

### Grade 3 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Operations, Algebraic Thinking, and Numbers in Base Ten</b>	MAFS.3.OA.1.1	48
	MAFS.3.OA.1.2	
	MAFS.3.OA.1.3	
	MAFS.3.OA.1.4	
	MAFS.3.OA.2.5	
	MAFS.3.OA.2.6	
	MAFS.3.OA.3.7	
	MAFS.3.OA.4.8	
	MAFS.3.OA.4.9	
	MAFS.3.NBT.1.1	
	MAFS.3.NBT.1.2	
	MAFS.3.NBT.1.3	
<b>Numbers and Operations - Fractions</b>	MAFS.3.NF.1.1 Also Assesses MAFS.3.G.1.2	17
	MAFS.3.NF.1.2	
	MAFS.3.NF.1.3	
<b>Measurement, Data, and Geometry</b>	MAFS.3.MD.1.1	35
	MAFS.3.MD.1.2	
	MAFS.3.MD.2.3	
	MAFS.3.MD.2.4	
	MAFS.3.MD.3.7 Also Assesses MAFS.3.MD.3.5 and MAFS.3.MD.3.6	
	MAFS.3.MD.4.8	
	MAFS.3.G.1.1	
<b>Total Standard Groupings</b>	22	100

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Grade 4 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Operations and Algebraic Thinking</b>	MAFS.4.OA.1.3	21
	MAFS.4.OA.1.1	
	MAFS.4.OA.1.2	
	MAFS.4.OA.2.4	
	MAFS.4.OA.3.5	
	MAFS.4.OA.1.b Also Assesses MAFS.4.OA.1.a	
<b>Numbers and Operations in Base Ten</b>	MAFS.4.NBT.1.1	21
	MAFS.4.NBT.1.2	
	MAFS.4.NBT.1.3	
	MAFS.4.NBT.2.4	
	MAFS.4.NBT.2.5	
	MAFS.4.NBT.2.6	
<b>Numbers and Operations – Fractions</b>	MAFS.4.NF.1.1	25
	MAFS.4.NF.1.2	
	MAFS.4.NF.2.3	
	MAFS.4.NF.2.4	
	MAFS.4.NF.3.5	
	MAFS.4.NF.3.6	
	MAFS.4.NF.3.7	
<b>Measurement, Data, and Geometry</b>	MAFS.4.MD.1.1	33
	MAFS.4.MD.1.2	
	MAFS.4.MD.1.3	
	MAFS.4.MD.2.4	
	MAFS.4.MD.3.5 Also Assesses MAFS.4.MD.3.6	
	MAFS.4.MD.3.7	
	MAFS.4.G.1.1	
	MAFS.4.G.1.2	
	MAFS.4.G.1.3	
<b>Total Standard Groupings</b>	28	100

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Grade 5 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Operations, Algebraic Thinking, and Fractions</b>	MAFS.5.OA.1.1	39
	MAFS.5.OA.1.2	
	MAFS.5.OA.2.3	
	MAFS.5.NF.1.1	
	MAFS.5.NF.1.2	
	MAFS.5.NF.2.3	
	MAFS.5.NF.2.4 Also Assesses MAFS.5.NF.2.6	
	MAFS.5.NF.2.5	
	MAFS.5.NF.2.7	
<b>Numbers and Operations in Base Ten</b>	MAFS.5.NBT.1.1	28
	MAFS.5.NBT.1.2	
	MAFS.5.NBT.1.3	
	MAFS.5.NBT.1.4	
	MAFS.5.NBT.2.5	
	MAFS.5.NBT.2.6	
	MAFS.5.NBT.2.7	
<b>Measurement, Data, and Geometry</b>	MAFS.5.MD.1.1	33
	MAFS.5.MD.2.2	
	MAFS.5.MD.3.3 Also Assesses MAFS.5.MD.3.4	
	MAFS.5.MD.3.5	
	MAFS.5.G.1.1 Also Assesses MAFS.5.G.1.2	
	MAFS.5.G.2.3 Also Assesses MAFS.5.G.2.4	
<b>Total Standard Groupings</b>	22	100

