

Computer-Based Released Items Grade 6 MCAS Mathematics Spring 2026

The spring 2026 grade 6 Mathematics test was administered in two formats: a computer-based version and a paper-based version. Most students took the computer-based test. The paper-based test was offered as an accommodation for eligible students who were unable to use a computer. More information can be found on the MCAS Test Administration Resources page at www.doe.mass.edu/mcas/admin.html.

The Department of Elementary and Secondary Education is releasing items from both versions of the test to provide information about the knowledge and skills that students are expected to demonstrate.

- Released items from the computer-based test are available online at mcas.onlinehelp.cognia.org/released-items.
- Released items from the paper-based test are available in PDF format on the Department's website at www.doe.mass.edu/mcas/release.html.

This document provides information about each released and unreleased operational item from the computer-based test, including the following: reporting category, standard covered, item type, item description, and correct answer (for released selected-response and short-answer items only). Sample responses and scoring guidelines for constructed-response items will be posted at www.doe.mass.edu/mcas/student/default.html.

A Note about Testing Mode

Most of the operational items on the grade 6 Mathematics test were the same, regardless of whether a student took the computer-based version or the paper-based version. In places where a technology-enhanced item was used on the computer-based test, an adapted version of the item was created for use on the paper test. These adapted paper items were multiple-choice or multiple-select items that tested the same Mathematics content and assessed the same standard as the technology-enhanced item.

Grade 6 Mathematics
Spring 2026 Computer-Based Released Operational Items

CBT Item No.	Reporting Category	Standard	Item Type*	Item Description	Correct Answer **
1	<i>Expressions and Equations</i>	6.EE.B.6	SR	Identify an expression with a variable that represents a given real-world context.	B
2	<i>The Number System</i>	6.NS.B.3	SA	Subtract decimals to thousandths.	412.464
3	<i>Ratios and Proportional Relationships</i>	6.RP.A.1	SR	Determine whether descriptions of part:part and part:whole ratios are true given a real-world context.	see page 6
4	<i>Ratios and Proportional Relationships</i>	6.RP.A.2	SA	Determine the unit rate given a real-world context.	.75
5	<i>Geometry</i>	6.G.A.3	SR	Determine the type of a polygon given the coordinates of its vertices.	C
6	<i>Expressions and Equations</i>	6.EE.C.9	SR	Choose a two-variable equation that best represents a given real-world context shown in a graph.	C
7	<i>Geometry</i>	6.G.A.4	CR	Identify a three-dimensional figure from its net and find the surface area of that figure in the context of a real-world problem.	
8	<i>Ratios and Proportional Relationships</i>	6.RP.A.1	SR	Determine which part:part or part:whole ratio represents a given real-world situation.	B
9	<i>Expressions and Equations</i>	6.EE.B.8	SA	Create an inequality that represents a real-world problem and graph the solution set on a number line.	see page 6
10	<i>Geometry</i>	6.G.A.1	SR	Decompose a figure into triangles and squares to solve a mathematical problem involving area.	B
11	<i>Ratios and Proportional Relationships</i>	6.RP.A.3	SR	Solve a ratio problem using conversion of units within a measurement system.	C
12	<i>Expressions and Equations</i>	6.EE.B.5	SR	Determine which values of a variable will make an inequality true.	D,E
13	<i>Expressions and Equations</i>	6.EE.A.1	SR	Determine which expression involving a whole-number exponent is equivalent to a given multi-digit whole number.	C
14	<i>Statistics and Probability</i>	6.SP.B.5	CR	Determine and compare measures of center and variability given a data set and a real-world situation.	
15	<i>The Number System</i>	6.NS.C.5	SR	Solve a real-world problem involving positive and negative whole numbers.	B

16	<i>Expressions and Equations</i>	6.EE.A.4	SR	Identify which expression is equivalent to a given variable expression.	B
17	<i>Ratios and Proportional Relationships</i>	6.RP.A.3	SR	Determine the unit rate and equivalent ratios in a real-world situation.	see page 6
18	<i>Expressions and Equations</i>	6.EE.A.3	SR	Use the distributive property to determine which expression is equivalent to a given variable expression.	A
19	<i>Geometry</i>	6.G.A.2	SR	Find the volume of a cube with an edge length expressed as a mixed number.	B
20	<i>Geometry</i>	6.G.A.1	SR	Determine which expressions can be used to find the total area of a figure.	A,D

*Mathematics item types are selected-response (SR), short-answer (SA), and constructed-response (CR).

