

Strategies for Harmonizing a Melody: FR 7

CHAPTER 21

REVIEW THE PROCESS

In Chapter 9 we learned the fundamentals of how to harmonize a melody. This portion of the AP Music Theory exam is challenging because it requires the student to understand melodies and their implied harmonies, harmonic progression, cadences, and counterpoint. It can be overwhelming because of the fact that there are many possible correct solutions—not just one right answer—to harmonizing a melody. Let's review the process and identify strategies for success. This is a timed exam, so:

1. The key is given. If you need to, write out the I ii⁽⁷⁾ IV V⁽⁷⁾ vi in a chord stack, then immediately . . .
2. Identify cadences and work them first.
3. Identify possible chord choices and **start phrases with tonic**, if possible.
4. Determine what harmonic rhythm you are going to use. This is when you choose which notes you are going to harmonize and which notes will not be part of the harmony (non-chord tones).
5. Make your selection of the chord and inversion, keeping in mind standard progressions, T-S-D-T (function), the desired contrary motion of the bass against the melody, and **creating a bass line that is a consonant counterpoint to the melody**.
6. Check your work to look for parallelism, retrogression, and correct resolution of tendency tones if they are in the bass (such as V⁴₂-I⁶).

THE MENU

These are the choices that are easiest to work with and will create the necessary progressions that are the *norm* of common-practice style. *Prepare* for the possibility of chromatic harmony. KISS—Keep It Simple for Success—it is not necessary to use iii, vii^o, or vii^{o7} chords in FR 7.

	(F)		F	(B \flat)		
C	D	F	D	G	A	
A	B \flat	D	B \flat	E	F	
F	G	B \flat	G	C	D	
F:	I	ii⁽⁷⁾	IV	V⁷/V	V⁽⁷⁾	vi

Most common
(but not only) choice

Is there a chromatic (non-diatonic) note in the melody? Look for the accidental and the note it **leads to**. The accidental is *usually* a leading tone in a new key and the note the accidental leads to is the new tonic.

TIPS FOR WRITING CADENCES

- Use *only* I/i, vi/VI, or V as the last chord of a cadence
- Do *not* invert at the cadence
- Write a PAC for the last (final) cadence

These are the *most common* melodic endings. Harmonize with the *norm* for all cadences.

Authentic Cadences (V-I)

- IF the final cadence melody ends with *Mi-Re-Do* ($\hat{3}-\hat{2}-\hat{1}$) or *Do-Ti-Do* ($\hat{1}-\hat{7}-\hat{1}$) or *Do-Re-Do* ($\hat{1}-\hat{2}-\hat{1}$), THEN harmonize with *So-So-Do*—meaning chord progression $I_4^6-V^{(7)}-I$.
- Use I_4^6 on a **strong** beat followed by the V or V^7 on a weak beat:

FM: I_4^6 V I fm: I_4^6 V^7 i FM: I_4^6 V I

So-So-Do is the most common bass ending!

- IF the melody ends with (final cadence) *Re-Ti-Do* ($\hat{2}-\hat{7}-\hat{1}$) or possibly *Fa-Ti-Do* ($\hat{4}-\hat{7}-\hat{1}$) or even *Do-Ti-Do* ($\hat{1}-\hat{7}-\hat{1}$) THEN harmonize with *Fa-So-Do* in the bass and the chord progression: ii^6-V-I or $IV-V-I$.

FM: ii^6 V I fm: ii^6 V^7 i FM: IV V I

Fa-So-Do is the second most common bass ending!

Half Cadences (V)

- In FR 7 at least one cadence will usually end the phrase with a *So*, *Ti*, or *Re*.
 - If the melody ends with *Ti* (7̂) or *Re* (2̂) your *only* choice is a half cadence.
 - *So* (5̂) could be half cadence or an IAC.
- **IF** you harmonize as a half cadence, **THEN** write a **root position V**.
- What comes *before* V? The same three chords that came before V in the PAC: I₄, ii⁶, or IV.
 - Harmonize *Re*, *Fa*, or *La* in the melody with *Fa* in the bass and IV or ii⁶.
 - Harmonize *Do*, *Mi*, or *So* in the melody with *So* in bass and I₄.
 - The **Phrygian half** cadence (iv⁶-V) occurs only in minor. The bass line *must be Le-So* and the melody is commonly *Fa-So*.

