



Digital Walkthrough

Grades 9–12



West Virginia Reveal
MATH[®]
Algebra 1 • Geometry • Algebra 2

West Virginia Reveal Math[®]

The Digital Experience

West Virginia Reveal Math develops the problem solvers of tomorrow with a blend of purposeful print and digital resources. Featuring integrated technology and plentiful opportunities for students to explore, collaborate, practice, and reflect, West Virginia Reveal Math increases both student engagement and confidence.

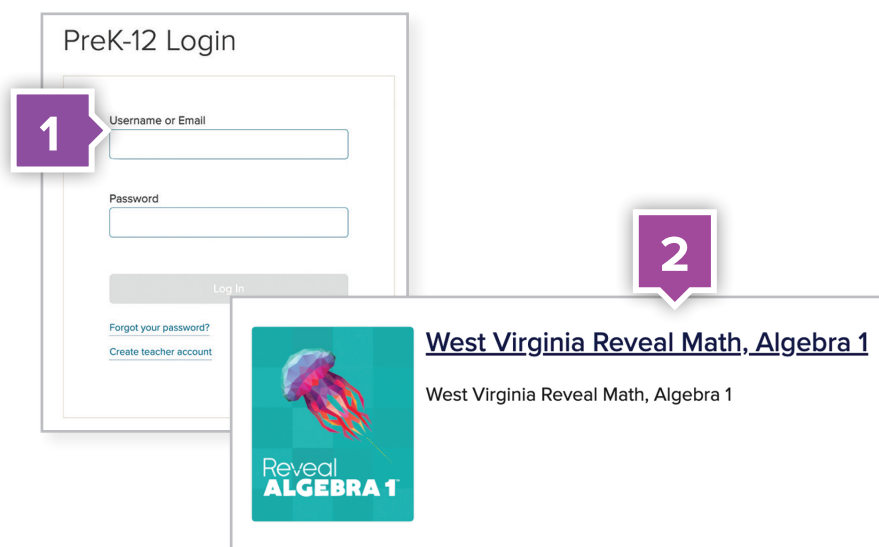
West Virginia Reveal Math currently integrates with the following Federated Standards: SAML 2.0 IDP, LTI 1.0, and Clever. Integration is possible with most learning management systems. Grade Passback and Assignment Sync are available with Canvas, Schoology, and Google Classroom; new integration required.

Use this Quick Start to review the Digital Teacher Center

- Teacher Dashboard
- Program Resources and Professional Development
- Unit Resources
- Lesson Resources for Teacher and Students
- Differentiation Resources
- Class Management Tools
- Assessments
- Reporting

Get Started

1. Visit mheonline.com/westvirginia to register for a username and password.
2. Select desired grade-level class.



Teacher Dashboard

Use the Teacher Dashboard as a central location to navigate the Digital Teacher Center.

The screenshot shows the Virginia Reveal Math, Algebra 1 Teacher Dashboard. The interface includes a top navigation bar with the course title, a left sidebar menu, a main content area with a 'Table of Contents' dropdown, and several resource sections. Numbered callouts are placed as follows: 1 points to the sidebar menu; 2 points to the top navigation bar; 3 points to the 'eBook Options' section; 4 points to the 'Table of Contents' dropdown; and 5 points to a lesson link within the 'Table of Contents' dropdown.

1. Use side menu to locate:

- Dashboard
- Course
- Gradebook
- Calendar
- Assignments
- Roster
- Reports
- Assessments
- My Tools

2. Search content by keyword or standard.

3. Access eBooks including Teacher Editions and Interactive Student Editions.

4. Click on **Table of Contents** to quickly navigate the course.

5. From the **Table of Contents**, click on the unit or lesson name to access the instructional resources.

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Use the Teacher Dashboard as a central location to navigate to the Digital Teacher Center.

Course Resources and Professional Development

Locate Program Resources from the Teacher Dashboard:

- Click **Table of Contents**.
- **Program Resources: Course Materials** is located at the top of the **Table of Contents**.
- Click on the name of the resource you would like to review.

Table Of Contents ▾

 **Program Resources: Course Materials**

Assign

- 1 **Teacher Edition, Correlations, and Pacing** >
- 2 **Supporting Al...** >
- 3 **Professional Learning Resour...** >
- 4 **Course Assessments** >
- Learning Resources** >
- Student Videos** >

1. Planning Resources

- Teacher Edition
- Correlations to the West Virginia Mathematics Standards
- Pacing Guide

2. Professional Learning Resources

- Digital Walkthrough
- eCourses
- “Why” Behind the Math Video Library

3. Course Assessments

- Diagnostic and Placement Test
- Diagnostic Scoring Guide
- End-of-Course Test

4. Learning Resources

- eToolkit (Virtual Manipulative Suite)
- eToolkit User Guide
- Selected Answers
- Printable Resource Bundles

Module Resources

Click the **Table of Contents** and select a module. Once you've reached your unit landing page, click **Expand All** to see the resources within each menu.

