



The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office of State Assessment
Albany, New York 12234

**INFORMATION BOOKLET FOR SCORING
THE REGENTS EXAMINATION IN MATHEMATICS
ALGEBRA 2/TRIGONOMETRY JANUARY 2017 ADMINISTRATION**

GENERAL INFORMATION

The general procedures to be followed in administering Regents Examinations are provided in the publications *Directions for Administering Regents Examinations* (DET 541) and in the *School Administrator's Manual*. The *Directions for Administering* are available on the Department's web site at <http://www.p12.nysed.gov/assessment/hsgen/>. The *School Administrator's Manual* is available on the Department's web site at <http://www.p12.nysed.gov/assessment/sam/secondary/>.

Questions about **general administration procedures** for Regents Examinations should be directed to the Office of State Assessment (OSA) at 518-474-5902 or 518-474-8220.

School administrators should print or photocopy this information booklet and distribute copies to all school personnel who will be scoring these examinations.

SCORING THE EXAMINATIONS

Scoring Keys and Rating Guides

The scoring keys and rating guides for these examinations will be posted on the Department's web site at <http://www.p12.nysed.gov/assessment/scoring/> on the date of the examinations. Schools must print sufficient copies to supply one to each rater.

All scoring keys and rating guides posted on the Department's web site will be password protected by two levels of password protection. In order to access the scoring keys and rating guides, schools will be required to enter the online request system (portal) using the same username and password that was used to order test materials.

The Regents Examination in Algebra 2/Trigonometry is to be scored by committees of mathematics teachers. **No teacher is to score any of the responses written by his or her own students.** No one teacher is to score more than approximately one third of the open-ended questions on a student's paper. The committee must be comprised of at least three teachers. Each of these teachers is responsible for scoring a similar number of the open-ended questions. The more teachers serving on a committee, the fewer open-ended questions each teacher scores. This process yields consistent and reliable scores and allows scoring to proceed quickly.

NOTE: January 2017 will be the last administration of the Regents Examination in Algebra 2/Trigonometry.

Each student answer sheet includes a section labeled "Raters'/Scorers' Names" with the letters A–J. Each rater must be assigned a letter and the rater's name must be clearly printed on the answer sheet next to the letter the rater has been assigned. There are designated spaces next to each of the open-ended questions. The letter identifying the rater that scored a specific open-ended question must be clearly written in the designated area.

The scoring key for each examination includes the answers to the Part I multiple-choice questions and rubrics for scoring each of the open-ended questions. Teachers must become thoroughly familiar with the rubrics for the open-ended questions they are scoring before beginning to score student responses to examination questions.

The Department provides “*Sample Response Sets*” for the Regents Examination in Algebra 2/Trigonometry. This guidance is not required as part of the scorer training. It is at the school’s discretion to incorporate it into the scorer training or to use it as supplemental information during scoring. While not reflective of all scenarios, the sample student responses selected for the *Sample Response Sets* illustrate how some less common student responses to open-ended questions may be scored. The *Sample Response Sets* will be available for all Regents administrations on the Department’s web site at <http://www.p12.nysed.gov/assessment/scoring/home-hs.html> on the same date and time as the rating guide for this examination. The same passwords will be used to access the Sample Response Set as will be provided for all other scoring materials posted on those days.

Scoring of Multiple-Choice Questions

For Regents Examinations in math, all schools must use the uniform scannable answer sheets provided by the regional information center or large-city scanning center. **If the students’ responses for the multiple-choice questions are being hand scored prior to being scanned, the scorer must be careful not to make any marks on the front of the answer sheet except to record the scores in the designated score boxes. Marks elsewhere on the front of the answer sheet will interfere with the accuracy of the scanning.**

Before scannable answer sheets are machine scored, several samples must be both machine and manually scored to ensure the accuracy of the machine-scoring process. All discrepancies must be resolved before student answer sheets are machine scored. When machine scoring is completed, a sample of the scored answer sheets must be scored manually to verify the accuracy of the machine-scoring process.

DETERMINING THE STUDENT’S FINAL EXAMINATION SCORE

A chart for converting the student’s raw score to a scale score is provided for each administration on the Department’s web site at <http://www.p12.nysed.gov/assessment/scoring/>. Because the scale scores corresponding to raw scores change from one examination administration to another, it is *crucial* that, for each administration, scorers use *only* the conversion chart provided for that administration to determine the student’s final score. If the determination of each student’s scale score is being done by hand, extreme care must be taken in recording the student’s scores on each part of the examination, adding these scores to determine the total-test raw score, and using the conversion chart to obtain the correct scale score.

Schools are *not* permitted to rescore any of the open-ended questions on any Regents Examination in mathematics after each open-ended question has been rated once, regardless of the final examination score. Schools are required to ensure that the raw scores have been added correctly and that the resulting scale score has been determined accurately.

When the teacher scoring committee completes the scoring process, test scores must be considered final and must be entered onto students’ permanent records. In addition, each rater must sign the *Examination Scoring Certificate* attesting that he or she fully and faithfully observed the rules and regulations for scoring the examinations. The principal must also sign this certificate to attest that the rules and regulations for scoring were fully and faithfully observed.

