



MCAS Test Information for Grades 3-8 Mathematics

This document describes the MCAS Math test designs for grades 3-8, including question types, and other information related to the mathematics tests.

Standards Assessed

The MCAS Grades 3-8 Mathematics tests are aligned to the [2017 Massachusetts Mathematics Curriculum Framework](#).

Number of Sessions and Calculator Use

All mathematics tests have two sessions.

Grades 3–6: No calculators are allowed for either session.

Grades 7–8: In Session 1, no calculators are allowed.

In Session 2, calculators are allowed.

Question Types

The following table contains information about the question types on the tests.

Question Type	Total Points	Grade Levels
Multiple Choice <i>Students select one correct answer from among several answer options.</i>	1	Grades 3–8
Multiple Select <i>Students select more than one correct answer from among several answer options.</i>	1	Grades 3–8
Technology Enhanced <i>Students taking the computer-based tests answer questions using technology such as drag-and-drop and hot spot.</i>	1	Grade 3
	1 or 2	Grades 4–8
Short Answer/Fill-in-the-Blank <i>Students construct a short written response, typically only a word or a number.</i>	1	Grades 3–8
Constructed Response <i>Students write a response to a multi-part item that includes calculations and explanations to a problem or set of problems.</i>	3	Grade 3
	4	Grades 4–8

Test Design

Each test includes both common and matrix questions. Common questions count toward a student's score, while matrix questions consist of both field-test and equating questions and do not count toward a student's score.

Common Questions

Students will complete a range of question types as described above. Information about the number of questions by points is in the table below.

Grade	Number of 1- Point Questions	Number of 2-point Questions	Number of Constructed Response Questions	Total Points on Tests
3	36	0	4	48
4-8	34	2	4	54

The reporting category percentages by grade are in the tables below.

Reporting Category Percentages (+/-5%) for Grades 3-5			
	Grade 3	Grade 4	Grade 5
Operations & Algebraic Thinking	30%	20%	15%
Number & Operations in Base Ten	15%	20%	30%
Number & Operations-Fractions	20%	30%	25%
Measurement & Data	25%	20%	20%
Geometry	10%	10%	10%

Reporting Category Percentages (+/-5%) for Grades 6-7		
	Grade 6	Grade 7
Ratios & Proportional Relationships	20%	20%
The Number System	20%	20%
Expressions & Equations	30%	25%
Geometry	15%	15%
Statistics & Probability	15%	20%

Reporting Category Percentages (+/-5%) for Grade 8	
The Number System and Expressions & Equations	40%
Functions	20%
Geometry	30%
Statistics & Probability	10%

Matrix Questions

In addition to common questions, students will answer matrix (field test and equating) questions which will vary by grade:

- Students in grades 3 will answer three additional 1-point questions and one additional constructed-response question.
- Students in grades 4–6 will answer three additional 1- or 2-point questions and one additional constructed -response question.
- Students in grades 7–8 will answer four additional 1- or 2-point questions and two additional constructed -response questions.