



## Mississippi Academic Assessment Program (MAAP)

# MATHEMATICS

### Updated Blueprints

[Algebra I](#)

[Grade 8](#)

[Grade 7](#)

[Grade 6](#)

[Grade 5](#)

[Grade 4](#)

[Grade 3](#)

[Mississippi College- and Career-Readiness Standards for Mathematics \(2016\)](#)

MISSISSIPPI DEPARTMENT OF EDUCATION

**Carey M. Wright, Ed.D.**

State Superintendent of Education

**Paula Vanderford, Ph.D.**

Chief Accountability Officer

**Jackie Sampsell, Ed.D.**

Student Assessment Director, Office of  
Student Assessment

**Libby Cook**

MAAP Program Coordinator &  
Mathematics Content Specialist, Office of  
Student Assessment

**Melissa Beck**

Assessment Coordinator (K-3) &  
Literacy Content Specialist, Office of  
Student Assessment

The Mississippi State Board of Education, the Mississippi Department of Education, the Mississippi School for the Arts, the Mississippi School for the Blind, the Mississippi School for the Deaf, and the Mississippi School for Mathematics and Science do not discriminate on the basis of race, sex, color, religion, national origin, age, or disability in the provision of educational programs and services or employment opportunities and benefits. The following office has been designated to handle inquiries and complaints regarding the non-discrimination policies of the above-mentioned entities: Director, Office of Human Resources, Mississippi Department of Education, 359 North West Street, P.O. Box 771, Jackson, MS 39205-0771, (601) 359-3513.

**Mississippi Department of Education**

359 North West Street

P. O. Box 771

Jackson, Mississippi 39205-0771

(601) 359-3513

[www.mdek12.org](http://www.mdek12.org)

# MAAP

## Assessment Blueprint

### ALGEBRA I

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>Number and Quantity (N)</b>	N-RN (3) N-Q (1, 2, 3)*		<b>5-9%</b>
<b>Algebra (A)</b>	A-SSE (1*, 2, 3*) A-APR (1, 3) A-CED (1, 2, 3, 4)* A-REI (1, 3, 4, 5, 6, 10, 11*, 12)		<b>46-55%</b>
<b>Functions (F)</b>	F-IF (1, 2, 3, 4*, 5*, 6*, 7*, 8, 9) F-BF (1*, 3) F-LE (1, 2, 5)*		<b>31-38%</b>
<b>Statistics and Probability (S)</b>	S-ID (1, 2, 3, 5, 6, 7, 8, 9)*		<b>9-12%</b>
<b>Operational Items</b>	<b>60</b>	<b>Total Points</b>	<b>65</b>
Field Test Items	10	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>70</b>		

Note\*: Modeling Standards

#### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 70% Multiple Choice Single Select (MCSS) items and the remaining 30% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

## Assessment Blueprint

# MATHEMATICS GRADE 8

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>The Number System (NS)</b>	8.NS (1, 2)		<b>9-14%</b>
<b>Expressions and Equations (EE)</b>	8.EE (1, 2, 3, 4, 5, 6, 7, 8)		<b>26-34%</b>
<b>Functions (F)<sup>1</sup></b>	8.F (1, 2, 3, 4, 5)		<b>17-23%</b>
<b>Geometry (G)</b>	8.G (1, 2, 3, 4, 5, 6, 7, 8, 9)		<b>26-34%</b>
<b>Statistics and Probability (SP)</b>	8.SP (1, 2, 3, 4)		<b>9-14%</b>
<b>Operational Items</b>	<b>61</b>	<b>Total Points</b>	<b>65</b>
Field Test Items	10	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>71</b>		

Note<sup>1</sup>: Function notation is not taught in Grade 8.

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

# MAAP

## Assessment Blueprint

# MATHEMATICS GRADE 7

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>Ratios and Proportional Relationships (RP)</b>	7.RP (1, 2, 3)		<b>12-17%</b>
<b>The Number System (NS)</b>	7.NS (1, 2, 3 <sup>1</sup> )		<b>15-18%</b>
<b>Expressions and Equations (EE)</b>	7.EE (1, 2, 3, 4)		<b>17-23%</b>
<b>Geometry (G)</b>	7.G (1, 2, 3, 4, 5, 6)		<b>18-25%</b>
<b>Statistics and Probability (SP)</b>	7.SP (1, 2, 3, 4, 5, 6, 7, 8)		<b>22-31%</b>
<b>Operational Items</b>	<b>61</b>	<b>Total Points</b>	<b>65</b>
Field Test Items	10	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>71</b>		

Note<sup>1</sup>: Computations with rational numbers extend the rules for manipulating fractions to complex fractions.