Principals and other administrative staff in a school or district do not have the authority to set aside the scores arrived at by the teacher scoring committee and rescore student examination papers or to change any scores assigned through the procedures described in this manual and in the scoring materials provided on the Department's web site at <http://www.p12.nysed.gov/assessment/scoring/>. Any principal or administrator found to have done so, except in the circumstances described below, will be in violation of Department policy regarding the scoring of State examinations. Teachers and administrators who violate Department policy with respect to scoring State examinations may be subject to disciplinary action in accordance with Sections 3020 and 3020-a of Education Law or to action against their certification pursuant to Part 83 of the Regulations of the Commissioner of Education.

On rare occasions, an administrator may learn that an error occurred in the calculation of a final score for a student or in recording students' scores in their permanent records. For example, the final score may have been based on an incorrect summing of the student's raw scores for parts of the test or from a misreading of the conversion chart. When such errors involve the answer papers for no more than 5% of the school's test takers for the examination or five students, whichever is greater, and when they are detected within four months of the test date, the superintendent of a public school district or the chief administrative officer of a nonpublic or charter school may arrange for the corrected score to be recorded in the student's permanent record. However, in all such instances, the superintendent or chief administrative officer must advise the Department in writing that the student's score has been corrected. The written notification to the Department must be signed by the superintendent or chief administrative officer and must include the initials or student identifications (at the discretion of the principal) of the students whose scores have been corrected, the examination title, the students' original and corrected scores, and a brief explanation of the nature of the scoring error that was corrected.

If an administrator has substantial reason to believe that the teacher scoring committee has failed to accurately score the answer papers for more than 5% of the school's test takers for the examination or five students, whichever is greater, or when errors are detected more than four months after the test date, the administrator must first obtain permission in writing from the Department before arranging for or permitting a rescoring of student papers. The written request to the Department must come from the superintendent of a public school district or the chief administrative officer of a nonpublic or charter school and must include the examination title, date of administration, and number of students whose papers would be subject to such rescoring. This request must also include a statement explaining why the administrator believes that the teacher scoring committee failed to score appropriately and, thus, why he or she believes rescoring the examination papers is necessary. As part of this submission, the school administrator must make clear his or her understanding that such extraordinary re-rating may be carried out only by a full committee of teachers constituted in accordance with the scoring guidelines presented above and fully utilizing the scoring materials for this examination provided by the Department.

The Department sometimes finds it necessary to notify schools of a revision to the scoring key and rating guide for an examination. Should this occur after the scoring committee has completed its work, the administrator is authorized to have appropriate members of the scoring committee review students' responses only to the specific question(s) referenced in the notification and to adjust students' final examination scores when appropriate. Only in such circumstances is the school not required to notify or obtain approval from the Department to correct students' final examination scores.

SPECIFIC INFORMATION FOR SCORING THE REGENTS EXAMINATIONS IN MATHEMATICS

The information below refers to the scoring of open-ended questions on the Regents Examination in Algebra 2/Trigonometry.

The open-ended questions (Parts II, III, and IV) on the Regents Examination in Algebra 2/Trigonometry should be scored in accordance with these guidelines:

- If the student gives one legible response, even if it is crossed out, teachers should score that response.
- If there are two or more responses with all but one crossed out, teachers should score only the response not crossed out.
- If there are one or more partial responses and one complete response, teachers should score the complete response. No credit is deducted for incorrect startups.
- If there are two or more complete responses, teachers should score each one. Credit will be allocated in the following way:

If one response is completely correct and the others are completely incorrect, teachers should award 50% credit and round down (3 credits for a 6-credit question, 2 credits for a 4-credit question, 1 credit for a 3-credit question, and 1 credit for a 2-credit question).

If each response warrants more than 50%, the lesser of the responses is awarded credit. (For example, if a 4-credit question is done two ways, with one worth 4 credits and another worth 3 credits, the student should be awarded 3 credits for the question.)

- If the question requires the student to include units of measure, full credit cannot be awarded if the student omits the unit or if incorrect units are used. Students may include the appropriate unit of measure even if it is not required.

Examples:

If the question asks for the number of feet in the length of a figure, no unit is required in the answer.

If the question asks for the dimensions of a figure, the proper unit of measure is required in the answer in order to receive full credit.

The rubric will specify how much credit is awarded if units are not used when required.

- If a student gives only a correct numerical answer to a problem but does not show how he or she arrived at the answer, the student will be awarded only 1 credit. All open-ended questions require the student to show work. If the question has only one part, this rule is straightforward, but this rule needs some clarification for multiple-part questions.

A fully correct answer for a multiple-part question requires correct responses for all parts of the question. For example, if a 3-credit question has three parts, the correct response to one or two parts of the question that required work to be shown is *not* considered a fully correct response with no work shown and would receive 0 credit.

The rubric of a multiple-part question will specify credit for various amounts of work shown.

- Students should receive 0 credit if the solution is completely incorrect, irrelevant, or incoherent or if a correct response was arrived at using an obviously incorrect procedure.

This last statement is illustrated by a student who, when asked to find one leg of a right triangle if the hypotenuse is 5 and the other leg is 3, gives a correct response of 4 by showing that 4 is the average of 3 and 5.

The method of solution must be obviously incorrect to warrant a score of 0.

In some cases, the rubric will specifically state which responses should receive a score of 0.