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Office for Standards, Assessment and Reporting

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**TO:** District Superintendents  
School Superintendents  
Principals of Public and Nonpublic High Schools  
Principals of Charter Schools  
Mathematics Department Chairs and Coordinators  
High School Mathematics Teachers

**FROM:** David Abrams *David Abrams*

**SUBJECT:** Test Specifications for the Component Retests in Integrated Algebra:  
First Administration—May 2010

The first administration of the new Component Retests in Integrated Algebra will take place in May 2010. These examinations will replace the Component Retests in Mathematics A.

The new examinations will:

- evaluate student achievement of the mathematics Learning Standard and the core curriculum in Integrated Algebra, and
- be provided for three of the content strands of the core curriculum: Algebra (Component A), Geometry (Component G), and Statistics and Probability (Component S).

The Mathematics Core Curriculum for Integrated Algebra is available on the Department's web site at:

<http://emsc.nysed.gov/osa/hsgen/mathcore-05/mc-ia-05.pdf>

The types of questions, the formatting, and the scoring guides that are being developed for the component retests will mirror those provided for the Regents Examination in Integrated Algebra. Past administrations of this examination are available at:

<http://www.nysedregents.org/testing/hsregents.html>

The test specifications that the Component Retests in Integrated Algebra will follow are attached to this memorandum and will be available on the Department's web site at:

<http://emsc.nysed.gov/osa/component.html>

As is the case with all State examinations, New York State teachers have made essential contributions to all aspects of the test development process for the new Component Retests in Integrated Algebra.

Thank you for your help and for all the work you do on behalf of the students in New York State.

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**Component Retests in Integrated Algebra**  
**(First Administration—May 2010)**

Component Retests in Integrated Algebra will be administered for the first time in May 2010. The Regents Examination in Integrated Algebra is a measure of student performance on five content strands. Component Retests will be provided for three of these strands: Algebra (Component A), Geometry (Component G), and Statistics and Probability (Component S). Each Component Retest consists of two modules (test sessions), given on two successive days.

There will be 11 questions on each module (22 for each component) of the Component Retests in Integrated Algebra. The table below shows the types and numbers of questions on each module:

<b>Question Type</b>	<b>Number of Questions</b>
Multiple choice (2 credits each)	8
2-credit open ended	1
3-credit open ended	1
4-credit open ended	1
Total credits	25

To be eligible for component retesting in Integrated Algebra, a student must be a junior or senior and must have done both of the following:

- taken the Regents Examination in Integrated Algebra at least twice, AND
- earned a score no lower than 48 on at least one of the two Regents Examinations in Integrated Algebra taken most recently. Any junior or senior who has not scored at least 48 on at least one of his or her last two Regents Examinations in Integrated Algebra is not eligible for component retesting and must retake the entire examination.

The component(s) that a student must take depends on the higher of the scores that the student earned on the last two Regents Examinations in Integrated Algebra as described below:

- If the student's higher score is between 55 and 64, the student will be required to take the Algebra Component (Component A) only.
- If the student's higher score is between 48 and 54, the student will be required to take the Algebra Component (Component A). In addition, the student must also take his or her weaker component: Geometry (Component G) OR Statistics and Probability (Component S). A worksheet for determining a student's weaker component (Component G or Component S) will be provided with the instructions for requesting the Component Retests.

Schools must make a graphing calculator available for the exclusive use of each student while that student takes the Component Retests in Integrated Algebra.

The Component Retests in Integrated Algebra will include a reference sheet containing the formulas specified below.

Trigonometric Ratios

$$\sin A = \frac{\textit{opposite}}{\textit{hypotenuse}}$$

$$\cos A = \frac{\textit{adjacent}}{\textit{hypotenuse}}$$

$$\tan A = \frac{\textit{opposite}}{\textit{adjacent}}$$

Area

trapezoid  $A = \frac{1}{2}h(b_1 + b_2)$

Volume

cylinder  $V = \pi r^2 h$

Surface Area

rectangular prism  $SA = 2lw + 2hw + 2lh$

cylinder  $SA = 2\pi r^2 + 2\pi rh$

Coordinate Geometry

$$m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1}$$