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Grade 6 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Ratio and Proportional Relationships</b>	MAFS.6.RP.1.1	15%
	MAFS.6.RP.1.2	
	MAFS.6.RP.1.3	
<b>Expressions and Equations</b>	MAFS.6.EE.1.1	30%
	MAFS.6.EE.1.2	
	MAFS.6.EE.1.3	
	MAFS.6.EE.1.4	
	MAFS.6.EE.2.5	
	MAFS.6.EE.2.6	
	MAFS.6.EE.2.7	
	MAFS.6.EE.2.8	
	MAFS.6.EE.3.9	
<b>Geometry</b>	MAFS.6.G.1.1	15%
	MAFS.6.G.1.2	
	MAFS.6.G.1.3	
	MAFS.6.G.1.4	
<b>Statistics &amp; Probability</b>	MAFS.6.SP.1.1	19%
	MAFS.6.SP.1.2	
	MAFS.6.SP.1.3	
	MAFS.6.SP.2.4	
	MAFS.6.SP.2.5	
<b>The Number System</b>	MAFS.6.NS.1.1	21%
	MAFS.6.NS.2.2	
	MAFS.6.NS.2.3	
	MAFS.6.NS.2.4	
	MAFS.6.NS.3.5	
	MAFS.6.NS.3.6 Also Assesses MAFS.6.NS.3.8	
	MAFS.6.NS.3.7	
<b>Total Standard Groupings</b>	28	100%

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Grade 7 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Ratio and Proportional Relationships</b>	MAFS.7.RP.1.1	25%
	MAFS.7.RP.1.2	
	MAFS.7.RP.1.3	
<b>Expressions and Equations</b>	MAFS.7.EE.1.1	21%
	MAFS.7.EE.1.2	
	MAFS.7.EE.2.3	
	MAFS.7.EE.2.4	
<b>Geometry</b>	MAFS.7.G.1.1	23%
	MAFS.7.G.1.2	
	MAFS.7.G.1.3	
	MAFS.7.G.2.4	
	MAFS.7.G.2.5	
	MAFS.7.G.2.6	
<b>Statistics and Probability</b>	MAFS.7.SP.1.2 Also Assesses MAFS.7.SP.1.1	16%
	MAFS.7.SP.2.4 Also Assesses MAFS.7.SP.2.3	
	MAFS.7.SP.3.5	
	MAFS.7.SP.3.6	
	MAFS.7.SP.3.7 Also Assesses MAFS.7.SP.3.8	
<b>The Number System</b>	MAFS.7.NS.1.1	15%
	MAFS.7.NS.1.2	
	MAFS.7.NS.1.3	
<b>Total Standard Groupings</b>	21	100%

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Grade 8 Mathematics Standards Coverage

Reporting Category	Standard	% of Test
<b>Expressions and Equations</b>	MAFS.8.EE.1.1	30%
	MAFS.8.EE.1.2	
	MAFS.8.EE.1.3	
	MAFS.8.EE.1.4	
	MAFS.8.EE.2.5	
	MAFS.8.EE.2.6	
	MAFS.8.EE.3.7	
	MAFS.8.EE.3.8	
<b>Functions</b>	MAFS.8.F.1.1	25%
	MAFS.8.F.1.2	
	MAFS.8.F.1.3	
	MAFS.8.F.2.4	
	MAFS.8.F.2.5	
<b>Geometry</b>	MAFS.8.G.1.2 Also Assesses MAFS.8.G.1.1	27%
	MAFS.8.G.1.3	
	MAFS.8.G.1.4 Also Assesses MAFS.8.G.1.1	
	MAFS.8.G.1.5	
	MAFS.8.G.2.6	
	MAFS.8.G.2.7 Also Assesses MAFS.8.G.2.8	
	MAFS.8.G.3.9	
<b>Statistics and Probability and The Number System</b>	MAFS.8.SP.1.1	18%
	MAFS.8.SP.1.2	
	MAFS.8.SP.1.3	
	MAFS.8.SP.1.4	
	MAFS.8.NS.1.1	
	MAFS.8.NS.1.2	
<b>Total Standard Groupings</b>	26	100%

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Algebra 1 EOC Standards Coverage

