



## Student Performance Q&A: 2015 AP<sup>®</sup> Music Theory Free-Response Questions

The following comments on the 2015 free-response questions for AP<sup>®</sup> Music Theory were written by the Chief Reader, Rebecca Jemian of the University of Louisville. 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?*

This question assessed students' ability to:

- hear a four-measure major-key melody in simple meter;
- hear tonic and dominant scale degrees;
- hear and notate the dotted rhythm in the second measure of the melody;
- differentiate between conjunct and disjunct motion; and
- notate pitches correctly in bass clef.

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

The mean score for this question was 4.7 out of 9 points.

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

- Forgetting to notate the rhythm of the given starting note
- Incorrectly notating the leap from D up to A (scale degrees 1 to 5) in measure 2
- Missing the dotted rhythm in measure 2
- Writing noteheads without stems
- Having trouble with the middle portion, despite being able to notate the opening two measures and the final two to four beats correctly

*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?*

- Teach students to listen to and remember the melody before notating on the page.
- Expose students to a wide variety of melodies in major and minor, various meters, and differing tempi.
- Do more sight singing. Focus on developing scale degree awareness, so that students are not measuring leaps as intervals devoid of a tonal context.
- Don't ignore rhythm: teach students a vocabulary of typical rhythmic patterns in the basic meters.
- Stress proper notation, including correct use of stems, beams, dots, etc. Constantly reinforce this until clear notation is a habit. Students may lose points because of illegible notation.
- Discuss question strategy with students; tell them that they can expect straightforward rhythms, a range of approximately one octave, a likely ending on tonic, etc. An important reminder: even if unsure about some of the durations, don't leave noteheads without rhythms indicated.

## **Question 2**

*What was the intent of this question?*

This question assessed students' ability to:

- hear a minor melody in compound meter;
- notate pitches correctly in treble clef;
- hear and notate the dotted rhythms in the third and fourth measures of the melody;
- hear and notate the raised 7<sup>th</sup> scale degree of harmonic minor;
- hear and notate the raised 3<sup>rd</sup> scale degree;
- hear and notate triadic and scalar patterns; and
- differentiate the contour of pitches.

*How well did students perform on this question?*

The mean score for this question was 3.2 out of 9 points.

*What were common student errors or omissions?*

- Notating in simple meter instead of compound meter
- Missing the dotted rhythms in the third measure and in the final measure
- Missing the accidentals for the raised 7<sup>th</sup> scale degree and the raised 3<sup>rd</sup> scale degree
- Failing to hear the arpeggiation of the V chord in the penultimate beat
- Notating the final dotted quarter note incorrectly, either as a dotted half note or with no dot at all
- Writing noteheads without stems

*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?*

- Teach students to listen to and remember the melody before notating on the page.
- Expose students to a lot of melodies in minor and major, various meters, and differing tempi.
- Give plenty of exercises in compound meter.
- Do more sight singing on a regular basis.

- Stress proper notation, including correct use of stems, beams, dots, etc.
- Teach the correct notation of accidentals in minor keys.
- Discuss question strategy with students; tell them that they can expect straightforward rhythms, a range of approximately one octave, a likely ending on tonic, etc.
- Help students find a consistent procedure for dictation that works for them.
- Advise students to use pencil rather than pen to complete dictation exercises.

### Question 3

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

This question assessed students' ability to:

- hear a chord progression in four parts in a minor key;
- notate the soprano and bass lines of the progression;
- hear and notate the leading tone in a minor key;
- provide the correct Roman numeral analysis of the chords;
- hear, notate, and analyze an authentic cadence;
- hear and notate triads in inversions; and
- hear and notate falling intervals of a third, fourth, and fifth in the bass line.

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

The mean score for this question was 10.9 out of 24 points.

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

- Failing to correctly notate leaps of a third, fourth, and fifth in the bass line
- Incorrectly adding a secondary dominant to the progression
- Failing to recognize the difference between a triad and a seventh chord
- Failing to raise the leading tone
- Failing to recognize the authentic cadence

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

- Teach students to identify cadence types and to work backward from the ends of phrases.
- Encourage students to check that their bass and soprano lines match their Roman numeral analysis.
- Emphasize the distinctive sounds of triads versus seventh chords.
- Practice hearing and notating inverted chords.
- Practice two-part dictation when given a four-part aural prompt.