Ti	So	Re	So	So
FM: Fa So ii ⁶ V	fm: Fa So ii ⁶ V	FM: So So I ₄ V	FM: Fa So IV V	fm: Le So iv ⁶ V

One of these examples is *not* correct. Which one?

Here's where you must be careful not to write parallel octaves between the bass and soprano. If the melody is *Fa-So*, it does indeed imply ii⁶ to V or IV to V; however, do *not* write the same thing in the bass that is in the soprano. The second example creates parallel octaves B \flat to C even though the passing tone moves the B \flat to beat 2. It is still parallel octaves and is considered an egregious error.

- **IF** two cadences both end with *So* ($\hat{5}$), both could be a half cadence or one could be a half cadence and one an IAC.
- **IF** the melody (in this case at a cadence) ends with *So* and is preceded by *Fi* (the raised 4th scale degree), **THEN** harmonize *Fi* with root position V/V and *So* with root position V.

Mi Fi So	So Fi So	Do Do Ti	Do Re
FM: I V/V V	fm: i V/V V	FM: IV V ⁵ /V V	FM: iv ⁶ V

In this example we wrote the V of V in **first inversion** so that the altered note is in the bass. Note that what was given (soprano) is the seventh of the chord (F) and it resolves down by step. What is the lesson of this example? The **given melody must be appropriate for the correct resolution** of the seventh in order to harmonize it this way.

Deceptive Cadences (V-vi or V-VI)

- What pitches in the melody would imply a deceptive cadence? *Do* or *Mi* ($\hat{1}-\hat{3}$). Why not *La*? Because with *La* in the soprano and *La* in the bass you would have parallel octaves! If the phrase end is *Mi* or *So*, you have choices: PAC or DC.
- **IF** you harmonize with a deceptive cadence, **THEN** the two-chord progression should be root position V-vi (V-VI in minor).
- What comes *before* V? Haven't we already answered that question? *Predominant* harmony ii⁶ or IV; or I₄ **IF** it is on a strong beat.

Mi	Do	Do	Me
FM: ii ⁶ V V ⁷ vi	FM: I ₄ V vi	fm: iv V VI	fm: i ₄ ⁶ V ⁷ vi

Plagal Cadence (IV-I or iv-i)

- What pitches in the melody might imply a plagal cadence? *Fa, La, or Do* (the IV chord— $\hat{4}-\hat{6}-\hat{1}$) going to *Do, Mi, So* (the I chord— $\hat{1}-\hat{3}-\hat{5}$).
- What melodic endings *usually* produce a plagal cadence? *Fa-Mi* (*Fa-Me* in minor) or *La-So* (*Le-So*) are the two most common. For either of these phrase endings harmonize with root position IV-I (or iv-i in minor).

FM: IV I FM: IV I fm: iv i

TIPS FOR WRITING PHRASE BEGINNINGS

Once all the cadences have been written you have completed half the exercise! Here are a few tips for beginning each phrase:

- Observe the melody of the first phrase that has been harmonized for you. Are any of the other phrases similar? Sometimes you can gain insight and even clues by studying what has been done for you in the first cadence. Look at the melodic patterns and see if you can use the same progression.
- What is the last chord written? Does it contain an imperative resolution? The last chord is often written as a $V\frac{1}{2}$, *requiring* the next chord to be I^6 .
- Remember that a new phrase is just like starting over—you do *not* have to resolve tendency tones. For example, if the cadence ends with V and the next chord you write is I, *Ti* does not have to resolve to *Do* because the tonic chord starts the new phrase.
- As we have seen in our study of progression and harmonic dictation, the beginning of phrases generally starts with tonic and very often return to tonic on the third or fourth chord. Most common bass lines that begin phrases are:
 - I– V^6 –I same bass if it is I– $V\frac{1}{2}$ –I = *Do-Ti-Do*
 - I– $IV\frac{6}{4}$ –I creating a pedal in the bass = *Do-Do-Do*
 - I– $V\frac{6}{4}$ – I^6 creating a passing tone bass with $V\frac{6}{4}$ = *Do-Re-Mi*

