



**Achievement Level Descriptors**  
**for**  
**Grade 4 Mathematics**

Georgia Department of Education  
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*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.
	4.OA.1 4.OA.2 4.OA.3 4.OA.4 4.OA.5	Solves single-step word problems by adding, subtracting, and multiplying and finds all factor pairs to 24.	Solves single-step word problems by multiplying and dividing with whole-number factors, products, dividends, divisors, and quotients; finds all factor pairs to 48; and identifies the next term in a number or shape pattern.	Interprets multiplication equations and uses them to solve multistep word problems using the four operations, finds factor pairs, identifies the rule for number and shape patterns, interprets remainders, and uses strategies to assess the reasonableness of answers.	Interprets multiplication equations as comparisons and uses them to solve multistep word problems using the four operations, finds factor pairs, generates number and shape patterns that follow a given rule, and recognizes a remainder as a fractional part of the divisor.
	4.NBT.1 4.NBT.2 4.NBT.3 4.NBT.5 4.NBT.6	Adds and subtracts up to three digits, uses place value to read and write numbers, and illustrates and explains calculations when multiplying and dividing.	Adds and subtracts, finds whole-number quotients to two digits, uses place value to compare numbers, and reads and writes numbers and uses expanded form.	Adds, subtracts, and multiplies fluently; finds whole-number quotients to four digits; represents numbers in expanded form to 1000; uses place value to order and compare numbers; and recognizes whole-number patterns in base ten.	Adds, subtracts, multiplies, and divides fluently; uses place value to symbolically order and compare numbers; represents numbers in expanded form; rounds to specified place values; and explains whole-number patterns.

	<p>4.NF.1 4.NF.2 4.NF.3 4.NF.4 4.NF.5 4.NF.6</p>	<p>Compares fractions with like denominators and identifies tenths, both as fractions and as decimals, using visual models.</p>	<p>Compares fractions with like numerators or like denominators; identifies unit fractions; adds or subtracts fractions with like denominators; and identifies tenths and hundredths, both as fractions and as decimals, using visual models.</p>	<p>Understands and uses fraction equivalence, compares fractions symbolically, identifies unit fractions that compose fractions with numerators &gt;2, adds and subtracts fractions with like denominators, solves two-step word problems with addition and subtraction of fractions, multiplies fractions by whole numbers, solves word problems with multiplication of fractions by whole numbers, and finds equivalent fractions using tenths and hundredths and compares two decimals.</p>	<p>Understands and represents fraction equivalence, orders fractions symbolically, represents and decomposes fractions as a sum of unit fractions, adds and subtracts fractions and mixed numbers with like denominators, solves multistep word problems with addition and subtraction of fractions, represents and explains multiplication of fractions by whole numbers, solves multistep word problems with multiplication of fractions by whole numbers, and orders three or more decimals from least to greatest or greatest to least.</p>
	<p>4.MD.1 4.MD.2 4.MD.3 4.MD.4 4.MD.5 4.MD.6 4.MD.7 4.MD.8</p>	<p>Distinguishes between larger and smaller units of measurement by recognizing factors as units of conversion, identifies data from line plots in whole-number units, and recognizes angles.</p>	<p>Converts units of measurement using multiplication, draws line plots to represent data in whole-number units, recognizes angles are fractions of a circle and are measured in degrees, and finds the area of rectangles.</p>	<p>Solves two-step problems in measurement conversion using the four operations and application of formulas, draws line plots to represent data in fractions of a unit (<math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{8}</math>), solves two-step problems involving interpretation of data, recognizes angles are fractions of circles and are measured in degrees, solves addition and subtraction word problems involving angles, and finds the area of rectilinear figures.</p>	<p>Solves multistep problems in measurement conversion using and reversing the four operations and through the selection and application of formulas, draws line plots in fractions of a unit to represent data, solves multistep problems involving interpretation of data, and decomposes angles.</p>
	<p>4.G.1 4.G.2 4.G.3</p>	<p>Draws points and line segments, identifies two-dimensional shapes, and recognizes shapes with symmetry.</p>	<p>Draws points, lines, and angles and identifies them in two-dimensional shapes; classifies two-dimensional shapes; identifies different kinds of triangles; distinguishes between two-dimensional</p>	<p>Draws points, lines, line segments, rays, angles, and parallel and perpendicular lines and identifies them in two-dimensional shapes; classifies two-dimensional shapes based on the presence of geometric</p>	<p>Draws, defines, and interprets points, lines, line segments, rays, angles, and parallel and perpendicular lines and represents them in two-dimensional shapes; classifies two-dimensional figures based</p>

			shapes with and without symmetry; and identifies a line of symmetry.	characteristics; identifies right triangles; identifies lines of symmetry in two-dimensional shapes; and draws lines of symmetry.	on the presence or absence of geometric characteristics; identifies and generalizes right triangles; interprets symmetry as a characteristic of two-dimensional shapes; and provides nonexamples of two-dimensional shapes, given specific characteristics.
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