



## **Student Performance Q&A: 2004 AP<sup>®</sup> Music Theory Free-Response Questions**

The following comments on the 2004 free-response questions for AP<sup>®</sup> Music Theory were written by the Chief Reader, Jo Anne F. Caputo of the Cleveland Institute of Music in Cleveland, Ohio. They give an overview of each free-response question and of how students performed on the question, including typical student errors. General comments regarding the skills and content that students frequently have the most problems with are included. Some suggestions for improving student performance in these areas are also provided. Teachers are encouraged to attend a College Board workshop to learn strategies for improving student performance in specific areas.

### **Question 1**

#### ***What was the intent of this question?***

The intent of this question was to test various skills involved in single-line melodic dictation. These skills include the ability to recognize an elaboration of an ascending and descending D major scale and the ability to recognize the tonic (an octave higher than the initial tonic) used as a climactic point near the beginning of the second phrase. The question tested simple rhythmic patterns appropriate to simple ternary meter. It tested familiar diatonic patterns that included a descending tonic triad and the 2-7-1 scale degrees (or re-ti-do) at the cadence.

#### ***How well did students perform on this question?***

The mean score was 3.9 out of a possible nine points.

#### ***What were common student errors or omissions?***

Rhythmic problems included writing either a half-note or a whole-note D in the last measure and difficulty with the dotted quarter/eighth rhythms of measures 2 and 5. The skip of a perfect fourth (scale degrees 3 up to 6) was problematic for many students, although the sixth degree of the scale resolved immediately to scale-degree 5 for the cadence in the next measure. Some students were careless with notation, filling in much of the answer correctly but losing credit because of missing stems, dots, and so on, or writing note heads that could not be deciphered.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

It is strongly recommended that the aural component of the class work for AP Music Theory be at least as strong as the non-aural component. Try to keep written work linked at all times with dictation and sight-singing activities. Teachers should emphasize the development of strategies for doing ear training. These could include activities like writing down familiar tunes from memory, singing scalar and triadic drills using scale numbers to increase awareness of scale function, listening to the stability (or lack of stability) of tonic triad scale degrees as opposed to tendency tones, and the identification (by scale degrees) of internal and final cadences. Urge students to be aware of the meter and to think about the types of rhythmic notation that would normally accompany that meter. Encourage them to be as careful as possible to achieve readable, precise notation.

## **Question 2**

***What was the intent of this question?***

The intent of this question was to test various skills of one-part dictation, specifically the ability to hear in a minor key, to distinguish between arpeggiated and scalar motion, to recognize standard patterns (e.g., ascending and descending melodic minor scales), and to recognize and be able to notate correctly common rhythmic patterns in compound meter.

***How well did students perform on this question?***

The mean score was 3.1 out of a possible nine points. The total mean score for melodic dictation (Questions 1 and 2) was 6.9 out of a possible 18 points.

***What were common student errors or omissions?***

Common errors included not recognizing where accidentals should be used, confusing arpeggios with scalar motion, missing the rhythmic patterns that included sixteenth notes, and notating the exercise in 3/4 instead of 6/8.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

It is recommended that teachers work on minor key dictation and sight singing as much and as early as possible. Additionally, work should emphasize compound meter, arpeggiated lines contrasted with scalar lines, scale function, and accidentals common to minor keys (e.g., raised seven and lowered seven), as well as appropriate chromatic alterations (e.g., raised 4). See also the suggestions in this section for Question 1.

## **Question 3**

***What was the intent of this question?***

The intent of this question was twofold: (1) to test students' ability to notate soprano and bass lines of a four-part harmonic dictation and (2) to correctly identify and analyze the harmonic functions of the chords included in the harmonic dictation. The question tested students' ability to hear

diatonic triads in root position and first inversion, diatonic seventh chords, and the cadential six-four chord, and to properly analyze these using Roman and Arabic numerals.

***How well did students perform on this question?***

The mean score was 12.4 out of a possible 24 points.

***What were common student errors or omissions?***

The most common errors on this question included omitting the seventh on the  $V_7$ , using the leading tone triad in root position instead of  $V_6$ , and missing the skip in the melody. Other common errors included harmonic analyses with incorrect inversions, incorrect Arabic numerals (including many nonexistent symbols), and incorrect secondary dominants.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

Urge students to be very careful in the two-part melodic dictation, keeping in mind that these two lines should work together to form good counterpoint and that the Roman and Arabic numerals should be in agreement with these two melodic lines. Train students to understand good harmonic progressions and to expect to hear them on the exam. For example, the mediant triad is seldom used, and the leading triad is rarely used in either root position (expect  $V_6$  if the leading tone is in the bass) or second inversion. Drill students on types of cadence; encourage them to identify the type of cadence used and then to work backwards from that cadence. Integrate harmonic dictation with every new chord they study.