TIPS FOR WRITING EVERYTHING ELSE

- You do *not* have to harmonize every single beat.
- Do not use non-chord tones in the bass (**KISS**).
- Do not invert carelessly. Second inversion $\frac{3}{4}$ chords, in particular, must have a function—cadential (strong beat), passing, or pedal (weak beat).
- Do *not* use seventh chords except at cadences.
- Remember that the interval of a fourth above the bass is considered dissonant and must resolve down by step.
- There should be no retrogression.
 - No V–IV or V–ii⁶
 - No ii–IV
- Write standard progressions, such as vi–ii–V–I.

We will now do three sample melodic harmonizations together.

EXAMPLE 1 IN F MAJOR

Start Here

So Fi So

FM: I V⁶ I I⁶ ii V⁷ I ii⁶ V

5

Fa Mi Re

Mi Re Do

	(F)		F	(B \flat)		
C	D	F	D	G	A	
A	B \flat	D	B \flat	E	F	
F	G	B \flat	G	C	D	
FM:	I	ii ⁽⁷⁾	IV	V ⁷ /V	V ⁽⁷⁾	vi

These are all the chords we need. Harmonize with PRIMARY chords.

What do we know for sure?

After identifying the scale degree numbers or solfege of the melody we can determine that the use of *Fi* in measure 4 requires a chord outside of F Major and the B \flat at the end of the measure is simply the return to the diatonic 4th scale degree. Phrase 2 (the "Start here" phrase) cadence will have a secondary dominant resolving to the dominant to create a half cadence. Phrase 3 ends on *Re*; therefore, the cadence must also be a half cadence. Why? Because the chords ending a cadence are *only* I, V, or vi. The only chord that includes $\hat{2}$ or *Re* is the V; therefore, it is a half cadence. The fourth phrase ends with *Mi-Re-Do*; that's our signal to write I $\frac{6}{4}$ -V 7 -I in the bass for a PAC.

STEP 1: Complete the cadences.

Start Here

So Fi So

FM: I V 6 I I 6 ii V 7 I ii 6 V V/V V

5

Fa Mi Re Mi Re Do

I V I 6 V 7 I

The Phrase 2 cadence chords function as V-I in the key of C Major, signaled by the B \flat (the leading tone in C Major). It is in root position, as are the two cadence chords in Phrase 3, to keep it simple.

STEP 2: Start the phrases with I (tonic), if possible, then decide on the harmonic rhythm.

This establishes what notes are to be harmonized and what notes are to be considered non-chord tones. It is not necessary to harmonize every beat and do *not* harmonize every NOTE when eighth notes are added to the melody. Do not use non-chord tones in the bass line. When in doubt, list the choices for possible harmonization.

STEP 3: Fill in the beats between the cadences.

Start Here

The musical score consists of two systems, each with a treble and bass staff. The first system contains measures 1-4, and the second system contains measures 5-8. Between the staves, numbers indicate the intervals between the soprano and bass notes. Below the bass staff, Roman numerals indicate the chord quality for each measure. An arrow labeled 'Start Here' points to the first note of the melody in measure 3.

