

This High-Level Blueprint describes the structure and content of the Maryland Comprehensive Assessment Program (MCAP) Grade 6 Mathematics Assessment by subclaim.

## Content Subclaim

The MCAP Grade 6 assessment contains 23 operational items designed to elicit evidence to support the Content Subclaim. Content Subclaim items are worth 1-point, are machine scored, and align to the Grade 6 evidence statements. Refer to the MCAP Grade 6 Evidence Statement document for more information on the content evidence statements.

### Domain: Ratios and Proportional Relationships

Number of items: 3

Code	Cluster
6.RP.A	Understand ratio concepts and use ratio reasoning to solve problems.

### Domain: The Number System

Number of items: 8

Code	Cluster
6.NS.A	Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
6.NS.B	Compute fluently with multi-digit numbers and find common factors and multiples.
6.NS.C	Apply and extend previous understandings for numbers to the system of rational numbers.

### Domain: Expressions and Equations

Number of items: 8

Code	Cluster
6.EE.A	Apply and extend previous understandings of arithmetic to algebraic expressions.
6.EE.B	Reason about and solve one-variable equations and inequalities.
6.EE.C	Represent and analyze quantitative relationships between dependent and independent variables.

### Domain: Geometry

Number of items: 2

Code	Domain & Cluster
6.G.A	Solve real-world and mathematical problems involving area, surface area, and volume.

**Domain: Statistics and Probability****Number of items: 2**

Code	Domain & Cluster
6.SP.A	Develop understanding of statistical variability.
6.SP.B	Summarize and describe distributions.

**Total number of Operational Items: 23**

## Reasoning Subclaim

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The MCAP Grade 6 assessment includes 6 operational items that elicit evidence to support the Reasoning Subclaim. Each assessment includes machine-scored and human-scored (constructed response) reasoning items. The content focus for all reasoning items is based on the content clusters. Refer to the MCAP Grade 6 Evidence Statements document for more information on the reasoning evidence statements.

**Evidence Statements**

- 6.R.1 Reasoning with Ratios and Proportional Relationships
- 6.R.2 Reasoning with Number Systems
- 6.R.3 Reasoning with Expressions and Equations

**Number of Machine Scored Items – Four (4) 1-point items****Number of Constructed Response Items – One 3-point item and one 4-point item**

## Modeling Subclaim

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The MCAP Grade 6 assessment includes 6 operational items that elicit evidence to support the Modeling Subclaim. Each assessment includes machine-scored and human-scored (constructed response) modeling items. Modeling items may address any of the Grade 6 evidence statements. Refer to the MCAP Grade 6 Evidence Statement document for more information on the modeling evidence statements.

### Evidence Statements

- 6.M.1 Choose and produce appropriate mathematics to model quantities and mathematical relationships in order to analyze situations, make predictions, solve multi-step problems, and draw conclusions.
- 6.M.2 Given a real-world situation, identify the problem that needs to be solved, make necessary assumptions, and identify important information.
- 6.M.3 Given real-world situation, formulate a mathematical representation of the problem.
- 6.M.4 Given a real-world situation, use mathematical models to compute and draw conclusions.
- 6.M.5 Given a real-world situation, interpret what a solution means within the context of the situation.
- 6.M.6 Given a real-world situation, evaluate and/or validate a partial or complete solution.

### Number of Machine Scored Items – Four (4) 1-point items

### Number of Constructed Response Items – One 3-point item and one 4-point item