



Our Students. Their Moment.

**New York State Testing Program  
Common Core  
Mathematics Test**

**Understanding the  
Mathematics Parent Report**

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THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY  
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## New York State Testing Program Common Core Mathematics Test

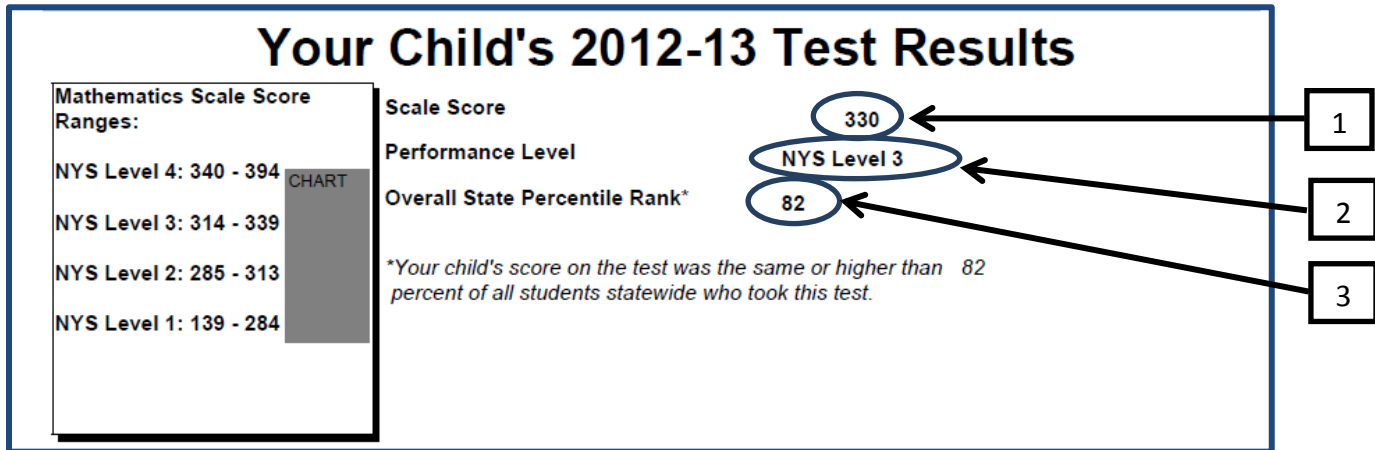
### Understanding the Mathematics Parent Report

With the adoption of the New York P-12 Common Core Learning Standards (CCLS) in English Language Arts (ELA)/Literacy and Mathematics, the Board of Regents signaled a shift in both instruction and assessment. In Spring 2013, New York State administered the first set of tests designed to assess student performance in accordance with the instructional shifts and the rigor demanded by the Common Core State Standards (CCSS). To aid in the transition to new tests, New York State released a number of resources during the 2012–2013 year, including test blueprints and specifications, sample questions, and criteria for writing test questions. Now that we have administered the first tests, we are providing this document to explain reports that families receive for both the Spring 2013 ELA and Mathematics tests. These annotated score reports will help students, families, educators, and the public better understand how to interpret the 2013 score reports.

#### *Understanding the Mathematics Parent Report*

Each year, students in grades 3–8 take the Mathematics Common Core Test. After the test, families receive a report that explains how their child performed. This document explains the parts of that score report. This document uses a grade 3 score report as an example. If your child is not in grade 3, you may notice some differences. These differences are explained in Section 4 of the document.

**Note:** The scale score and "Points Earned By Your Child" for subscores are provided for illustrative purposes only. All other reported numbers reflect actual state performance.



**1 Scale Score:** The *Scale Score* is determined by the number of points your child earned on the test. The number of points have to be on a scale so that the test results mean the same thing year after year even though different students are taking the test with different questions. The higher the number of points your child earned, the higher his or her scale score. Scale scores are most meaningful when they are associated with a performance level.

Table 1 provides the range of scale scores for each grade, as well as the scale score your child would need to meet their grade level performance expectations and to be on track for college and career readiness.