**Answers are provided here for selected-response and short-answer items only. Page 6 of this document provides correct answers for technology-enhanced (TE) items. Sample responses and scoring guidelines for constructed-response items will be posted at www.doe.mass.edu/mcas/student/default.html.

Grade 6 Mathematics
Spring 2026 Computer-Based Unreleased Operational Items

CBT Item No.	Reporting Category	Standard	Item Type	Item Description
21	<i>Ratios and Proportional Relationships</i>	6.RP.A.2	SR	Determine the unit cost in a real-world situation.
22	<i>The Number System</i>	6.NS.C.8	SA	Plot a point that is a specific distance away from a given point on a coordinate plane.
23	<i>Statistics and Probability</i>	6.SP.A.1	SR	Recognize a statistical question and explain why something is or is not a statistical question.
24	<i>The Number System</i>	6.NS.A.1	CR	Solve real-world problems by interpreting and using quotients of fractions, using geometry as a context.
25	<i>The Number System</i>	6.NS.C.7	SA	Find the absolute value of a number.
26	<i>Expressions and Equations</i>	6.EE.A.2	SR	Choose which mathematical expressions represent a word description.
27	<i>The Number System</i>	6.NS.C.6	SA	Plot a negative mixed number on a number line.
28	<i>Expressions and Equations</i>	6.EE.A.3	SR	Determine which expressions are equivalent to a given expression with one variable.
29	<i>Statistics and Probability</i>	6.SP.A.2	SR	Given a set of data in a dot plot, identify the mode and the range of the data.
30	<i>Expressions and Equations</i>	6.EE.B.5	SR	Use substitution to determine if values given in a table are solutions of a 2-step inequality.
31	<i>Ratios and Proportional Relationships</i>	6.RP.A.2	SR	Determine the unit rate in a given real-world context.
32	<i>The Number System</i>	6.NS.B.2	SA	Divide multi-digit whole numbers within a real-world context.
33	<i>Expressions and Equations</i>	6.EE.B.7	CR	Write and solve whole number equations that model a real-world problem.
34	<i>Statistics and Probability</i>	6.SP.A.2	SR	Given a set of data, determine which sentence about the median and the range is true.
35	<i>Ratios and Proportional Relationships</i>	6.RP.A.3	SA	Use ratio relationships to solve a real-world problem.
36	<i>Statistics and Probability</i>	6.SP.B.4	SR	Choose whether statements are true or false based on data represented in a histogram.
37	<i>Ratios and Proportional Relationships</i>	6.RP.A.1	SR	Select part:part and part:whole ratios to describe given ratio relationships.
38	<i>The Number System</i>	6.NS.B.4	SR	Use the distributive property and the greatest common factor to write an expression that represents a real-world problem.

39	<i>Ratios and Proportional Relationships</i>	6.RP.A.2	SR	Identify three unit rates.
40	<i>Expressions and Equations</i>	6.EE.A.4	SR	Determine which expression is equivalent to a given variable expression.

* Mathematics item types are selected-response (SR), short-answer (SA), and constructed-response (CR).

Correct Answer for CBT Item #3: Technology-Enhanced Item

Statement	True	False
The ratio of orange beads to pink beads is 4:2 .	☐	☒
The ratio of pink beads to orange beads is 2:1 .	☒	☐
The ratio of pink beads to the total number of beads is 4:6 .	☒	☐

Correct Answer for CBT Item #9: Technology-Enhanced Item

Part A

$$3 \cdot 12 < x$$

Part B



Correct Answer for CBT Item #17: Technology-Enhanced Item

In **3** hours, the carpenter can make birdhouses. In **5.5** hours, the carpenter can make birdhouses.