System 1 (Measures 1-4):

- Intervals: 8 6 3 6 | 8 7 3 5 | 3 3 6 3 | 5 3 8 7
- Chords: FM: I V⁶ I I⁶ ii V⁷ I | ii⁶ V I⁶ IV I V/V V V⁷

System 2 (Measures 5-8):

- Intervals: 3 3 8 6 | 7 3 5 8 | 3 6 3 6 | 6 5 8
- Chords: I V⁶ I ii⁶ V⁷ I V V | I I⁶ V I⁶ I₄⁶ V⁷ I

Notice the anacrusis to Phrase 3 is *Fa* leading to *Mi*. We harmonized it with a root position V⁷ resolving to I. Measure 6 has *Fa-Mi* in the melody as well, which we also harmonized with a V⁷.

The numbers between the staves represent the intervals between the soprano and bass. Remember you are creating a consonant counterpoint. This system of checking also quickly shows if you have parallel fifths or octaves.

EXAMPLE 2 IN G MAJOR

GM: I · I⁶ ii⁶ V vi V I I⁶ IV V

5 Î 3̂ 4̂ 3̂ 2̂ 3̂ #4̂ 5̂ 3̂ 4̂ 3̂ 2̂ 1̂ 2̂ 7̂ 1̂

	(G)		G	(C)		
D	E	G	E	A	B	
B	C	E	C#	F#	G	
G	A	C	A	D	E	
GM:	I	ii ⁽⁷⁾	IV	V ⁷ /V	V ⁽⁷⁾	vi

Our Chord Menu

What do we know for sure?

The harmonization of beat 3 in measure 3 with a V tells us the B is functioning as an accented passing tone and is an NCT. The use of the *Fi* in measure 6 requires a chord outside of G Major and the C# in measure 7 is simply the return to the diatonic 4th scale degree.

STEP 1: Complete the cadences.

Start Here

GM: I I⁶ ii⁶ V vi V I I⁶ IV V V V/V V I ii⁶ V I

We have harmonized the cadence at the end of Phrase 2 with V, creating a half cadence. The note in the melody is *Ti*—there is no other choice. The third phrase ends with *Ŝ* (*So*) but is preceded by *Fi*, so we harmonize with a half cadence with a secondary dominant. Those two chords function as V–I in the key of D Major, signaled by the C# (the leading tone in D Major). Our final melodic phrase ends with *Re-Ti-Do*, which we know goes with *Fa-So-Do* in the bass. We have chosen ii⁶–V–I. Aim for contrary motion.

STEP 2: Start with I (tonic) if possible, then decide on the harmonic rhythm.

This establishes what notes are to be harmonized and what notes are to be considered non-chord tones. Remember you only need two chords per measure. It is not necessary to harmonize every beat and do *not* harmonize every note when eighth notes are added to the melody.

Do not use non-chord tones in the bass line. When in doubt, list the three (sometimes four) choices for possible harmonization.

Start Here

GM: I I⁶ ii⁶ V vi V I I⁶ IV V I V⁶ I V

5 I 3 4 3 2 3 #4 5 3 4 3 2 I 2 7 I

V/V V I ii V vi ii⁶ V I

STEP 3: Fill in the beats between the cadences.

Remember that each phrase is like starting at the beginning. In Phrase 2 we used tonic and dominant harmony and chose to use the tonic triad in root position in both places and the dominant triad in first inversion. Why? First, it provides contrary motion. Second, if we had used all root-position triads we would have P8–P5–P8–M3 in the counterpoint between bass and soprano. By inverting the dominant triad we have P8–m3–P8–M3 and eliminated the direct fifth and direct octave (similar motion into a perfect interval in bass–soprano voice pair). The last phrase works nicely harmonizing the C \sharp with the supertonic and identifying the B as a passing tone, and using the suggested progression of vi–ii–V–I to end the phrase. It works well by using the supertonic in the common first-inversion position for the *Fa-So-Do* bass line.

The third phrase ends with a half cadence preceded by the V of V in root position. In measure 5 we have chosen to harmonize beats 1 *and* 2 with tonic to keep it simple. The B is a passing tone. The IV⁶ leads us “gracefully” to V⁶ where *Ti* must go to *Do*.

