Florida Reveal MATH™

Reveal the Full Potential in Every Student
Florida Reveal Math is built on four cornerstones of effective mathematics instruction that comprise the foundation of the program.

The principles of Florida Reveal Math are grounded in the latest research on how students learn best. The blended print and digital instructional model captures the best of both modalities and brings them together in a seamless experience that makes math meaningful for your students.

In-Depth Standards Coverage
Master the MAFS with rigorous instruction to ensure high achievement for students.

Targeted Instruction
Equip teachers with purposeful instruction, assessment, and differentiation tools to reach every student.

Active Classroom
Engage students with activities, technology, and discussions that bring math to life.

Student Mindset
Teach students that "I can" is the most powerful way to think.

Aligned print and digital content means teachers choose the most effective instructional pathway!
Reveal the Power and Possibility of Math!

*Florida Reveal Math* includes a wealth of print and digital resources that lead to mastery of the Mathematics Florida Standards.

**Interactive Student Edition, 2 volumes**
With the inviting and colorful write-in print Interactive Student Edition (ISE), students take ownership of their learning by interacting with the content. **The ISE is also available in Spanish for Grade 6, Grade 7, and Grade 8!**

**Teacher Edition, 2 volumes**
User-friendly tips in the Teacher Edition suggest when and how to integrate technology in a purposeful way.

**Language Development Handbook**
The Language Development Handbook provides graphic organizers and note-taking strategies to support the language development of all students, while the Teacher Edition provides specific tips for building English language proficiency.

**Student Digital Center**
The Student Digital Center includes engaging videos, animations, instructional content, assessments, and more – all in one place!

**Teacher Digital Center**
The Teacher Digital Center allows easy access to valuable and flexible resources for both core instruction and differentiation.
Florida Reveal Math addresses the rigor of the Mathematics Florida Standards through every lesson from start to finish. With the MAFS clearly labeled and fully integrated in the student and teacher materials, students don’t just meet the standards- they master them!

Focus
Domain: Geometry
Major Cluster(s): In this lesson, students address the major cluster MAFS.8.G.2 by solving problems using the Pythagorean Theorem.
Standards for Mathematical Content: MAFS.8.G.2.6, MAFS.8.G.2.7
Also addresses MAFS.8.EE.1.2
Standards for Mathematical Practice: MP1, MP2, MP3, MP4, MP5, MP6, MP7

Coherence
Vertical Alignment
Previous
Students examined relationships among the angles in a triangle. MAFS.8.G.1.5

Now
Students solve problems using the Pythagorean Theorem. MAFS.8.G.2.6, MAFS.8.G.2.7

Next
Students will solve problems using the converse of the Pythagorean Theorem. MAFS.8.G.2.6

Rigor
The Three Pillars of Rigor

<table>
<thead>
<tr>
<th>1 CONCEPTUAL UNDERSTANDING</th>
<th>2 FLUENCY</th>
<th>3 APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conceptual Bridge</td>
<td></td>
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</table>

In this lesson, students develop understanding of the Pythagorean Theorem and the relationship between the side lengths of right triangles. Students use this understanding to build fluency with finding missing side lengths of right triangles. They apply their fluency to solve real-world problems. Students also expand on their understanding by explaining a Proof of the Pythagorean Theorem.

Teaching the Mathematical Practices

2 Reason Abstractly and Quantitatively Encourage students to use the mathematics they know, finding the distance between two integers, to solve the real-world problem and to make sure their answer makes sense in the context of the problem.

3 Construct Viable Arguments and Critique the Reasoning of Others As students discuss the Talk About the Example question, encourage them to think logically as they reason about whether a negative answer makes sense.

Develop Habits of Mind with Standards for Mathematical Practices Tips

Strategies for Teaching the Mathematical Practices appear throughout the Teacher Edition to illustrate ways teachers can integrate the practices in their classroom in a practical and meaningful way.

Focus, Coherence, and Rigor

As a vertically aligned series, Florida Reveal Math links topics across grades to support the learning progressions of students. The Conceptual Bridge feature in the Teacher Edition helps teachers understand how students will develop essential critical thinking skills.
Rich Exploratory Tasks

In *Florida Reveal Math*, rich digital tasks appear in most lessons in the form of **Explore** activities—investigation-driven, complex tasks that nurture students’ innate curiosity. Students work individually, in pairs, or in small groups to share ideas and approaches with their peers, furthering their understanding through collaborative learning.