**Table 1:** Range and Proficiency Level of Scale Scores Across Grades

	Grade					
	3	4	5	6	7	8
Range of Scale Scores	139–394	126–402	126–406	119–399	133–401	119–403
Scale Scores Greater than or Equal to this Value are Proficient	314	314	319	318	322	322

**2 Performance Level:** Students are assigned a *Performance Level* based on how they perform on the test. There are four possible performance levels: *NYS Level 1*, *NYS Level 2*, *NYS Level 3*, and *NYS Level 4*. Each student is assigned to a performance level based on the scale score earned. For a full description of each performance level, please refer to the bottom of page 1 on the Parent Report.

For a detailed description of the skills, knowledge, and practices that are typical of students at each performance level, please visit <http://www.engageny.org/resource/performance-level-descriptions-for-ela-and-mathematics>

**3 Overall State Percentile Rank:** *Overall State Percentile Rank* compares your child's score to the rest of the students who took the same subject area test this year. Percentile ranks are reported on a scale of 1-99. If your child has an *Overall State Percentile Rank* of 82, it means that your child's scale score was the same or higher than 82% of all students who took the same test. The higher the *Overall State Percentile Rank*, the better your child did compared to other students.

**Note:** The scale score and "Points Earned By Your Child" for subscores are provided for illustrative purposes only. All other reported numbers reflect actual state performance.

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**Mathematics Common Core Domains with Emphasized Clusters**

**Operations and Algebraic Thinking**

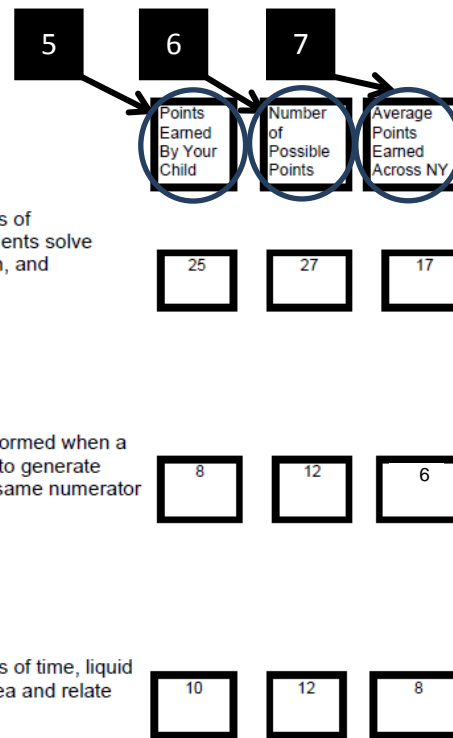
Students multiply and divide within 100. Students understand the properties of multiplication and the relationship between multiplication and division. Students solve problems involving the four operations—addition, subtraction, multiplication, and division—and identify and explain patterns in arithmetic.

**Number and Operations - Fractions**

Students recognize fractions as numbers, understanding that a fraction is formed when a whole is divided into several equal parts. Students recognize and are able to generate equivalent fractions. Additionally, students compare two fractions with the same numerator or the same denominator.

**Measurement and Data**

Students solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Students also understand concepts of area and relate area to multiplication and addition.



**4 Mathematics Domain Subscores:**

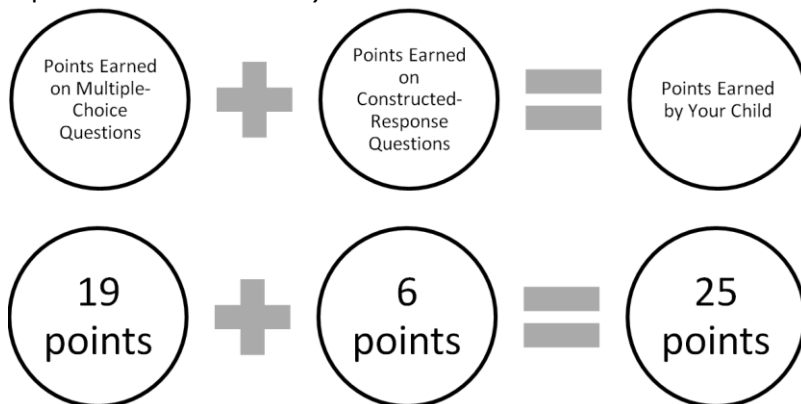
The points from the Mathematics test are divided into three reported subscores. These subscores measure major content areas for the grade, which are organized by domains (e.g., **Operations and Algebraic Thinking**). Domain subscores are calculated based on points earned on groups of questions that assess major content areas. These subscores differ by grade because of the differences in the knowledge and skills students are required to demonstrate at each grade. Please refer to Table 2 at the end of this document for the reported domains in other grades.