Start Here

GM: I I⁶ ii⁶ V vi V I I⁶ IV V I V⁶ I V

5

I IV⁶ V⁶ I V/V V I ii V vi ii⁶ V I

Step 4: Check your work!

- ✓ Is there contrary motion between the bass and soprano? Check for parallelism.
- ✓ Does the progression follow the T-PD-D-T progression?
- ✓ If you have written V-I or V-vi OR used a seventh chord in any inversion, do the tendency tones resolve?
- ✓ Have you written viable cadences with only I, V, or vi at the fermatas? Are cadence chords (two chords per cadence) in root position?

EXAMPLE 3 IN A \flat MAJOR

Start Here

AbM: I vii^{o6} I⁶ I IV V I

STEP 1: Complete the cadences first.

Create the chord stack in the key. Label the melody using solfege or numbers if this technique is helpful. Watch your time!

	(A \flat)	(A \flat)	(D \flat)		
	E \flat	F	A \flat	F	B \flat C
	C	D \flat	F	D \flat	G A \flat
	A \flat	B \flat	D \flat	B \flat	E \flat F
Ab:	I	ii ⁽⁷⁾	IV	V ⁷ /V	V ⁽⁷⁾ vi

↑ Notice the similarity

Start Here

The image shows a musical score for a piece in Ab major, 4/4 time. It consists of two phrases, each with a treble and bass staff. The first phrase starts with a circled G4 in the treble staff, marked 'Start Here'. The second phrase starts with a circled G4 in the treble staff, marked with a '5' below it. Chord symbols are written below the bass staff, and scale degrees are written above the treble staff.

AbM: I vii^o I⁶ I IV V I V/V V

5 ô ô ô ô ô ô ô ô ô ô ô ô ô ô ô ô

V I IV V⁷ I

We notice in Phrase 1 the use of the leading-tone triad in first inversion leading to I⁶ (the NORM) forming an ascending pattern in the bass and ending with an IAC. Phrase 2 features *Fi* passing between *Mi* and *So* at the cadence, and the third and fourth phrase both look like they imply dominant-tonic harmony.

STEP 2: Decide on the harmonic rhythm. Determine available choices starting with I if possible.

Start Here

AbM: I vii^{o6} I⁶ I IV V I I⁶ V I⁶ V⁴ vi⁶ V/V V I

5 6 7 1 6 5 4 3 2 1 4 3 2 1 7 6 7 1

ii⁶ V I V V⁷ I IV V⁷ I

To avoid a direct fifth we started the second phrase with I⁶ and harmonized both 2̂ and 7̂ in measure 3 with root position V. Once again we choose a I⁶ because an Ab here would have created parallel octaves. The V⁴ on beat 4 is a passing 4̂. Notice the segment in the box is essentially in the temporary key of Eb Major so the progression vi⁶-V/V-V is the same as ii⁶-V-I in the key of the dominant. We begin Phrase 3 with root position tonic and once again employ ii⁶-V-I leaving only one more chord before completing Phrase 3. We decided to see what it would look like if we opt to use two quarter notes for V and V⁷ in the next measure. Looks good! Now we fill in the remaining blanks.

STEP 3: Fill in the beats between the cadences.

Phrases 3 and 4 both lend themselves to the use of dominant seventh chords. In Phrase 3 the $\hat{4}-\hat{3}$ melodic pattern provides the correct resolution of the seventh and again in Phrase 4 where this time we started the phrase with the familiar $I-V^6-I$ and *Do-Ti-Do* in the bass.

Start Here

AbM: I vii^{o6} I⁶ I IV V I I⁶ V I⁶ V⁴ vi⁶ V/V V I

5 $\hat{4}$ $\hat{3}$ $\hat{4}$ $\hat{3}$

ii⁶ V I ii⁶ V V⁷ I V⁶ I V⁶₅ I I⁶ IV V⁷ I

STEP 4: Check your work!

Remember, there's more than one way to harmonize a melody, just as there are many possible solutions to the part-writing examples.