1. Ensure Student Readiness and Launch

- Ignite! activity and Teacher Notes
- Module Pretest
- Launch the Module Video

2. Evaluate Student Learning

- Formative Assessment Math Probe and Teacher Notes to uncover and resolve misconceptions
- Dynamic Module Practice
- Performance Task and Teacher Rubric
- Module Vocabulary Activity & Review
- Module Test

3. Module Supports

- Cultural Connections designed for students to learn about math contributions across various cultures in history.
- LearnSmart is an online, interactive study tool to support additional online practice and supporting resources.

Table of Contents

Module 4: Linear and Nonlinear Functions

Assign

> Module 4 Info

Resources

Launch

Review and Assess

Additional Resources

Teacher-added Resources

NAME _____ DATE _____ PERIOD _____

Cheryl Tobey Math Probe

Absolute Value Functions

Determine which graph, if any, could represent each function.

Graph A Graph B Graph C Graph D

Circle your choice.	Explain your choice.
1. $y = x + 4 $ A. Graph A B. Graph B C. Graph C D. Graph D E. Need more information	
2. $y = x + 4$ A. Graph A B. Graph B C. Graph C D. Graph D E. Need more information	
3. $y = x - 4 $ A. Graph A B. Graph B C. Graph C D. Graph D E. Need more information	
4. $y = x - 4$ A. Graph A B. Graph B C. Graph C D. Graph D E. Need more information	
5. $y - 4 = x $ A. Graph A B. Graph B C. Graph C D. Graph D E. Need more information	

Cheryl Tobey Math Probe - Absolute Value Functions © McGraw-Hill Education

Additional Resources

Cultural Connections - Native American Beadwork
Description: This essay highlights the contributions that people of various cultures have made to mathematics.
Type: Essay

LearnSmart - Linear and Exponential Relationships
Description: An online, interactive study tool. LearnSmart provides students with additional online practice and resources as they study for summative and end-of-year assessments.
Type: All

LearnSmart - Descriptive Statistics
Description: An online, interactive study tool. LearnSmart provides students with additional online practice and resources as they study for summative and end-of-year assessments.
Type: All

Lesson Resources for Teachers

Click the **Table of Contents** and select a lesson. Once you've reached your lesson landing page, click **Expand All** to see the resources within each menu. The Lesson blade categories match the lesson model structure.

The screenshot shows the interface for Lesson 3: Slope-Intercept Form. At the top left is a 'Table of Contents' dropdown. The main title is 'Lesson 3: Slope-Intercept Form'. Below the title is an 'Assign' button. A section titled '> Lesson 3 Info' contains a 'Resources' section with five items: 'Launch', 'Explore and Develop', 'Reflect and Practice', 'Additional Resources', and 'Teacher-added Resources'. On the right side, there is a search bar and a 'Present' button. A menu is open below the 'Present' button, showing options: 'Sync Presentation', 'Show Student Preview', and 'Add to Calendar'. Five numbered callouts (1-5) are overlaid on the interface: 1 points to the 'Add to Calendar' option in the menu; 2 points to the 'Present' button; 3 points to the search bar; 4 points to the 'Assign' button; and 5 points to the 'Teacher-added Resources' item.

1. Add a lesson to your class calendar.
2. **Launch** your lesson presentation here.
3. You can also rearrange or edit the presentation by clicking the edit button.
4. **Assign** activities or assessments to an individual or a whole class.
5. Add your own resources to include in presentations or to assign to your students from the **Teacher-added Resources** menu.

You can easily plan and prepare using the simple layout organization that aligns with your print Teacher Edition.

Lesson Resources for Students

Students have access to all Lesson Resources including **Extra Examples** not found in the print Student Edition and **Personal Tutor** videos.

1. Click the **Explore and Develop** section to see all lesson resources.
2. Click on the **Reflect and Practice** to see the Personal Tutor resources.

Interactive Student Edition

When using their **Interactive Student Edition** from the Student Dashboard, students can digitally take notes and answer questions.

