MCAP Grade 6 Mathematics

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 <br> 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 <br> 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 <br> 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. |


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

## Total number of Operational Items: 23

## Total Number of Points : $\mathbf{2 3}$

## Reasoning Subclaim

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
Total Number of Points: 11

## Modeling Subclaim

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. $1 \quad$ 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

Total Number of Points: 11