Please refer to the test guides for more information on the specific domains for each grade (<http://www.engageny.org/resource/test-guides-for-english-language-arts-and-mathematics>).

**5 Points Earned By Your Child on Domain Subscores:**

*Points Earned By Your Child* on domain subscores represents the number of points your child earned on questions measuring that domain (e.g., **Operations and Algebraic Thinking**). Each multiple-choice question that your child answered correctly earns one point. Your child may earn multiple points for each constructed-response question.

There are two types of constructed-response questions: short-response (maximum of 2 points) and extended-response (maximum of 3 points). Teachers rate each student’s response to these questions. The points earned on the constructed-response questions are added to the number of multiple-choice questions answered correctly to equal the *Points Earned By Your Child* on the domain subscore. See the example below.



For examples of questions from the 2013 Mathematics test, please visit <http://www.engageny.org/resource/new-york-state-common-core-sample-questions>

**Note:** The scale score and "Points Earned By Your Child" for subscores are provided for illustrative purposes only. All other reported numbers reflect actual state performance.

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**Number of Possible Points on Domain Subscores:**

*Number of Possible Points* on domain subscores describes the total number of points measuring that specific domain on the 2013 Mathematics test. This includes all possible points from both multiple-choice and constructed-response questions in that domain. These points can be compared with *Points Earned By Your Child* on domain subscores. For example, if your child earned a total of 25 points from questions measuring **Operations and Algebraic Thinking** out of a total of 27 possible points on **Operations and Algebraic Thinking**, then he or she missed a total of two points in the **Operations and Algebraic Thinking** domain.

Mathematics Common Core Domains with Emphasized Clusters	Points Earned By Your Child	Number of Possible Points
Operations and Algebraic Thinking	25	27
Students multiply and divide within 100. Students understand the properties of multiplication and the relationship between multiplication and division. Students solve problems involving the four operations—addition, subtraction, multiplication, and division—and identify and explain patterns in arithmetic.		

For more information about how many questions were included on each section of the test, please refer to <http://www.engageny.org/resource/test-guides-for-english-language-arts-and-mathematics>

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**Average Points Earned Across NY:**

The *Average Points Earned Across NY* on domain subscores reports the average number of points earned by students throughout the state. This number can be used to compare your child’s performance to the other students who took the Mathematics test in their grade. For example, if your child earned 25 points in **Operations and Algebraic Thinking**, he or she has earned eight more points in **Operations and Algebraic Thinking** than the average student in the state. However, please note that is possible to earn more points than the average Mathematics test taker in grade 3 in **Operations and Algebraic Thinking**, and other subscores, and still be considered not proficient.

**Note:** The scale score and "Points Earned By Your Child" for subscores are provided for illustrative purposes only. All other reported numbers reflect actual state performance.

**Table 2. The Domain Subscores and Number of Possible Subscore Points for Math by Grade**

Grade	Reporting Categories		
	1	2	3
3	Operations and Algebraic Thinking 27	Number and Operations— Fractions 12	Measurement and Data 12
4	Operations and Algebraic Thinking 11	Number and Operations in Base Ten 17	Number and Operations— Fractions 18
5	Number and Operations in Base Ten 17	Number and Operations— Fractions 26	Measurement and Data 9
6	Ratios and Proportional Relationships 19	The Number System 11	Expressions and Equations 28
7	Ratios and Proportional Relationships 20	The Number System 14	Expressions and Equations 22
8	Expressions and Equations 30	Functions 11	Geometry 14

**Note:** The scale score and "Points Earned By Your Child" for subscores are provided for illustrative purposes only. All other reported numbers reflect actual state performance.