Reporting Category	Standard	% of Test
Algebra and Modeling	MAFS.912.A-APR.1.1	41%
	MAFS.912.A-CED.1.1 Also Assesses MAFS.912.A-REI.2.3 and MAFS.912.A-CED.1.4	
	MAFS.912.A-CED.1.2 Also Assesses MAFS.912.A-REI.3.5, MAFS.912.A-REI.3.6, and MAFS.912.A-REI.4.12	
	MAFS.912.A-CED.1.3	
	MAFS.912.A-REI.1.1	
	MAFS.912.A-REI.2.4	
	MAFS.912.A-REI.4.11 Also Assesses MAFS.912.A-REI.4.10	
MAFS.912.A-SSE.2.3 Also Assesses MAFS.912.A-SSE.1.1 and MAFS.912.A-SSE.1.2		
Functions and Modeling	MAFS.912.F-BF.2.3	40%
	MAFS.912.F-IF.1.2 Also Assesses MAFS.912.F-IF.1.1 and MAFS.912.F-IF.2.5	
	MAFS.912.F-IF.2.4 Also Assesses MAFS.912.F-IF.3.9	
	MAFS.912.F-IF.2.6 Also Assesses MAFS.912.S-ID.3.7	
	MAFS.912.F-IF.3.8 Also Assesses MAFS.912.A-APR.2.3 and MAFS.912.F-IF.3.7	
	MAFS.912.F-LE.1.1 Also Assesses MAFS.912.F-LE.2.5	
	MAFS.912.F-LE.1.2 Also Assesses MAFS.912.F-BF.1.1 and MAFS.912.F-IF.1.3	
	MAFS.912.F-LE.1.3	
Statistics and the Number System	MAFS.912.N-RN.1.2 Also Assesses MAFS.912.N-RN.2.3 and MAFS.912.N-RN.1.1	19%
	MAFS.912.S-ID.1.1	
	MAFS.912.S-ID.1.2 Also Assesses MAFS.912.S-ID.1.3	
	MAFS.912.S-ID.2.5	
	MAFS.912.S-ID.2.6 Also Assesses MAFS.912.S-ID.3.8 and MAFS.912.S-ID.3.9	
<b>Total Standard Groupings</b>	21	100%

**Number and Quantity:** MAFS.912.N-Q.1.1, MAFS.912.N-Q.1.2 and MAFS.912.N-Q.1.3 are assessed throughout.

Critical areas of focus were included in the determination of the percentage for each reporting category.

### Geometry EOC Standards Coverage

Reporting Category	Standard	% of Test
<b>Congruence, Similarity, Right Triangles, and Trigonometry</b>	MAFS.912.G-CO.1.1	46%
	MAFS.912.G-CO.1.2 Also Assesses MAFS.912.G-CO.1.4	
	MAFS.912.G-CO.1.5 Also Assesses MAFS.912.G-CO.1.3	
	MAFS.912.G-CO.2.6 Also Assesses MAFS.912.G-CO.2.7 and MAFS.912.G-CO.2.8	
	MAFS.912.G-CO.3.9	
	MAFS.912.G-CO.3.10	
	MAFS.912.G-CO.3.11	
	MAFS.912.G-CO.4.12 Also Assesses MAFS.912.G-CO.4.13	
	MAFS.912.G-SRT.1.1	
	MAFS.912.G-SRT.1.2	
	MAFS.912.G-SRT.1.3 Also Assesses MAFS.912.G-SRT.2.4	
	MAFS.912.G-SRT.2.5	
	MAFS.912.G-SRT.3.8 Also Assesses MAFS.912.G-SRT.3.6 and MAFS.912.G-SRT.3.7	
<b>Circles, Geometric Measurement, and Geometric Properties with Equations</b>	MAFS.912.G-C.1.1	38%
	MAFS.912.G-C.1.2	
	MAFS.912.G-C.1.3	
	MAFS.912.G-C.2.5	
	MAFS.912.G-GMD.1.1	
	MAFS.912.G-GMD.1.3	
	MAFS.912.G-GMD.2.4	
	MAFS.912.G-GPE.1.1	
	MAFS.912.G-GPE.2.4	
	MAFS.912.G-GPE.2.5	
	MAFS.912.G-GPE.2.6	
MAFS.912.G-GPE.2.7		
<b>Modeling with Geometry</b>	MAFS.912.G-MG.1.1	16%
	MAFS.912.G-MG.1.2	
	MAFS.912.G-MG.1.3	
<b>Total Standard Groupings</b>	28	100%

Critical areas of focus were included in the determination of the percentage for each reporting category.



