



# Achievement Level Descriptors for Grade 8 Mathematics

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**Achievement Levels and Achievement Level Descriptors**

The Georgia Alternate Assessment (GAA) 2.0 is the state's alternate assessment based on alternate academic achievement standards (AA-AAAS) for those students with significant cognitive disabilities who cannot participate in the general statewide assessment program, even with maximum allowable accommodations.

The GAA 2.0 is designed to ensure that students with the most significant cognitive disabilities are provided access to the state academic content standards and given the opportunity to demonstrate achievement of the essential knowledge, concepts, and skills inherent in the standards. To that end, the GAA 2.0 assesses students' understanding of the state's alternate academic content standards, or *Extended Content Standards*, which align to the grade-level content standards. Alignment refers to the connection of the skill through which students will demonstrate what they know and can do, to the content standard expectations for general education students in a given grade. Students with significant cognitive disabilities may need to learn these skills differently, in smaller segments, with fewer identified components, at a slower pace, and/or learn skills that would provide access to the standard. The *Extended Content Standards* allow students to show learning of concepts and constructs within a grade-level standard, but at reduced levels of complexity.

The following four achievement levels generally describe students' understanding of the essential knowledge and skills outlined in Georgia's Extended Content Standards.

**Level 1:** Students at this level demonstrate a **limited** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need substantial academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

**Level 2:** Students at this level demonstrate a **partial** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need frequent academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

**Level 3:** Students at this level demonstrate an **adequate** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need occasional academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

**Level 4:** Students at this level demonstrate a **thorough** understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and **may need limited academic support** as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.

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

**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 Level 3 learner should also possess the knowledge and skills of a Level 2 learner and a Level 1 learner.

<b>Policy ALDs</b>				
<b>Standards</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>
	Students at this level demonstrate a <b>limited</b> understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and <b>may need substantial academic support</b> as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.	Students at this level demonstrate a <b>partial</b> understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and <b>may need frequent academic support</b> as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.	Students at this level demonstrate an <b>adequate</b> understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and <b>may need occasional academic support</b> as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.	Students at this level demonstrate a <b>thorough</b> understanding of the knowledge and skills specified in Georgia's alternate academic content standards. They are actively working with adapted grade-level content that focuses on essential knowledge and skills and <b>may need limited academic support</b> as they transition to the next grade/course, inclusive postsecondary education, or competitive integrated employment.
<b>Range ALDs</b>				
<b>Students demonstrate increasingly complex understanding of number sense.</b>				
MGSE8.NS.1 MGSE8.NS.2	Convert a rational number fraction to a decimal equivalent.	Convert a decimal expansion into a rational number.  Identify a decimal on a number line which is	Determine if a number is rational by deciding if it is- or can be written as a fraction or a repeating or terminating decimal.	Order estimated square roots of rational numbers on a number line.

		greater than/less than a given decimal.	Place the rational approximation of an irrational number on a number line.	
<b>Students demonstrate increasingly complex spatial reasoning and understanding of geometric principles.</b>				
MGSE8.G.1 MGSE8.G.2	Identify congruent figures in the same location on a coordinate plane.	Identify a line segment or an angle within a figure that has been translated on a coordinate plane.  Identify rotation, reflection, and/or translation when shown two congruent figures.  Identify whether figures are congruent given the number of spaces up, down, left or right on a coordinate plane.	Identify a line segment or an angle within a figure that has been reflected or rotated on a coordinate plane.  Demonstrate a reflection, translation, or rotation of a figure using manipulatives.	Given a figure that has been transformed, identify which transformation has occurred.  Record shown movement needed to match congruent figures, including rotations, reflections on a coordinate plane.
<b>Students demonstrate increasingly complex understanding of measurement, data, and analytic procedures.</b>				
MGSE8.SP.1 MGSE8.SP.2	Represent numerical data on a scatter plot.	Determine whether points on a scatter plot have a linear association.  Describe the presence or absence of a trend on a scatter plot.	Describe a pattern of points on a scatter plot using terminology.  Find an informal line of best fit for a scatter plot.  Determine whether a line of best fit is	Use the line of best fit on a scatter plot of real-life data to predict likely outcomes.

			appropriate based on how many data points are above or below.	
<b>Students solve increasingly complex mathematical problems using algebraic thinking.</b>				
MGSE8.EE.2 MGSE8.EE.7b MGSE8.F.1 MGSE8.F.3	<p>Identify like terms within an expression.</p> <p>Identify the input and output within a function.</p> <p>Identify the linear function given a graph of a linear and non-linear function.</p>	<p>Match the figure of a square with given dimensions to determine its perfect square.</p> <p>Identify whether a given number will provide a solution for a linear equation with one variable.</p> <p>Identify the function within a table of values.</p> <p>Identify the output when given a function and one input.</p> <p>Complete the ordered pair when given the input.</p> <p>Identify the outputs of the function <math>y = mx + b</math> when given two or more values for <math>m</math>, <math>x</math>, and <math>b</math>.</p>	<p>Identify a geometric formula that represents the area of a perfect square given the side lengths.</p> <p>Determine the square root as the length of one of the sides when given an equation and a visual perfect square model.</p> <p>Solve linear equations given a word problem.</p> <p>Identify perfect squares within 100.</p> <p>Simplify an expression with like terms.</p> <p>Identify outputs when given the function and two or more inputs.</p> <p>Complete one or more ordered pairs when given inputs.</p>	<p>Generate a visual square model that shows the square root of a perfect square is the length of one of the sides using sketches, objects, or pre-printed materials.</p> <p>Solve real-world or mathematical linear equations involving addition or multiplication.</p> <p>Graph one input and corresponding output on a coordinate plane.</p> <p>Identify a function as linear or not linear after graphing given points.</p>

			Identify the outputs of a given linear and non-linear function.	
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