#### **Question 4**

***What was the intent of this question?***

The intent of this question was to test students' ability to hear and notate outer voices of a four-part texture in a minor key and to assign Roman and Arabic numerals to explain harmonic function. Specifically, the question tested students' ability to hear and notate secondary dominants ( $V_2^4/iv$ ), a deceptive cadence, and the difference between cadential six-four to  $V_7$  and  $V$  to  $V_7$  in the penultimate measure.

***How well did students perform on this question?***

The mean score was 9.7 out of a possible 24 points. The total mean score for harmonic dictation (Questions 3 and 4) was 22.1 out of a possible 48 points.

***What were common student errors or omissions?***

The most common errors were omission of the accidental for the A sharp in the bass (m.1), omission of the accidental or enharmonic spelling of the D sharp in the soprano (m.2), confusion between  $V_5^6$  and  $vii_7^o$  (m.1), incorrect identification of the deceptive cadence at the end, incorrect Roman numeral analyses, the inability to hear chromatic alterations, and overcompensating by writing larger melodic intervals.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

Teachers are encouraged to emphasize minor keys when training students in harmonic dictation and, specifically, to watch for careless omissions of common accidentals used in minor keys. One strategy, perhaps useful for helping students remember accidentals, is to insist that students say the name of the accidental when referring to the pitch; never accept the answer “B” if the pitch is actually B flat. Urge students to compare the soprano and bass lines and then compare Roman and Arabic numerals to those pitches; they should all make sense together. Review appropriate use of second inversion triads. Stress that in normal chord progressions relatively few chords are used; therefore, it is fairly unlikely that the mediant chord and root-position leading tone triad would be used. Try to introduce secondary dominants into the curriculum as early as possible so that students will have some knowledge of them. Encourage students to write as neatly as possible to lessen the ambiguity of their notation.

## **Question 5**

***What was the intent of this question?***

The intent of this question was to test students’ ability to understand and realize a figured bass and to test their understanding of voice-leading rules, their knowledge of functional harmony, and their ability to appropriately handle tendency tones. Specifically, the question tested their understanding of chromatic alterations common to minor keys, their ability to correctly write and resolve a cadential six-four chord, and their comprehension of the problems inherent in diminished seventh chords.

***How well did students perform on this question?***

The mean score was 12.0 out of a possible 25 points.

***What were common student errors or omissions?***

By far, the most common error was failing to raise the seventh scale degree to create a leading tone. Additional errors included poor spacing, incorrect approach to and resolution of a chordal seventh, and not understanding or obeying figures that either suggested intervals above the bass line or alterations of those intervals.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

Teachers should stress the critical need for creating a leading tone in a minor key. In addition to teaching figured bass symbols as suggesting specific chord inversions, explain to students that these numbers give information about specific intervals above the bass line. Some topics that deserve close attention include proper treatment of the cadential six-four chord, approach and resolution of chordal sevenths, and proper resolution of tendency tones. Students should be encouraged to write smooth lines; some college teachers suggest writing both outer voices before filling in the inner voices, though others find this to be more problematic than helpful. Students should sing everything they write. Encourage students to rewrite the Arabic numerals next to the Roman numerals as they complete the analysis so that they are reminded of them as they write pitches. Urge them to be careful not to alter these figures. Remind them that if they are running out of time, they should quickly fill in the final chord.

## Question 6

### ***What was the intent of this question?***

The intent of this question was to test students' ability to write a four-part harmonization based only on Roman and Arabic numerals. Specifically, it tested knowledge of common notation of analysis symbols, chromaticism, common suspension figures, secondary dominant usage, and correct approach to and resolution of seventh chords.

### ***How well did students perform on this question?***

The mean score was 9.0 out of a possible 18 points.

### ***What were common student errors or omissions?***

Many students seemed not to understand the symbols for a secondary dominant or simply could not spell the chord. Many students wrote an incorrect bass note for the  $V_5^6$ . Some students had trouble with the suspension, in many cases confusing it with a second inversion dominant seventh chord ( $V_3^4$ ) or thinking that the numbers referred to scale degrees 4 and 3.

### ***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

A good strategy to suggest is for students to write the complete bass line first and then fill in the upper voices. A few students wrote in all the "easy" chords first, voicing all the tonic chords like the given chord; in general, this makes voice leading difficult, if not even impossible. Emphasize the generally accepted voice ranges. Link part writing to ear training to strengthen audiation. Urge students to write in pencil only.