A Balanced Approach to Instruction

*Florida Reveal Math* addresses rigor through a **balanced math approach** with equal focus on conceptual understanding, fluency, and application. The practical and adaptable instructional model incorporates this approach to ensure students have the foundational understanding they need to master higher level thinking skills.

Performance Tasks

Multi-step performance tasks measure students’ abilities to integrate the content from the module. These assessments appear in each module and include a **scoring rubric**.

### Performance Task

**Relationships Between Two Variables**

#### Part A

Mr. Ahmed records the number of students who have arrived at the meeting prior to the meeting start time. The table shows his findings.

<table>
<thead>
<tr>
<th>Time Before Meeting Starts (min)</th>
<th>Number of Students Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>45</td>
</tr>
<tr>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
</tr>
</tbody>
</table>

#### Part B

Identify the independent and dependent variables.

Students planning to attend the field trip are required to make a $20 deposit toward the cost of the trip by the end of the meeting. Mr. Ahmed displays the graph to show the students the monthly payment plan for the field trip.
Florida Assessment Solutions

*Florida Reveal Math* effectively prepares students for the Florida Standards Assessments in Mathematics with abundant opportunities for diagnostic, formative, and summative assessments that address the skills students need to master the tests.

**FSA Practice**

FSA Practice items at the end of every lesson and module ensure students are confident and prepared to meet the requirements of the assessments.

Each practice item also indicates the specific Mathematics Florida Standard addressed.

13. **Multiselect.** Alice takes an art class after school once a week. At each class, she buys a bottle of juice for $1.25 and a bag of pretzels for $0.85. Select all expressions that represent the amount of money, in dollars, Alice spends after attending 8 art classes.

- $8(1.25)(0.85)$
- $8(1.25 + 0.85)$
- $8(1.25) + 8(0.85)$
- $8 + 1.25 + 0.85$
- $(8 + 1.25) + (8 + 0.85)$

14. **Open Response.** Nate scored 5 more than twice the number of points as Jake scored. Write an expression that represents the relationship of the number of points Nate scored in terms of the number of points Jake scored, $p$.

**Built to Test Item Specifications**

Assessment items are specifically built to meet the Florida Test Item Specifications. These practice items, found in both print and online, mirror the types of questions students will encounter on the FSA, such as drag-and-drop, open response, multiple-select, and those that require an equation editor to input answers.
Reports and Recommendations

Drawing on performance data from student assessments and activities, the Florida Reveal Math reports and recommendations provide teachers and administrators with the information they need to monitor and adjust instruction on a daily basis.

**Activity Report**
- Overall class or student average score
- Overall class or student progress over time
- Performance by activity type (e.g., homework, quiz, exam)
- Average score per activity

**Standards Report**
- Class and individual average score per standard, skill, or objective

**Recommendations Report**
- Suggested resources for students, based on performance, that can be assigned to any student in that group

**Administrator Report**
- Activity, standards, progress, and usage reports

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**EXCLUSIVE**

Individualized Learning Pathways

When Reveal Math is bundled with ALEKS, educators can deliver a personalized learning pathway via:
- Online, individualized instruction, practice, and assessment based specifically on gaps in student knowledge
- Bilingual courses offered in both English and Spanish
- Comprehensive progress monitoring reports at the student, class, district, and school level
Florida Reveal Math empowers teachers with impactful resources to deliver the right math, at the right time, for the right student. With powerful adaptive technology and differentiation resources, teachers have the tools they need to reach all learners.

**Targeted Instruction**

Leveled Discussion Questions  
**AL** Why do we place the 1 above the 8 of the dividend, 5,287 ÷ 340?  
**C** How do you know when you are done dividing? When the final remainder is zero, there is no other division to take place.  
**OL** Find 5,287 ÷ 170. What do you notice about this divisor compared to 340? What do you notice about this quotient compared to the quotient of 5,287 ÷ 340?  
**BL** Sample answer: 170 is half of 340, and the quotient 31.1 is twice the quotient 15.55.

### Offer Opportunities for Discourse and Differentiation

**Leveled Discussion Questions** and **Differentiation** tips in the Teacher Edition provide point-of-use strategies for:

- **AL** Approaching Level
- **OL** On Level
- **BL** Beyond Level

### Exclusively for LearnSmart

**LearnSmart**

LearnSmart®, included with Florida Reveal Math, provides an easy-to-use opportunity for students to practice and study key course topics in an online setting. LearnSmart is an online, interactive study tool that assesses a student’s proficiency and knowledge within a specific course, tracks which topics have been mastered, and identifies areas that need more study.