### Algebra 2 EOC Standards Coverage

Reporting Category	Standard	% of Test
<b>Algebra and Modeling</b>	MAFS.912.A-APR.1.1 Also Assesses MAFS.912.A-APR.3.4	36%
	MAFS.912.A-APR.4.6 Also Assesses MAFS.912.A-APR.2.2	
	MAFS.912.A-CED.1.1 Also Assesses MAFS.912.A-REI.1.2 and MAFS.912.A-CED.1.4	
	MAFS.912.A-CED.1.2 Also Assesses MAFS.912.A-CED.1.3, MAFS.912.A-REI.3.6, and MAFS.912.A-REI.3.7	
	MAFS.912.A-REI.1.1	
	MAFS.912.A-REI.4.11	
	MAFS.912.A-SSE.2.3 Also Assesses MAFS.912.A-SSE.1.1 and MAFS.912.A-SSE.1.2	
	MAFS.912.N-CN.3.7 Also Assesses MAFS.912.A-REI.2.4	
	MAFS.912.G-GPE.1.2	
<b>Functions and Modeling</b>	MAFS.912.F-BF.1.2 Also Assesses MAFS.912.F-BF.1.1, and MAFS.912.A-SSE.2.4	36%
	MAFS.912.F-BF.2.3	
	MAFS.912.F-BF.2.4	
	MAFS.912.F-IF.2.4 Also Assesses MAFS.912.F-IF.3.9, MAFS.912.F-IF.2.5, and MAFS.912.F-LE.2.5	
	MAFS.912.F-IF.3.8 Also Assesses MAFS.912.A-APR.2.3, MAFS.912.F-IF.2.6, and MAFS.912.F-IF.3.7	
	MAFS.912.F-LE.1.4 Also Assesses MAFS.912.F-BF.2.a	
	MAFS.912.F-TF.1.2 Also Assesses MAFS.912.F-TF.1.1 and MAFS.912.F-TF.3.8	
	MAFS.912.F-TF.2.5	
<b>Statistics, Probability, and the Number System</b>	MAFS.912.N-CN.1.2 Also Assesses MAFS.912.N-CN.1.1	28%
	MAFS.912.N-RN.1.2 Also Assesses MAFS.912.N-RN.1.1	
	MAFS.912.S-CP.1.1	
	MAFS.912.S-CP.1.5 Also Assesses MAFS.912.S-CP.1.4, MAFS.912.S-CP.1.2, MAFS.912.S-CP.1.3, and MAFS.912.S-CP.2.6	
	MAFS.912.S-CP.2.7	
	MAFS.912.S-IC.1.1	
	MAFS.912.S-IC.2.3 Also Assesses MAFS.912.S-IC.2.4, MAFS.912.S-IC.2.5, MAFS.912.S-IC.1.2, and MAFS.912.S-IC.2.6	
	MAFS.912.S-ID.1.4	
<b>Total Standard Groupings</b>	25	100%

**Number and Quantity:** MAFS.912.N-Q.1.2 is assessed throughout.

Critical areas of focus were included in the determination of the percentage for each reporting category.

## Percentage of Points by Depth of Knowledge Level

Grade/Course	DOK Level 1	DOK Level 2	DOK Level 3
3–8	10%–20%	60%–80%	10%–20%
Algebra 1	10%–20%	60%–80%	10%–20%
Algebra 2	10%–20%	60%–80%	10%–20%
Geometry	10%–20%	60%–80%	10%–20%

## Test Length

*This table provides the approximate range for the number of items on each test.*

Grade/Course	Number of Items
3	60–64
4	60–64
5	60–64
6	62–66
7	62–66
8	62–66
Algebra 1	64–68
Algebra 2	64–68
Geometry	64–68

Note: Approximately 6–10 items on all of the tests listed above are experimental (field test) items and are included in the ranges above but are not included in students' scores.

## Sessions and Times

Grade/Course	Administration Time	Number of Sessions*	Computer-Based in 2015
3	160 minutes	2	No
4	160 minutes	2	No
5	160 minutes	2	Yes
6	180 minutes	3	Yes
7	180 minutes	3**	Yes
8	180 minutes	3**	Yes
Algebra 1	180 minutes	2**	Yes
Algebra 2	180 minutes	2**	Yes
Geometry	180 minutes	2**	Yes

\*All sessions are administered over two days.  
 \*\*Session 1 is the non-calculator portion of each assessment.