## Question 7

### ***What was the intent of this question?***

The intent of this question was to test students' ability to write an extended melody harmonization, producing a bass line and harmonies that conform to common practice procedures.

### ***How well did students perform on this question?***

The mean score for this question was 4.1 out of a possible nine points.

### ***What were common student errors or omissions?***

The most common error was students' inability to recognize the modulation/tonicization of the relative major in the third phrase. Other errors included irregular resolutions of sevenths, inappropriate use of six-four chords, parallel octaves and fifths, omission of the leading tone in minor, the movement of diminished fifth to perfect fifth, the use of diminished triads (ii and vii) in root position, the use of bass pitches that could not function harmonically with the melody, and inappropriate nonharmonic tones.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

In order for students to successfully handle an exercise like this, teachers should emphasize and work extensively in minor keys and especially emphasize the alterations that must be made in harmonic and melodic minor in order to produce the leading tone in  $vii_7$ ,  $V$ , and  $V_7$ . Emphasize the appropriate uses of six-four chords, seventh chords, and, specifically, diminished seventh chords. Strongly emphasize the correct writing of cadences, especially authentic half and final cadences.

Teachers should also stress that in an exercise like this, it is better for students to use a limited chord vocabulary effectively rather than to try to be “creative” and write inappropriate progressions. The use of the mediant chord is more common in minor keys but still should be used with discretion. A perfectly acceptable harmonization of melodic scale degrees 3-1 might use a root position tonic triad moving to a first inversion tonic. Suggest that students start by writing the cadences first and then working backwards from the cadence and forwards from the beginning of the phrase.

### **Question 8 (S1)**

***What was the intent of this question?***

The intent of this question was threefold: to test students’ ability (1) to sing an arpeggiated tonic triad and then keep these pitches in mind through the rest of the melody, (2) to sing pitch patterns common to melodic minor, and (3) to sing a fairly accessible mix of rhythms common to simple quadruple meter.

***How well did students perform on this question?***

The mean score was 4.7 out of a possible nine points.

***What were common student errors or omissions?***

Many students had problems singing the opening f minor triad, instead singing either a major triad or major or minor scale degrees 1-2-3. Several students had trouble with the dotted quarter/eighth note rhythm in Segment 2. Segments 5 and 6 caused many problems; some students sang D flat instead of D natural and others started Segment 5 on F, skipping up a fourth instead of using stepwise motion.

***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

In general, students should be discouraged from singing each melody more than one time. They usually repeat the same errors they made in the first version, make additional errors, and lose the possibility of achieving the point awarded for “flow.” Create warm-up drills (in both major and minor) that emphasize the differences between scalar motion and arpeggiated triads. Access every published sight-singing melody on AP Central<sup>®</sup> ([apcentral.collegeboard.com](http://apcentral.collegeboard.com)) to help prepare for the question. Sight singing should be a part of every class meeting and should be incorporated with every new topic discussed. While group singing is appropriate for warm-up exercises, each student should have frequent opportunities to sing independently.

## Question 9 (S2)

### ***What was the intent of this question?***

The intent of this question was to test students' "inner hearing" (the ability to be heard in the mind) of a written piece of music just by looking at it and with little or no outside stimulus. The question tested students' awareness of scale degree function and their ability to sing intervals accurately.

### ***How well did students perform on this question?***

The mean score was 3.7 out of a possible nine points. The total mean score for sight singing (Questions 8 and 9) was 8.4 out of a possible 18 points.

### ***What were common student errors or omissions?***

Many students sang this question in minor, perhaps led astray by the previous sight-singing melody, which was in minor. A significant number of students had trouble singing the rhythms in compound meter, while others did not hold the last note for its full duration. Common pitch errors included the skip between Segments 1 and 2 and the skip between Segments 3 and 4. Many students sang an octave instead of a sixth in Segment 7.

### ***Based on your experience of student responses at the AP Reading, what message would you like to send to teachers that might help them to improve the performance of their students on the exam?***

Teachers are urged to make sight singing an integral part of every class meeting. They are encouraged to have students work equally in major and minor modes, treble and bass clefs, and simple and compound meters. Develop a series of drills that focus on common cadence patterns and use numbers or syllables to increase awareness of the scale degree function (e.g., 5-7-1, 4-7-1, 2-7-1, 5-low5-1, 6-7-8, etc.). Encourage students to do quick analyses of the structural features of the melodies they sing. Do dress rehearsals under conditions that are somewhat similar to those of the exam: timed practice, timed performance, tape recorders, and so on.