**Common Misconception**

Some students may jump into using the Pythagorean Theorem, and using it incorrectly, without paying attention to the information asked for in a problem. In Exercise 3, students may incorrectly set up the equation $22^2 + 27^2 = x^2$, solve the equation, and claim that $x$ is about 35 inches. Remind them that they should study the given information or given diagram to discern whether or not they need to find a missing leg or the missing hypotenuse. They can also check their solution for reasonableness by knowing that $x$ cannot be greater than 27 inches, because the hypotenuse is the longest side of a right triangle.
Expert Advisor

Cheryl R. Tobey, M.Ed.
Senior Mathematics Associate at Education Development Center (EDC)

Cheryl Rose Tobey brings more than 17 years of experience providing professional development to mathematics educators, primarily in the areas of diagnostic and formative assessment. She is the coauthor of twelve published Corwin books, including Mathematics Formative Assessment: Practical Strategies for Linking Assessment, Instruction, and Learning Volumes 1 and 2 and seven books in the Uncovering Student Thinking Series.

Cheryl Tobey Formative Assessment Probes
Identify and Address Student Misconceptions!

Each module features a Cheryl Tobey Formative Assessment Probe. Students complete a short problem set so teachers can identify misconceptions in students’ thinking and determine the appropriate next instructional steps.

Digital Lessons to Support Differentiated Instruction

Arrive MATH Take Another Look® digital lessons align with lesson objectives, providing targeted skill support and additional opportunities for practice.

Each 15-minute mini digital lesson contains three parts:

Part 1: Model Concept

Part 2: Interactive Practice

Part 3: Data Check

*Arrive MATH Booster*, a new MHE supplemental intervention program includes all Take Another Look grade levels, plus games and hands-on resources.
Language Development Handbook
Build Language Skills

*Florida Reveal Math* includes a *Language Development Handbook* Student Edition and Teacher Edition for each course to empower teachers to meet the diverse needs of learners. These handbooks provide instrumental resources to build vocabulary and notetaking skills for all learners, including English Language Learners. The Teacher Edition includes additional guidance and tips designed to address ELL needs.

Expert Advisor

Walter Secada, Ph.D.
Professor of Teaching and Learning at the University of Miami

As a program advisor for *Florida Reveal Math*, Dr. Walter Secada brings his expertise on improving education for English Language Learners to the program. Dr. Secada’s experience includes leading research on the teaching of mathematics to middle-school English Language Learners, equity in education, Hispanic dropout and prevention, bilingual education, and professional development for teachers.

Resources for Spanish Speakers

- Spanish Interactive Student Editions for Grade 6, Grade 7, and Grade 8
- Language Development Handbook for Grade 6, Grade 7, and Grade 8 (Teacher and Student Editions)
- Spanish Personal Tutors
- Multilingual eGlossary
- ALEKS Bilingual Courses in Spanish
In *Florida Reveal Math*, students explore math in a meaningful way with abundant print and digital resources that create an exciting classroom environment. Through engaging and purposeful technology and opportunities for mathematical discourse, students take ownership of their learning and deepen their conceptual understanding.

Designed with student engagement in mind, the digital resources in *Florida Reveal Math* include **animations, videos, and interactive problems** to enhance context and learning.

Teachers have the flexibility to modify the pre-made interactive teacher presentations by:
- Adding their own resources, including hyperlinks to internet resources
- Rearranging lesson content
- Sharing custom presentations with students

Students can engage with their **Interactive Student Editions** by highlighting, underlining, adding their own notes, responding to open-ended questions, and completing practice problems.

Build-in graphic organizers and self-reflection tools in the **Interactive Student Edition** provide opportunities for students to organize information in different ways and evaluate their progress.

Utilize the digital resources in *Florida Reveal Math* with:
- a projector
- interactive whiteboard
- desktops, laptops, or tablets
Visualize Math Concepts in Action

With Web Sketchpad® activities integrated at point-of-use in Florida Reveal Math, teachers can innovate their instruction in a seamless way. These dynamic, math exploration activities enhance understanding by demonstrating math concepts in action. Students interact with the activities to see how changing a problem’s variables can affect the outcome. They learn to see math as an organic, exploratory experience.

