3, Chapter 1

1. The CAGED system is based on the idea of building scale patterns around familiar chord shapes.
2. **Five** barre chord shapes are used for the CAGED system.
3. These barre chords are derived from the open chord shapes for the chords C, A, G, E, and D.
4. We can **build major scale and major pentatonic patterns** around the major barre chord shapes.
5. We can **build minor scale and minor pentatonic scale patterns** around the minor barre chord shapes.
6. When we learn a new scale pattern, we also need to start developing a **vocabulary of musical ideas** that come from it. This includes useful licks, bends, or fragments—anything musical.

Volume 3, Chapter 2

1. We can think of extended chords as **decorated 7th chords**. They aren't a different type of chord, just seventh chords with added color tones.
2. **Yes**, in general, an extended chord can act as a stand-in or replacement for a basic 7th chord.
3. The **9th**, **11th**, and **13th** are the most commonly added extensions to 7th chords.
4. **Major 7** chords are often extended to **maj9** and **maj13** chords. The **11th** is rarely used on major chords because it often clashes with the major 3rd.
5. **Minor 7** chords are commonly extended to **m9**, **m11**, and (less often) **m13** chords.
6. **Dominant 7** chords are frequently extended to **9**, **11**, or **13** chords.
7. Sharp and flat versions of extensions (e.g., **b9**, **#11**, **b13**) are called **altered extensions**, or simply **alterations**.
8. **True** – On guitar, we often don't play all the notes in an extended chord. Instead, we use the **most important tones** (usually the 3rd, 7th, and 1 or 2 extensions). Extended chords can be played with as few as **three notes** and still convey the full harmonic color.

Volume 3, Chapter 3

1. The two approaches are the **modal key approach** and the **chord-by-chord approach**.
2. A progression can be thought of as being in a modal key when all the chords come from the same major scale, but the **emphasis is not on the I chord**.
3. To determine which mode to use, **identify the main or “hero” chord**—the one that feels like the tonal center or “home”—then use the mode that corresponds to that chord's scale degree in the parent major key.

4. If the hero chord is the **I chord**, use **Ionian**.
5. If the hero chord is the **V chord**, use **Mixolydian**.
6. If the hero chord is the **VII chord**, use **Locrian**.
7. If the hero chord is the **II chord**, use **Dorian**.
8. If the hero chord is the **IV chord**, use **Lydian**.
9. If the hero chord is the **III chord**, use **Phrygian**.
10. If the hero chord is the **VI chord**, use **Aeolian** (aka the natural minor scale).
11. **True** – The chord-by-chord approach involves using a **different mode for each chord**, changing modes as the chords change.

Volume 3, Chapter 4

1. **Diatonic chords** are the chords found in the standard chord family of a key. For example, the diatonic chords in the key of G major are: G, Am, Bm, C, D, Em, and F#dim.
2. A **diatonic stand-in chord** is a chord that keeps the same root note as one of the chords in the key, but changes its quality—typically from minor to major or vice versa—to add variety.
3. We might **change the quality** of chords II, III, and VI from minor to major, resulting in II^{maj}, III^{maj}, and VI^{maj} chords.
4. The **III major** chord is often used to **resolve smoothly into the IV chord**, creating a strong voice-leading motion upward.
5. The most common example of a minor chord being used as a stand-in for a major chord is when **chord IV is changed from major to minor**, i.e., **IV → IV^m**.

Volume 3, Chapter 5

1. The interval structure for a diminished triad is: root + b3 + b5.
2. The interval structure for an augmented triad is: root + 3 + #5.
3. The interval structure for a diminished 7th chord is: root + b3 + b5 + bb7 (enharmonic equivalent of 6).
4. The interval structure for an augmented 7#5 chord is: root + 3 + #5 + b7.
5. Yes, diminished 7th chords do repeat at 3-fret intervals up and down the fretboard.
6. Yes, in a diminished 7th chord, any of the four notes can be treated as the root due to the symmetrical structure.
7. There are 3 diminished families: C–Eb–Gb–A; Db–E–G–Bb; D–F–Ab–B.
8. You can repeat an augmented triad voicing up or down 4 frets.
9. There are 4 augmented families: C–E–Ab; Db–F–A; D–F#–Bb; Eb–G–B.
10. The best chord symbol to describe this is **7#5** (e.g., G7#5, Bb7#5), or alternatively **+7**.
11. Augmented 7th chords are often used as stand-ins for **dominant 7th chords** to introduce added tension.