## Percentage of Computer-Based Test Composed of Technology-Enhanced Items

Grade/Course	Percentage Range
Grades 5-8 Mathematics*	25%–50%
Algebra 1, Geometry, Algebra 2 EOCs	40%–60%

\* Grades 3 and 4 Mathematics tests, once computer based, will also be composed of 25%–50% TEIs.

# Florida Standards Assessments

## Technology-Enhanced Item Descriptions

The Florida Standards Assessments (FSA) are composed of test items that include traditional multiple-choice items, items that require students to type or write a response, and technology-enhanced items (TEI). Technology-enhanced items are computer-delivered items that require students to interact with test content to select, construct, and/or support their answers.

Currently, there are nine types of TEIs that may appear on computer-based assessments for FSA Mathematics. For Grades 3 and 4 assessments, which will be paper-based tests in 2014-2015, and for students with an IEP or 504 plan that specifies a paper-based accommodation, TEIs will be modified or replaced with test items that can be scanned and scored electronically.

For samples of each of the item types described below, see the [FSA Training Tests](#).

### **Technology-Enhanced Item Types – Mathematics**

1. **Editing Task Choice** – The student clicks a highlighted word or phrase, which reveals a drop-down menu containing options for correcting an error as well as the highlighted word or phrase as it is shown in the sentence to indicate that no correction is needed. The student then selects the correct word or phrase from the drop-down menu. For paper-based assessments, the item is modified so that it can be scanned and scored electronically. The student fills in a circle to indicate the correct word or phrase.
2. **Editing Task** – The student clicks on a highlighted word or phrase that may be incorrect, which reveals a text box. The directions in the text box direct the student to replace the highlighted word or phrase with the correct word or phrase. For paper-based assessments, this item type may be replaced with another item type that assesses the same standard and can be scanned and scored electronically.
3. **Hot Text** –
  - a. **Selectable Hot Text** – Excerpted sentences from the text are presented in this item type. When the student hovers over certain words, phrases, or sentences, the options highlight. This indicates that the text is selectable (“hot”). The student can then click on an option to select it. For paper-based assessments, a “selectable” hot text item is modified so that it can be scanned and scored electronically. In this version, the student fills in a circle to indicate a selection.
  - b. **Drag-and-Drop Hot Text** – Certain numbers, words, phrases, or sentences may be designated “draggable” in this item type. When the student hovers over these areas, the text highlights. The student can then click on the option, hold down the mouse button, and drag it to a graphic or other format. For paper-based assessments, drag-and-drop hot text items will be replaced with another item type that assesses the same standard and can be scanned and scored electronically.

4. **Open Response** – The student uses the keyboard to enter a response into a text field. These items can usually be answered in a sentence or two. For paper-based assessments, this item type may be replaced with another item type that assesses the same standard and can be scanned and scored electronically.
5. **Multiselect** – The student is directed to select all of the correct answers from among a number of options. These items are different from multiple-choice items, which allow the student to select only one correct answer. These items appear in the online and paper-based assessments.
6. **Graphic Response Item Display (GRID)** – The student selects numbers, words, phrases, or images and uses the drag-and-drop feature to place them into a graphic. This item type may also require the student to use the point, line, or arrow tools to create a response on a graph. For paper-based assessments, this item type may be replaced with another item type that assesses the same standard and can be scanned and scored electronically.
7. **Equation Editor** – The student is presented with a toolbar that includes a variety of mathematical symbols that can be used to create a response. Responses may be in the form of a number, variable, expression, or equation, as appropriate to the test item. For paper-based assessments, this item type may be replaced with a modified version of the item that can be scanned and scored electronically or replaced with another item type that assesses the same standard and can be scanned and scored electronically.
8. **Matching Item** – The student checks a box to indicate if information from a column header matches information from a row. For paper-based assessments, this item type may be replaced with another item type that assesses the same standard and can be scanned and scored electronically.
9. **Table Item** – The student types numeric values into a given table. The student may complete the entire table or portions of the table depending on what is being asked. For paper-based assessments, this item type may be replaced with another item type that assesses the same standard and can be scanned and scored electronically.