## Question 4

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

This question assessed students' ability to:

- hear a four-part progression in a major key and notate the outer voices;
- provide the correct Roman numeral analysis of the chords;
- demonstrate a knowledge of common chord progressions;
- hear and notate triads and seventh chords in root position and in inversion;
- hear the chordal 7<sup>th</sup> in inner and outer voices;
- hear and properly label the secondary dominant chord;
- hear and notate the descending thirds pattern in the bass line;
- hear, notate, and analyze a deceptive progression; and
- hear the cadential six-four chord and provide an appropriate Roman numeral analysis.

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

The mean score for this question was 10.8 out of 24 points.

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

- Not recognizing seventh chords when the chordal 7<sup>th</sup> is in an inner voice
- Not labeling the seventh at the cadence when the chordal 7<sup>th</sup> is notated in the soprano
- Omitting the natural sign needed for the secondary dominant chord
- Writing a sharp instead of the natural sign needed for the secondary dominant chord
- Writing a lower-case ii at the secondary dominant
- Failing to identify IV<sup>6</sup> to V<sup>6</sup>
- Notating the alto pitch on beat one of measure two as the soprano pitch
- Notating the final three tenor pitches as the final three bass pitches
- Analyzing the final three chords as V–IV–I
- Writing a lower-case i (indicating a minor tonic) for the final harmony (although this error was accepted, as indicated in the Scoring Guidelines)
- Transposing the final bass pitch up an octave (although this error was accepted, as indicated in the Scoring Guidelines)
- Misaligning the notes with the blanks provided

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

- Work consistently on ear-training skills
- Teach common cadential chord progressions
- Emphasize chromatic alterations needed for secondary dominant chords
- Practice hearing and notating sequences, such as descending thirds

## Question 5

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

This question assessed students' ability to:

- realize a figured bass progression in Common Practice style in four voices;
- employ smooth voice leading procedures;
- demonstrate an understanding of diatonic harmony, including chord spelling in a four-part texture, voice leading, and doubling;
- analyze chords using Roman numerals;
- spell chords in a minor key, including raising the leading tone in the V chord;
- write and resolve a cadential six-four chord;
- notate a deceptive cadence;
- correctly prepare and resolve the chordal 7<sup>th</sup>; and
- correctly realize inverted triads and seventh chords utilizing all chord members.

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

The mean score for this question was 13.3 out of 25 points.

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

- Failing to supply a correct Roman numeral analysis
- Failure to translate figures into meaningful musical structures (e.g., raised 6, 8/6/4, etc.)
- Incorrectly realizing the figures, especially those provided for chords two, five, and six
- Difficulty realizing figures that indicate chromatic alterations, as in chords two and six
- Failure to raise the leading tone in the  $V_3^4$  and  $V_7^7$  chords
- Identifying the cadence as authentic, rather than deceptive
- Reversing the order of the  $I_4^6$  and  $V_7^7$  (Roman numerals, chord spelling, or both)
- Writing incomplete inverted triads and seventh chords
- Writing parallel fifths and octaves, especially octaves between outer voices in chords three to four
- Writing hidden octaves between chords four and five
- Failing to correctly prepare and resolve the chordal 7<sup>th</sup>
- Failing to resolve outer-voice scale degree 7 to tonic
- Using incorrect doubling of the cadential six-four chord
- Failing to utilize the doubled third in the deceptive cadence
- Using incorrect spacing
- Writing overlapping voices
- Notating accidentals on the wrong side of the note

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

- Consult the AP<sup>®</sup> Course Description Guide and other Web resources.
- Coach students on how to avoid over-complicating the required tasks.
- Practice writing clear, unambiguous musical notation by hand.

- Master the major and minor scales, aiming for true fluency. Too many students seem to learn key signatures without associating each key with scale degrees and common bass patterns (cadences, etc.).
- Clarify the difference between chromatic scale-degree inflections typical for minor (raised 7, Picardy 3<sup>rd</sup>, etc.) and chromaticism connected with secondary dominant chords.
- Encourage students to think about voice leading before working on vertical realization.
- Teach students to use stepwise motion and to keep the common tone whenever possible. (Think like a singer.)
- Review the meanings of the figures, giving special attention to identification of chordal roots.
- Emphasize that figured bass is not the same thing as inversion symbols.
- Drill chord spelling, and remind students that chord spelling errors result in a 5-point deduction.
- Teach students to properly prepare and resolve chordal 7<sup>ths</sup>.
- Practice writing cadences with the cadential six-four chord, following the intervallic prescription of the figures provided.

