



**Achievement Level Descriptors**  
**for**  
**Grade 7 Mathematics**

Georgia Department of Education  
September 2015  
All Rights Reserved

*Based on the 2014-2015 Administrations*

## Achievement Levels and Achievement Level Descriptors

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner*, *Developing Learner*, *Proficient Learner*, and *Distinguished Learner*. The general meaning of each of the four levels is provided below:

**Beginning Learners do not yet demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **need substantial academic support** to be prepared for the next grade level or course and to be on track for college and career readiness.

**Developing Learners demonstrate partial proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **need additional academic support** to ensure success in the next grade level or course and to be on track for college and career readiness.

**Proficient Learners demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **are prepared** for the next grade level or course and are on track for college and career readiness.

**Distinguished Learners demonstrate advanced proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **are well prepared** for the next grade level or course and are well prepared for college and career readiness.

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors (ALDs)**. ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

**ALDs show a progression of knowledge and skills** for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

ALD	Standard	Beginning Learner	Developing Learner	Proficient Learner	Distinguished Learner
<b>Policy</b>		<b>Beginning Learners do not yet demonstrate proficiency in the knowledge and skills</b> necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need substantial academic support to be prepared for the next grade level or course and to be on track for <i>college and career readiness</i> .	<b>Developing Learners demonstrate partial proficiency in the knowledge and skills</b> necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need additional academic support to ensure success in the next grade level or course and to be on track for <i>college and career readiness</i> .	<b>Proficient Learners demonstrate proficiency in the knowledge and skills</b> necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are prepared for the next grade level or course and are on track for <i>college and career readiness</i> .	<b>Distinguished Learners demonstrate advanced proficiency in the knowledge and skills</b> necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are well prepared for the next grade level or course and are well prepared for <i>college and career readiness</i> .
<b>Range</b>		A student who achieves at the <b>Beginning Learner</b> level demonstrates minimal command of the grade-level standards.	A student who achieves at the <b>Developing Learner</b> level demonstrates partial command of the grade-level standards.	A student who achieves at the <b>Proficient Learner</b> level demonstrates proficiency of the grade-level standards.	A student who achieves at the <b>Distinguished Learner</b> level demonstrates advanced proficiency of the grade-level standards.
	7.RP.1 7.RP.2 7.RP.3	Identifies proportional relationships from relationships between equivalent ratios and percentages.	Determines proportional relationships by examining tables and graphs and computes unit rates and identifies them as the constant of proportionality in multiple representations.	Analyzes proportional relationships and uses them to solve problems by computing and comparing unit rates and recognizing equivalent ratios, explains the constant of proportionality in context and uses it to write an equation, and solves word problems with percentages.	Analyzes and interprets numerical and symbolic proportional relationships and uses them to solve complex and multistep problems by comparing rates and ratios, determining and applying rates, and determining rates from graphs.
	7.NS.1 7.NS.2 7.NS.3	Uses addition, subtraction, multiplication, and division to solve single-step word problems involving positive fractions and decimals.	Uses visual representations to add and subtract rational numbers; uses algorithms to add, subtract, multiply, and divide integers; and converts a fraction to a decimal via long division.	Applies understanding of fractions and decimals to fluently use all four operations with rational numbers and recognizes and uses additive inverses, absolute value, and properties of operations to solve real-world word problems with rational numbers.	Applies understanding of all four operations with rational numbers to solve multistep real-world problems, using fractions and decimals interchangeably.

	<p>7.EE.1 7.EE.2 7.EE.3 7.EE.4</p>	<p>Uses one or more properties of operations to combine like terms in an expression and writes a single-step equation to solve a word problem.</p>	<p>Uses a property of operations, such as the distributive property, to generate linear expressions and solve two-step word problems with rational numbers.</p>	<p>Uses properties of operations to generate equivalent expressions and to solve multistep word problems with rational coefficients, uses variables to represent quantities in multistep problems, and solves word problems with equations and inequalities requiring two-step solutions.</p>	<p>Uses multiple properties of operations to strategize and generate equivalent expressions and to solve complex multistep word problems with rational coefficients, uses variables to represent quantities in complex multistep word problems with equations and inequalities requiring multistep solutions, and interprets solutions in context.</p>
	<p>7.G.1 7.G.2 7.G.3 7.G.4 7.G.5 7.G.6</p>	<p>Draws and describes specific polygons with labeled vertices and identifies their sides and angles and identifies the vertices, edges, and faces of a rectangular prism.</p>	<p>Constructs a specific geometric figure, such as a line, polygon, circle, or solid, and describes a relationship between its sides and angles; describes the vertices, edges, and faces of a rectangular prism and describes its surface area as the sum of the areas of its six rectangular faces; and uses formulas to find the area and circumference of circles.</p>	<p>Describes geometric figures and the relationships between them, including two-dimensional cross sections, and writes and solves mathematical problems involving angle measure, area, surface area, and volume.</p>	<p>Creates geometric figures and analyzes and compares their general properties and solves complex multistep problems involving angle measure, area, surface area, and volume of composite polygons and solids.</p>
	<p>7.SP.1 7.SP.2 7.SP.3 7.SP.4 7.SP.5 7.SP.6 7.SP.7 7.SP.8</p>	<p>Distinguishes between populations and samples, understands probability as a number between 0 and 1, and understands samples can be used to gain information about a population.</p>	<p>Calculates simple probability, compares experimental and theoretical probabilities, uses random sampling to draw inferences about a population, and understands likelihood on a continuum of 0 to 1.</p>	<p>Uses random sampling to draw comparative inferences about two populations; develops, uses, and evaluates probability models; and uses a variety of tools to find probabilities of compound events, including simulations.</p>	<p>Uses multiple samples to draw inferences about a population; draws interpretive comparative inferences about multiple populations; investigates experimental and theoretical probabilistic reasoning processes; and develops, uses, and evaluates multiple probability models.</p>