

Georgia Milestones Assessment System

Grade 6 Mathematics ASSESSMENT BLUEPRINT

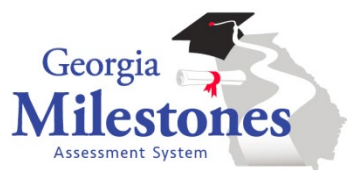
Claims, Targets, and Content Standards

Claims and Targets	Content Standards Assessed	Approximate # of Points
Numerical Reasoning		29
Solve relevant, mathematical problems involving operations with whole numbers, fractions, and decimal numbers.	6.NR.1	6
Apply operations with whole numbers, fractions, and decimals within relevant applications.	6.NR.2	8
Solve a variety of problems involving whole numbers and their opposites; model rational numbers on a number line to describe problems presented in relevant, mathematical situations.	6.NR.3	7
Solve a variety of contextual problems involving ratios, unit rates, equivalent ratios, percentages, and conversions within measurement systems using proportional reasoning.	6.NR.4	8
Geometric & Spatial Reasoning		7
Solve relevant problems involving area, surface area, and volume.	6.GSR.5	7
Patterning & Algebraic Reasoning		22
Identify, write, evaluate, and interpret numerical and algebraic expressions as mathematical models to explain relevant situations.	6.PAR.6	8
Write and solve one-step equations and inequalities as mathematical models to explain authentic, realistic situations.	6.PAR.7	7
Graph rational numbers as points on the coordinate plane to represent and solve contextual, mathematical problems; draw polygons using the coordinates for their vertices and find the length of a side of a polygon.	6.PAR.8	7
Total		58

Depth of Knowledge

Depth of Knowledge (DOK) is measured on a scale of 1 to 4 and refers to the level of cognitive demand (different kinds of thinking) required to complete an assessment item. The following table shows the expectations of the four DOK levels on the Grade 6 Mathematics exam.

Depth of Knowledge	Approximate # of Points	Approximate % of Test
Level 1	12 to 17	20% to 30%
Level 2	32 to 38	55% to 65%
Level 3	6 to 12	10% to 20%
Level 4	N/A	N/A



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Assessment Design

Item Type	# of Items	# of Points
1-point Selected-Response and Technology-Enhanced ^{1, 2}	42	42
2-point Technology-Enhanced ¹	8	16
Field Test Items ³	5	0
Total⁴	55	58

¹ **Technology-Enhanced:** Possible variants of the technology-enhanced item types used for Mathematics include multiple-part selected-response, multiple-select, drag-and-drop, drop-down, graphing, and keypad-input.

² **1-point Selected-Response and Technology-Enhanced Items:** The ratio of selected-response to technology-enhanced items may vary. The target range of 1-point technology-enhanced items is 0 to 5.

³ **Field Test Items:** Field Test items may include 1-point selected-response, 1-point technology-enhanced, and 2-point technology-enhanced items.

⁴ **Total:** Of the 55 items, 50 contribute to the student's Mathematics score.

Mathematical Practices

Mathematical practices describe how students should engage with the mathematics content for their grade level. Developing these habits of mind builds students' capacity to become mathematical thinkers. These practices are embedded within items aligned to the mathematics content standards but are not reported as a separate reporting category.

Mathematical Practice	Expectation
Make sense of problems and persevere in solving them.	6.MP.1
Reason abstractly and quantitatively.	6.MP.2
Construct viable arguments and critique the reasoning of others.	6.MP.3
Model with mathematics.	6.MP.4
Use appropriate tools strategically.	6.MP.5
Attend to precision.	6.MP.6
Look for and make use of structure.	6.MP.7
Look for and express regularity in repeated reasoning.	6.MP.8