## Question 6

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

This question assessed students' ability to:

- write a four-part chord progression from Roman numerals;
- demonstrate an understanding of chord inversions;
- demonstrate command of voice-leading procedures, including stepwise root progressions, root progressions by third, and root progressions by fifth;
- demonstrate knowledge of secondary dominant chords;
- demonstrate an understanding of tendency tones and their resolutions; and
- demonstrate knowledge of how to approach chordal dissonances.

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

The mean score for this question was 7.7 out of 18 points.

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

- Missing the D-sharp in the secondary dominant chord
- Writing incorrect accidentals (including writing the correct accidental on the wrong side of the note head)
- Doubling the leading tone
- Writing parallel octaves and fifths
- Using incorrect spacing
- Writing incomplete inverted chords
- Writing incorrect inversions (most often writing all chords in root position)
- Leaping down into the chordal 7<sup>th</sup>
- Omitting or adding a chordal 7<sup>th</sup>
- Not resolving the chordal 7<sup>th</sup> properly

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

- Encourage students to use smooth voice leading.
- Encourage students to use contrary motion in the outer voices.
- Encourage students to write the outer voices first and to fill in the inner voices as a pair, after the outer voices have been carefully checked.
- Avoid overemphasis of doubling the root, as this is not always appropriate.
- Think carefully about the key signature, about whether a chord should need any accidentals, and, if so, which specific accidentals are needed.
- Be careful not to confuse the leading tone (scale degree seven) with the chordal 7<sup>th</sup>.
- Drill inversions and their figures, carefully distinguishing triads from seventh chords. Students should be aware that they will not receive any points for a chord if the inversion is incorrect or if a 7<sup>th</sup> is added or omitted (i.e., does not match the analysis provided).
- Focus on proper treatment of dissonance, especially the approach to and resolution of the chordal 7<sup>th</sup>.
- Emphasize the importance of resolving leading tones, particularly in outer voices.
- Advise students not to add embellishing tones unless specifically required by the figures.
- Discuss the appropriate use of charts, diagrams, and other memory aids. Writing charts and diagrams often seems unhelpful for this particular question: it takes time; the information is not always relevant to the question; and the layout sometimes seems to cause mistakes because the student confuses the layout of the diagram with the actual music notation.
- Address issues of notation, particularly the proper way to write note heads and accidentals, and how to portray doubling.

## **Question 7**

*What was the intent of this question?*

This question assessed students' ability to:

- compose a bass line following the rules of eighteenth-century counterpoint;
- write standard cadences;
- harmonize a melody with an appropriate chord progression;
- use conventional harmonic patterns;
- recognize and correctly use a secondary dominant chord;
- avoid creating doubled leading tones; and
- use embellishments correctly in a two-part framework.

*How well did students perform on this question?*

The mean score for this question was 4.9 out of 9 points.

*What were common student errors or omissions?*

- Ignoring the secondary dominant
- Using an inappropriate plagal cadence at the end of phrase two
- Using six-four chords improperly
- Incorrectly harmonizing or resolving the secondary dominant
- Doubling the leading tone in an inner voice when harmonizing a leading tone in the melody

- Using the I<sup>7</sup> and IV<sup>7</sup> chords and their inversions, resulting in inappropriate harmonizations in this style
- Writing harmonic perfect fourths between the soprano and bass
- Writing harmonic retrogressions, particularly at cadences

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

- Teach students that plagal cadences are really just tonic prolongations that should occur after an authentic cadence; plagal cadences are not generally appropriate options for this question.
- Remind students that unaccented passing tones are the only appropriate embellishment for this exercise.
- Discourage overuse of six-four chords, except for the cadential six-four chord if appropriate at a cadence. Remind students that passing and pedal six-four chords must occur on weak beats.
- Encourage the use of root-position chords at cadences.
- Discourage the use of the root-position vii<sup>o</sup> chord.
- Teach students to prepare and resolve chordal 7<sup>th</sup>s properly.
- Encourage students to use the first phrase as a guide for consistency throughout the question.