Collaborative Learning
Improve Communication and Comprehension

Collaboration Strategies in the Teacher Digital Center provide ideas for ways to incorporate peer-to-peer collaboration and discussion in the classroom.

Collaborative Practice tips in the Teacher Edition offer suggestions on how students can work together to write their own problems or make sense of existing problems.

Collaborative Practice
Have students work in pairs or small groups to complete the following exercise.

Clearly explain your strategy.

Use with Exercise 4 Have students work in pairs. Give students 1–2 minutes to individually consider the problem and formulate their strategy. Then ask them to clearly explain their strategy to their partner how they would solve the problem, without actually solving it. Have each student use their partner’s strategy to solve the problem. Have them compare and contrast strategies to determine if one or both strategies were viable, and discuss and resolve any differences.

Think About It! What are the like terms in this expression?

Think About It! and Talk About It! features in the Interactive Student Edition build students’ skills in mathematical thinking and discourse. Students learn to develop a coherent rationale for their ideas and to communicate it to others.
Technology-Enhanced Items
Prepare Students for Computer-Based FSA Testing

Technology-Enhanced Items like drag-and-drop, equation editor problems, and multiselect, provide students with the valuable practice they need to master Florida Standards Assessments. Students also benefit by improving their keyboarding skills through typing responses to rigorous open-ended questions.

Launch the Module Videos
Engaging videos connect math to real-world scenarios, thus answering the perpetual question “When will I ever use this?!”

eTools
Embedded within lessons, this convenient collection of coordinate graphing, number lines, and transformations tools allows students to explore and solve problems in a digital context.

Dinah Zike Foldables™
Ideal for kinesthetic and visual learners, this popular resource provides a way for students to organize their thoughts around key math concepts. They also make a great study tool!

Explore, Model, and Apply Math
The best-in-class Desmos graphing calculator, easily accessible in Florida Reveal Math, makes math accessible and enjoyable for students. The powerful and intuitive engine allows students to quickly and easily create visual representations of math.


Florida Reveal Math is built on the principle that changing the way students think can change the way they learn. Research shows that a positive frame of mind with regards to learning math influences academic performance. By instilling a positive mindset in students, teachers can build students’ confidence in their own innate abilities.

Mindset Matters

“Not Yet” Doesn’t Mean “Never”
Students with a growth mindset understand that just because they haven’t yet found a solution, that does not mean they won’t find one with additional effort and reasoning. It can take time and continued effort to reason through different strategies that can be used to solve a problem.

How Can I Apply It?
Assign students the Formative Assessment Math Probes that are available for each module. Have them complete the probe before starting the module, and then again at the specified lesson within the module, or at the end of the module so that they can see their progress.

Productive Struggle Problems

Florida Reveal Math includes problems that promote productive struggle. These challenging problems teach students of all levels the value of perseverance. Corresponding teacher questioning strategies in the Teacher Edition give the teacher a framework to guide student thinking and encourage grit.

Multi-Step Example

The gift wrap sales for the Spirit Club’s fundraiser are shown in the table. This year, the selling price of a roll of gift wrap was 10% greater than last year’s price. If the Spirit Club earns 25% of the sales each year, in which year did they earn more money? How much more did they earn?

<table>
<thead>
<tr>
<th></th>
<th>Price ($)</th>
<th>Number of Rolls Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last Year</td>
<td>?</td>
<td>775</td>
</tr>
<tr>
<td>This Year</td>
<td>6.93</td>
<td>700</td>
</tr>
</tbody>
</table>

Understand
What information do you know? Circle it.
What information do you need to find? Underline it.

Plan
Step 1 Find the ________ for last year.
Step 2 Find the total ________ for each year.
Step 3 Find how much the club made.
Step 4 Compare the amounts.
Florida Reveal Math teaches students how to think—not what to think!

Learning Targets

Learning targets in the form of “I Can” statements appear at the beginning of each lesson to communicate the lesson objective in student-friendly language. Students self-assess their success in achieving these targets throughout each lesson and at the end in the form of metacognitive checks.
The 6–8 Solution for Florida’s Mathematics Classrooms

*Florida Reveal Math* is a coherent, vertically aligned 6–8 math solution, with a consistent pedagogy and instructional model, as well as a focus on rigor, formative assessment, and growth mindset.

**Standard Pathway**

**Advanced Pathway**

Contact your McGraw-Hill Education Sales Representative for more information about this exciting new program!

mheonline.com/Florida