

# New Jersey Graduation Proficiency Assessment Results

# **Spring 2023 Administration**

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## Understanding the New Jersey Graduation Proficiency Assessment

- Statute requires the State graduation proficiency assessment to administered to all grade 11 students. (N.J.S.A. 18A:7C-6)
- The New Jersey Graduation Proficiency Assessment is designed to measure the extent to which students are graduation ready in English Language Arts (ELA) and Mathematics.
- Graduation readiness is reported separately for each content component.
- The ELA component is aligned to the grade 10 standards.
- The Mathematics component is aligned to Algebra I and Geometry standards.



## Understanding the New Jersey Graduation Proficiency Assessment

- On May 3, 2023, the New Jersey State Board of Education adopted a *new* proficiency level cut score for the English language Arts (ELA) and mathematics components of the NJGPA, as well as the menu of alternative assessments and aligned cut scores.
- Students who take but do not meet the minimum required score on each component of the assessment will have the opportunity to receive additional supports and may take the following steps:
  - Retake the ELA and/or mathematics components of the New Jersey Graduation
    Proficiency Assessment in the following summer or fall;
  - Meet a designated cut score from the menu of substitute competency tests; or
    - Complete a portfolio appeal.

#### **Description of the Individual Student Report (ISR)**



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#### How Did Your Student Perform in the Mathematical Subclaims?



require:

#### MAJOR CONTENT

ADDITIONAL & SUPPORTING CONTENT

Students are assessed using items that require:

- Performing arithmetic operations on polynomials; solving linear, quadratic, and exponential equations; understanding, interpreting, and using functional relations, algebraic expressions, and linear models.
- Applying geometric concepts; identifying and performing transformations on shapes; solving right triangles; using coordinate geometry; and understanding and using different types of geometric proof.

Students are assessed using items that

#### EXPRESSING MATHEMATICAL REASONING

Students are assessed using open-ended items that require:

- Creating and justifying logical mathematical solutions.
- Analyzing and correcting the reasoning of others.

- Understanding the full set of real numbers and performing operations with irrational numbers; changing algebraic expressions to equivalent forms; creating and solving systems of linear equations; creating and/or critiquing linear, quadratic, and exponential models; and interpreting data.
- Using a coordinate plane to quantify transformations; using properties of circles; understanding basic geometric constructions; and finding volume of shapes.

#### **MODELING & APPLICATION**

Students are assessed using open-ended items that require:

- Solving real-world problems with symbols.
- Reasoning quantitively.
- Strategically using appropriate tools.

#### Proportion of Available Points by Subclaim







## Scoring Subclaims for Reading Complex Text: 44 total points

- **Reading Literature:** Students demonstrate comprehension and draw evidence from readings of grade 10, complex literary text.
- **Reading Informational Text**: Students demonstrate comprehension and draw evidence from readings of grade 10, complex informational texts.
- **Vocabulary Interpretation and Use**: Students use context to determine the meaning of words and phrases.

#### Scoring Subclaims for Writing: 30 total points

- Written Expression: Students produce clear and coherent writing in which the development, organization, and style are appropriate to the task, purpose, and audience.
- Knowledge of Language and Conventions: Students demonstrate knowledge of conventions and other important elements of language.



#### Standards for Mathematical Content (30 out of 55 points)

• Major Content

The student solves problems involving the Major Content in Algebra I and Geometry.

• Supporting Content

The student solves problems involving the Additional and Supporting Content in Algebra I and Geometry.

#### Standards for Mathematical Practice (25 out of 55 points)

• Reasoning (10 out of 55 points)

The student expresses Algebra I and Geometry course-level appropriate mathematical reasoning by constructing viable arguments, critiquing the reasoning of others (MP.3), and/or attending to precision when making mathematical statements(MP.6).

• Modeling (15 out of 55 points)

The student solves real-world problems by applying knowledge and skills articulated in the standards for Algebra I and Geometry, engaging particularly in the Modeling practice, and where helpful making sense of problems and persevering to solve them (MP.1), reasoning abstractly and quantitatively (MP.2), using appropriate tools strategically (MP.5), looking for and making use of structure (MP.7), and/or looking for and expressing regularity in repeated reasoning (MP.8).



Subject	Eligible Test Takers	Valid Test Scores	<b>Participation Rate</b>
English / Language Arts	303	296	98%
Mathematics	303	297	98%



**Spring 2023 NJGPA Test Administration - Comparison of Percentages: Teaneck Public Schools vs the State** 

## **Percentage of Students - Graduation Ready**

NJGPA Comparison	2022		2023	
	State	District	State	District
<b>English/ Language Arts</b>	39.4%	46%	80.5%	83.4%
<b>Comparison of Growth - English/ Language Arts</b>		+40.9%	+37.4%	
Mathematics	49.5%	43.2%	55%	46.1%
<b>Comparison of Growth - Mathematics</b>			+5.5%	+2.9%



## **Spring 2023 NJGPA - English/Language Arts Subgroup Performance**

New Jersey Graduation Proficiency Assessment	Total Number of Students in the Subgroup	Number of Students who are Graduation Ready	% of Students Who Are Graduation Ready
Female	152	140	92.1%
Male	143	106	74.1%
Hispanic or Latino	106	88	83%
Asian	23	22	95.7%
Black or African-American	113	92	81.4%
White	47	40	85.1%
Economic Disadvantage	95	75	78.9%
Students With Disabilities-IEP Yes	62	31	50.0%