## **Question S1**

*What was the intent of this question?*

This question assessed students' ability to:

- sight read and sing a melody in minor mode;
- sing in simple meter;
- perform common rhythmic patterns;
- perform a dotted rhythm;
- perform conjunct motion;
- perform chordal skips within the tonic and dominant triads;
- correctly sing an altered pitch;
- sing a two-phrase unit with motion from *do* to *sol*;
- retain a sense of tonic; and
- read in bass clef.

*How well did students perform on this question?*

The mean score for this question was 4.5 out of 9 points.

*What were common student errors or omissions?*

- Failing to hold the last note for its full value
- Singing in the major mode
- Singing *re* in segment two instead of skipping back to *do*
- Starting segment five early
- Failing to sing segment seven correctly



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

- Sight sing regularly in class.
- Practice reading and performing in different clefs.
- Encourage students not to hum, but to sing with an initial consonant sound; humming obscures accurate pitch.
- Encourage students to sing strongly so they can be heard.
- Encourage students to sing the tonic triad to establish the key/tonic.
- Encourage students to select a starting pitch that is comfortable for their individual range.
- Encourage students to ghost-finger along, as if playing their instruments, while singing.
- Encourage students to sing using contour, and not just rhythm on tonic, if they struggle greatly with pitch.
- Encourage students to keep going even if they make a mistake.
- Teach students how to regain their place in a melody. For instance, many students sang the first four segments incorrectly but were able to begin correctly in segment five and finish the question well.
- Practice common rhythmic patterns in various meters.
- Emphasize holding notes for their full value.
- Allow students to use a neutral syllable if, by March, they are struggling with solfège or numbers.
- Encourage students to analyze the mode of the melody they are performing.
- Encourage students to sing aloud during the 75-second practice time.
- Encourage students to practice rhythm first during the practice time.
- Encourage students to write on the test during the practice period.
- Encourage students to conduct while they practice so that they establish a steady tempo.
- Give practice AP<sup>®</sup> Music Theory Exams, including using the free examples posted on AP Central<sup>®</sup>.
- Simulate the recording scenario for students.
- Review the recording directions with the proctor.
- Music teachers need to train proctors prior to the day of the exam.

## **Question S2**

*What was the intent of this question?*

This question assessed students' ability to:

- sight read and sing a melody in major mode;
- sing in compound meter;
- sing note values at the beat, the division, and the subdivision level;
- sing dotted rhythms;
- recognize melodic and rhythmic patterns;
- recognize and sing *fi*, the raised 4th scale degree;
- outline a dominant triad;
- sing a melody with a vocal range of a ninth, from *sol* to *la*;
- sing skips and stepwise motion in both ascending and descending directions;
- establish and maintain a steady tempo;
- retain a sense of tonic; and
- read treble clef.

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

The mean score for this question was 4.1 out of 9 points.

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

- Singing in minor mode instead of in major, or mixing the modes
- Failing to hold the last note for its full value
- Performing rhythms incorrectly, especially the dotted rhythms
- Not singing in compound meter
- Singing a whole step instead of a minor third in segment two
- Singing a whole step instead of a minor second in segment five
- Singing *ti-do* at the end, instead of *sol-do*
- Singing *sol* instead of *fa* in segment two
- Overshooting larger intervals
- Not managing time well

***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?***

- Start singing early in the year; sing often in major and minor modes and in simple and compound meters.
- Teach and use a system of singing, such as solfège, numbers, etc.
- Teach scale degrees and their relation to tonic.
- Emphasize the difference between major and minor scales and triads.
- Practice singing in all forms of minor.
- Practice descending scalar and intervallic patterns in all forms of the minor key.
- Practice minor triad arpeggios, both throughout the octave and with just pairs of notes, for example, *do-me*, *sol-me*.
- Practice executing rhythms, including dotted rhythms.
- Emphasize rhythmic integrity; the duration of the final note is important.
- Look at a melody as being centered on a tonic triad.
- Practice looking at and singing melodies in various clefs and ranges.
- Practice melodies that contain altered tones.
- Coach students on where to place a melody in a range of the voice that is both comfortable and executable.
- Teach students to choose an appropriate tempo for singing. The tempo of this exercise was marked *Moderato*. Although points were not deducted for an incorrect tempo set at the start of the exercise, students tended to fare worse if they chose to perform at a painstakingly slow tempo.
- Offer strategies for the sight-singing process: use of the practice time, identification of tricky spots, etc.