- ✓ Is there contrary motion most often between the bass and soprano? Check for parallelism.
- ✓ Does the progression follow the T-PD-D-T progression?
- ✓ If you have written V-I or V-vi OR used a seventh chord in any inversion, do the tendency tones resolve?
- ✓ Have you written viable cadences with only I, V, or vi at the fermatas? Are cadence chords in root position?

A FEW MORE COMMENTS ABOUT EXAM STRATEGY

Since time is limited to 45 minutes to accomplish both part-writing examples (FR 5 and 6) *and* harmonizing the melody (FR7), I suggest you *begin* with FR7. Identify the melody with solfege or numbers and complete all three cadences. Then go directly to the part-writing exercises and complete both. Finish harmonizing the melody with your remaining time. In this way you will be sure to earn 4 points (out of 8) for correctly completing the cadences should you run out of time. Make sure you practice timing yourself on these three free-response questions.

Additional Practice Examples

1.

Start Here
↓

DM: I V⁶ I V₄⁶ I⁶ V I I⁶ IV

5

- Complete the cadences first. You are looking for standard patterns so you can write standard progression. Remember you are writing in common-practice style.
- Look for familiar patterns in the melody, such as *Fa* to *Mi*, that imply harmonization (V^7-I).
- Remember to use contrary motion more than similar motion.
- Observe T-S-D-T.
- Keep it simple. Use root position primary chords (I, ii, IV, V).

2.

Start Here

GM: I vi V⁶ V₅⁶ I I⁶ IV V₂⁴

5

3.

Start Here

Musical notation for exercise 3, measures 1-4. The key signature is E-flat major (two flats) and the time signature is 4/4. The melody is written in the treble clef, and the bass line is in the bass clef. The melody consists of quarter notes: G4, A4, Bb4, C5, D5, E5, D5, C5, Bb4, A4, G4. The bass line consists of quarter notes: G3, A3, Bb3, C4, D4, E4, D4, C4, Bb3, A3, G3. There are fermatas over the final notes of the melody in measures 2 and 4.

E♭M: I V⁶ I⁶ V⁶ I ii V I IV IV⁶ V

5

Musical notation for exercise 3, measures 5-8. The key signature is E-flat major (two flats) and the time signature is 4/4. The melody is written in the treble clef, and the bass line is in the bass clef. The melody consists of quarter notes: G4, A4, Bb4, C5, D5, E5, D5, C5, Bb4, A4, G4. The bass line consists of quarter notes: G3, A3, Bb3, C4, D4, E4, D4, C4, Bb3, A3, G3. There are fermatas over the final notes of the melody in measures 6 and 8.

POSSIBLE SOLUTIONS

1.

Start Here

DM: I V⁶ I V⁴ I⁶ V I I⁶ IV I V⁶ I ii⁶ V I V

5

I IV I ii V/V V V⁶ I V⁴ I⁶ I V⁷ I

Comments

Phrase 2 ends with an IAC. Phrase 3 ends with an HC with secondary dominant (G# is *Fi*), and the final cadence is PAC. Although the ending melody is *Mi-Re-Do*, we did not harmonize with *So-So-Do* and the I₄. Why? The I₄ chord should occur on a *strong* beat and not on beat 4 of the measure. The V₄ in measure 7 is a passing $\frac{1}{4}$ chord, and the eighth note in measure 5 is not part of the implied harmony. It is a passing tone.

2.

Start Here

GM: I vi V⁶ V₅ I I⁶ IV V₂⁴ I⁶ ii₅ V I⁶

5

IV ii V⁶ I ii V/V V I⁶ ii⁶ V V₂⁴ I⁶ ii I₄ V⁷ I

Comments

The Start Here phrase must begin with a I⁶ as it follows the V₂⁴. The second fermata is *So*; therefore, it can be harmonized with a I or a V. The third phrase has *Fi-So* implying secondary harmony and the final phrase *Mi-Re-Do*.