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

## Assessment Blueprint

# MATHEMATICS GRADE 6

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>Ratios and Proportional Relationships (RP)</b>	6.RP (1, 2 <sup>1</sup> , 3)		<b>12-17%</b>
<b>The Number System (NS)</b>	6.NS (1, 2, 3, 4, 5, 6, 7, 8, 9)		<b>26-34%</b>
<b>Expressions and Equations (EE)</b>	6.EE (1, 2, 3, 4, 5, 6, 7, 8, 9)		<b>31-38%</b>
<b>Geometry (G)</b>	6.G (1, 2, 3, 4)		<b>9-14%</b>
<b>Statistics and Probability (SP)</b>	6.SP (1, 2, 3, 4, 5)		<b>11-14%</b>
<b>Operational Items</b>	<b>61</b>	<b>Total Points</b>	<b>65</b>
Field Test Items	10	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>71</b>		

Note<sup>1</sup>: Expectations for unit rates in this grade are limited to non-complex fractions.

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

## Assessment Blueprint

# MATHEMATICS GRADE 5

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
Operations and Algebraic Thinking (OA)	5.OA (1, 2, 3)		13-17%
Number and Operations in Base Ten (NBT)	5.NBT (1, 2, 3, 4, 5, 6, 7)		25-33%
Number and Operations—Fractions (NF)	5.NF (1, 2, 3, 4, 5, 6, 7 <sup>1</sup> )		25-33%
Measurement and Data (MD)	5.MD (1, 2, 3, 4, 5)		13-17%
Geometry (G)	5.G (1, 2, 3, 4)		12-17%
Operational Items	49	Total Points	52
Field Test Items	9	Total Testing Time	180 Minutes (3 Hours)
Total Items	58		

Note<sup>1</sup>: Division of a fraction by a fraction is not a requirement at this grade

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

## Assessment Blueprint

# MATHEMATICS GRADE 4

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>Operations and Algebraic Thinking (OA)</b>	4.OA (1, 2, 3, 4, 5)		<b>17 -25%</b>
<b>Number and Operations in Base Ten (NBT)<sup>1</sup></b>	4.NBT (1, 2, 3, 4, 5, 6)		<b>21-29%</b>
<b>Number and Operations—Fractions (NF)<sup>2</sup></b>	4.NF (1, 2, 3, 4, 5, 6, 7)		<b>21-29%</b>
<b>Measurement and Data (MD)</b>	4.MD (1, 2, 3, 4, 5, 6, 7)		<b>15 -23%</b>
<b>Geometry (G)</b>	4.G (1, 2, 3)		<b>6-12%</b>
<b>Operational Items</b>	<b>49</b>	<b>Total Points</b>	<b>52</b>
<b>Field Test Items</b>	<b>9</b>	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>58</b>		

Note<sup>1</sup>: Limited to whole numbers less than or equal to 1,000,000.

Note<sup>2</sup>: Limited to denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.

## Assessment Blueprint MATHEMATICS GRADE 3

This blueprint describes the content and structure of an assessment and defines the ideal percentage of operational test items by reporting category for the Mississippi Academic Assessment Program (MAAP). **Starting with the 2021-2022 school year, the mathematics assessments will only have one (1) session.**

Reporting Category	Mississippi College- and Career-Readiness Standards Available for Assessment		Percentage of Points by Reporting Category
<b>Operations and Algebraic Thinking (OA)</b>	3.OA (1, 2, 3, 4, 5, 6, 7, 8 <sup>1</sup> , 9)		<b>37-46%</b>
<b>Number and Operations in Base Ten (NBT)</b>	3.NBT (1, 2, 3)		<b>12-17%</b>
<b>Number and Operations—Fractions (NF)<sup>2</sup></b>	3.NF (1, 2, 3)		<b>13-19%</b>
<b>Measurement and Data (MD)</b>	3.MD (1, 2, 3, 4, 5, 6, 7, 8)		<b>21-29%</b>
<b>Geometry (G)</b>	3.G (1, 2)		<b>4-12%</b>
<b>Operational Items</b>	<b>49</b>	<b>Total Points</b>	<b>52</b>
Field Test Items	9	<b>Total Testing Time</b>	<b>180 Minutes (3 Hours)</b>
<b>Total Items</b>	<b>58</b>		

Note<sup>1</sup>: Limited to problems posed with whole numbers and having whole-number answers.

Note<sup>2</sup>: Limited to fractions with denominators 2, 3, 4, 6, and 8.

### Operational Form Development Notes:

- The Depth of Knowledge (DOK) level of items across the operational test form will be tracked to have as much variety as possible. The goal is for 75% of the items on the form to be DOK level 2 and approximately 25% of the items on the form to be DOK level 1 and DOK level 3. However, we recognize that standard distribution, item types, and item statistics take priority when building the form.
- The goal is for the form to contain approximately 75-80% Multiple Choice Single Select (MCSS) items and the remaining 20-25% of the items will be Multiple Choice Multiple Select (MCMS), Match, Numeric Entry, Grid, and Composite Item Types.
- The operational form will be built to ensure that at least 75% of the standards in a reporting category will be assessed each year.