Volume 3, Chapter 6

1. The interval formula for the natural minor scale is: **Root – 2 – b3 – 4 – 5 – b6 – b7.**
2. The interval formula for the harmonic minor scale is: **Root – 2 – b3 – 4 – 5 – b6 – 7.**
3. The only difference between the two scales is the **7th note.**
4. The 7th note in the harmonic minor scale is called the **leading tone.**
5. Filled-in triad table:

Scale	I	II	bIII	IV	V	bVI	bVII/VII
Natural Minor	m	dim	maj	m	m	maj	maj
Harmonic Minor	m	dim	aug	m	maj	maj	dim

6. The most important difference is **chord V**:
 - In **natural minor**, chord V is **minor**
 - In **harmonic minor**, chord V is **major**, which provides dominant function
7. In harmonic minor, chord V is commonly played as either:
 - **Major** (e.g., E major in A harmonic minor)
 - **Dominant 7th** (e.g., E7 in A harmonic minor)

Volume 3, Chapter 7

1. **Combined Minor Chord Family (Most Common Options)**

Degree	Chord Options
I	m or m7
II	m7 ^b 5
III	Maj or Maj7
IV	m7
V	Maj, 7, m, or m7
VI	Maj or Maj7
VII	Maj or 7

2. The V chord in minor keys can be:
 - minor (m)
 - minor 7 (m7)
 - major (maj)
 - dominant 7 (7)
3. The **dominant 7 (V7)** chord generally has the strongest pull to the I chord. A **major V** also creates strong resolution, but the V7 contains more tension due to the tritone between the 3rd and 7th.
4. **Embedded Scale in Natural Minor**
The **minor pentatonic** scale is embedded within the natural minor scale. This

allows us to use the minor pentatonic any time the natural minor scale is appropriate.

5. **Progression: | Am | G | F | G |**

This entire progression fits naturally within **A natural minor**.

→ Recommended scale: **A natural minor** or **A minor pentatonic**

6. **Progression: | Am | F | Bm7^b5 | E7 |**

This progression includes a V7 chord (E7), which points to the **harmonic minor** scale.

→ Recommended scale: **A harmonic minor** (optional: use natural minor until V7 appears, then switch)

7. **Progression: | Am7 | Dm7 | Cmaj7 | E |**

The first three chords fit **A natural minor** well, especially since **Am7** implies natural minor. The **E major** chord (V) fits **A harmonic minor**.

→ Suggested approach: Use **A natural minor** for bars 1–3, switch to **A harmonic minor** over **E**

8. **Progression: | Am | Dm7 | Am | Fmaj7 |**

All chords exist in both **A natural minor** and **A harmonic minor** families.

→ Either scale will work. You can also mix them or use **A minor pentatonic** for a more bluesy sound.

Volume 3, Chapter 8

1. A **secondary dominant** chord is a **dominant 7th chord that does not occur naturally in the chord family or key**—it temporarily tonicizes another chord.
2. The chords **most often changed into secondary dominants** are the **II, III, VI, and VII** chords. This is a generalization, not a strict rule.
3. The **V7 chord is not a secondary dominant**, because it occurs naturally in the key and is part of the diatonic chord family.
4. A secondary dominant tends to work best when it functions as the **V chord of the chord it is resolving to**.
5. In the key of F:
 - a. **A7** would be labeled **III7**
 - b. **Bb7** would be labeled **IV7**
 - c. **F7** would be labeled **I7**
6. The **secondary dominants** from the given list are:
G7 (II7)
E7 (VII7)
The other chords (Fmaj7, Dm7, and C7) are **diatonic** to the key of F and **not** secondary dominants.

Volume 3, Chapter 9

1. Parallel major and minor keys are scales that share the **same root note**, but have different sets of notes and chords—e.g., G major and G minor.

2. Yes, B \flat major and B \flat minor are parallel keys because they share the same root note, B \flat .
3. The parallel minor of F major is **F minor**.
4. Two common names for this concept are **modal interchange** and **modal mixture**.
5. The IV chord in a major key is often changed into a **IV minor chord (IVm)**, borrowed from the parallel minor.
6. Example progressions using chords from both F major and F minor families:
 - a: F – A \flat – B \flat – B \flat m
 - b: F – C – D \flat – E \flat
 - c: F – B \flat – A \flat – E \flat
 - d: F – A \flat – B \flat – C – E \flat

Volume 3, Chapter 10

1. Key changing is also called *modulation*. If a chord sequence changes key, we could say it has “modulated.”
2. Chord progressions in major keys often modulate to their *relative minor* key. The reverse is also true – a minor key progression often modulates to its *relative major*.
3. The progression starts in G major using I, IV, and V. In bar 5 it modulates to *E minor*, the *relative minor* of G. In E minor, the chords function as: I (Em), bVI (C), bVII (D), IV (Am)
4. The final chord before the loop is D major — the V chord in G major. This “sets up” a return to G, creating a *perfect cadence* (V–I).
5. In bar 3, the progression modulates from A major to *A minor*. The E major chord acts as V in both A major and A minor, functioning as a pivot to *set up* both keys.
6. If the progression modulated *up a whole step*, the new chords would be: | G | D | Em | C |.
7. To create smoother transitions:
 In bar 4, insert **B \flat or B \flat 7** to lead into bar 5 (Eb as I in Eb major).
 In bar 8 (if repeating), insert **G or G7** to set up return to C major.
 So the progression becomes:
 || C | Am | F | G B \flat (7) |
 | Eb | Cm | Ab | B \flat G(7) ||

Volume 3, Chapter 11

Volume 3, chapter 12