

This High-Level Blueprint describes the structure and content of the Maryland Comprehensive Assessment Program (MCAP) Grade 7 Mathematics Assessment by subclaim.

Content Subclaim

The MCAP Grade 7 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 7 evidence statements. Refer to the MCAP Grade 7 Evidence Statement document for more information on the content evidence statements.

Domain: Ratios and Proportional Relationships

Number of items: 8

Code	Cluster
7.RP.A	Analyze proportional relationships and use them to solve real-world and mathematical problems.

Domain: The Number System

Number of items: 4

Code	Cluster
7.NS.A	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

Domain: Equations and Expressions

Number of items: 5

Code	Cluster
7.EE.A	Use properties of operations to generate equivalent expressions.
7.EE.B	Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Domain: Geometry

Number of items: 3

Code	Domain & Cluster
7.G.A	Draw, construct, and describe geometric figures and describe the relationships between them.
7.G.B	Solve real-world and mathematical problems involving angle measure, area, surface area, and volume.

Domain: Statistics and Probability

Number of items: 3

Code	Domain & Cluster
7.SP.A	Use random sampling to draw inferences about a population.
7.SP.B	Draw informal comparative inferences about two populations.
7.SP.C	Investigate chance processes and develop, use, and evaluate probability models.

Total number of Operational Items: 23

Total Number of Points : 23

Reasoning Subclaim

The MCAP Grade 7 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 7 Evidence Statements document for more information on the reasoning evidence statements.

Evidence Statements

- 7.R.1 Reasoning with Ratios and Proportional Relationships
- 7.R.2 Reasoning with Number Systems
- 7.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

Total Number of Points: 11

Modeling Subclaim

The MCAP Grade 7 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 7 evidence statements. Refer to the MCAP Grade 7 Evidence Statement document for more information on the modeling evidence statements.

Evidence Statements

- 7.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.
- 7.M.2 Given a real-world situation, identify the problem that needs to be solved, make necessary assumptions, and identify important information.
- 7.M.3 Given real-world situation, formulate a mathematical representation of the problem.
- 7.M.4 Given a real-world situation, use mathematical models to compute and draw conclusions.
- 7.M.5 Given a real-world situation, interpret what a solution means within the context of the situation.
- 7.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

Total Number of Points: 11