## **Spring 2023 NJGPA - Mathematics Subgroup Performance**

New Jersey Graduation Proficiency Assessment	Total Number of Students in the Subgroup	Number of Students who are Graduation Ready	% of Students Who Are Graduation Ready
Female	152	85	56%
Male	144	52	36%
Hispanic or Latino	108	49	45%
Asian	23	13	57%
Black or African-American	112	40	36%
White	47	31	66%
Economic Disadvantage	95	41	43%
Students With Disabilities-IEP Yes	63	11	17.5%



## **Current Senior Class: Class of 2024**

If, after completing the New Jersey Graduation Proficiency Assessment in grade 11, students did not demonstrate proficiency by passing the ELA component, such students may access the following pathways:

- <u>Second Pathway</u>: By meeting the designated cut score on a substitute competency test such as the PSAT, SAT, ACT, or ACCUPLACER; or
- <u>**Third Pathway</u>**: By submitting, through the district, a student portfolio appeal to the New Jersey Department of Education.</u>



#### **Meeting the Assessment Requirements Current Seniors: Class of 2024** Week of October 10th, September 2023 to January to March 2024 **October 5, 2023 Teaneck High School New Jersey Graduation Proficiency Retake the New Jersey Graduation** Pathways offered to take alternative **Assessment Intensive Tutoring Proficiency Assessment** Assessments Eligible seniors will work with the school counseling Four weeks of intensive tutoring prior to Eligible seniors will retake the Graduation retaking the assessment during the Proficiency Assessment. department to determine alternative assessments to week of October 10, 2023. meet the graduation requirements. Students who are "not yet graduation ready" Mathematics: 160 students Language Arts: 49 students



# **Instructional Planning**





# NJGPA Support Plan

Assess	Assess student readiness using an NJGPA screener.
Identify	Identify students to participate in before or after school tutoring opportunities
High Intensity Support	Provide students with small-group tutoring support in the identified standards between October - March



# NJGPA ELA Instructional Planning

## **Current Junior Class: Class of 2025**

Increasing Opportunities to Read Informational Text:

• The Director of School Innovation, English and ESL and the Supervisor of Social Studies will observe and coach teachers together in order to elevate and improve reading instruction in the social studies classroom.

Item Analysis and Supporting Content

• Department meeting times will be used to review the question types, and complete an item analysis in support for sharpening grade-level instruction in grades 9, 10 and 11.



# NJGPA Mathematics Instructional Planning

## **Current Junior Class: Class of 2025**

Item Analysis and Supporting Content

• Department meetings will be used to review the question types, and complete an item analysis in support of sharpening content area instruction in Algebra 1, Geometry, and Algebra II.

Increasing Opportunities to Engage in Rich Mathematics Tasks:

- Rich mathematical tasks engage scholars in sense-making of **content standards** through **multi-part items** that require high levels of **critical thinking, reasoning, mathematical modeling,** and **problem solving**.
  - In Eureka Math<sup>2</sup>, our new K-8 mathematics program, students are consistently exposed to complex tasks that support the productive struggle required to learn mathematics.



# NJGPA Mathematics - Rich Task Example

#### The Problem:

The Farmer Supply is building a storage building for fertilizer that has a cylindrical base and a coneshaped top. The county laws say that the storage building must have a maximum width of 8 feet and a maximum height of 14 feet.



Dump trucks deliver fertilizer in loads that are 4 feet tall, 6 feet wide, and 12 feet long. Farmer Supply wants to be able to store 2 dump-truck loads of fertilizer.

Determine a height of the cylinder,  $h_1$ , and a height of the cone,  $h_2$ , that Farmer Supply should use in the design. Show that your design will be able to store at least two dump-truck loads of fertilizer.

Enter your answer and your work in the space provided.



## What is required of students to achieve maximum points on this problem?

Student response includes each of the following 3 elements:

- Valid values for  $h_1$  and  $h_2$
- Valid approach for determining  $h_1$  and  $h_2$
- Verification that the design will store at least 2 dump-truck loads of

#### fertilizerSample Student Response:

Assuming the dump trucks are rectangular prisms, each dump truck stores 288 cubic

feet of fertilizer (4  $\times$  6  $\times$  12 = 288). Two dump trucks will store 576 cubic feet of fertilizer. The volume of the storage building needs to be at least 576 cubic feet. The volume of the storage building equals the volume of the cylinder plus the volume of the cone. I used the maximum diameter of 8 feet.

$$\pi r^{2}h_{1} + \frac{1}{2}\pi r^{2}h_{2}$$
$$4^{2}\pi h_{1} + \frac{3}{2}\pi 4^{2}h_{2}$$

I used the maximum total height of 14 feet. Since the volume of a cone involves dividing by 3, I made the height of the cone much smaller than the height of the cylinder.

$$\pi 4^{2}h_{1} + \frac{1}{3}\pi 4^{2}h_{2}$$
  
$$\pi 4^{2}11 + \frac{1}{3}\pi 4^{2}3 \approx 603.16$$

Using  $h_1 = 11$  feet and  $h_2 = 3$  feet, the storage building will have a volume greater than 576 cubic feet.