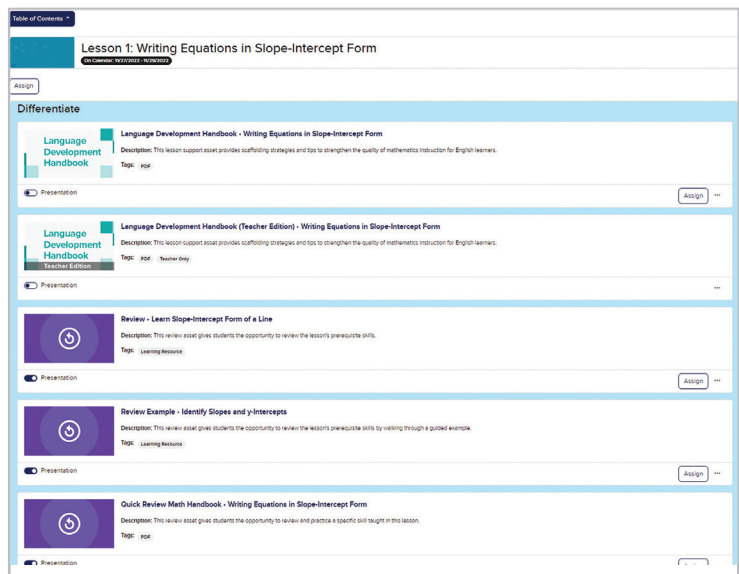
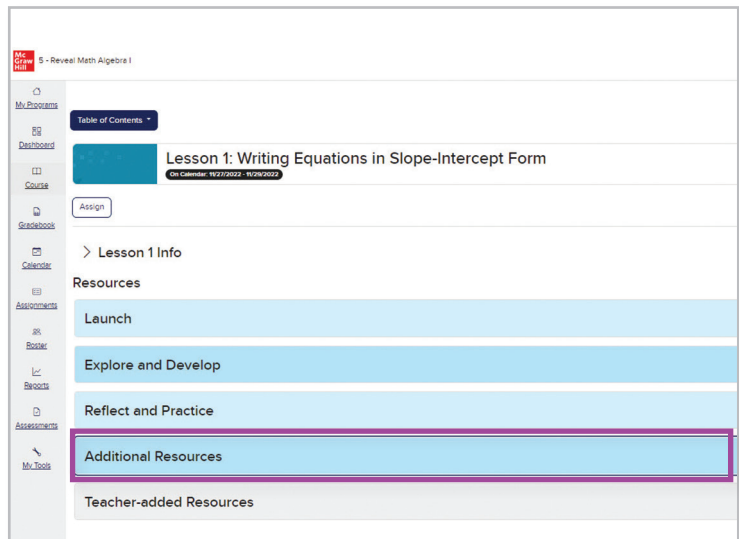
Personal Tutor

Personal Tutor Videos review the topic concept for students and caregivers to reference while completing independent work.

Differentiation Resources

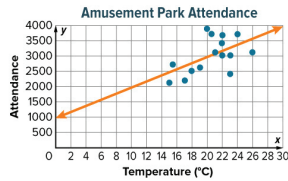
The resources in the Additional Resources blade in the Differentiate subcategory align to the Teacher Edition Lesson Opener Differentiate section reflecting their intended use to support students:

- **Approaching Level** resources support students who may not fully understand the lesson concepts or skills.
- **On Level** resources are to help on-level students get additional practice to solidify the skills they've built.
- **Beyond Level** resources are for students who may need or would benefit from an additional challenge.



Learn and Apply

The manager of an amusement park records the number of people who visit the amusement park on 15 different days during the summer. He also records the average temperature each day. This scatter plot shows the relationship between attendance at the amusement park and the daily temperature (in degrees Celsius).



Click on the **Take Another Look** activity. This lesson support asset gives students an additional opportunity to learn the objectives by engaging in the content in a new and different way.

Make Conjectures Using Lines of Fit

The scatter plot shows the diameter of different trees and their heights.

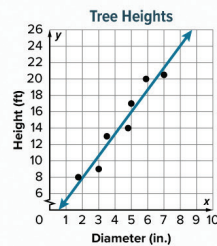
Use the line of fit that is drawn to make a conjecture about the height of a tree if its diameter is 8 inches.

Using the line, the y-value that corresponds with an x-value of 8 is about 24.

So, you can predict that a tree that has a diameter of 8 inches will have a height of about feet.

Reset

Check Answer



Review Learn and Review Examples can be assigned to any student who may need a refresher on the lesson prerequisite skill.

Quadratic Regression

For some sets of data, a linear equation in the form $y = ax + b$ does not adequately describe the relationship between data points. The *QuadReg* function on a graphing calculator can be used to fit a data set with a regression equation in the form $y = ax^2 + bx + c$. This equation is a **quadratic regression model** for the data. The calculator will also return an R^2 value, called the **coefficient of determination**, which tells you how closely the model fits the data. If the R^2 value is close to 1, the fit is very good. A poor fitting model will have an R^2 value closer to 0.

The table shows the population of Atlanta from 1970 through 2014. Move through the steps to fit the data with a quadratic regression model and analyze the fit.

Year	1970	1980	1990	2000	2010	2014
Population	497,000	425,000	394,000	416,000	420,000	456,000

Step 1 Enter the data.

Enter the data from the table into the lists in a graphing calculator. Let 1970 be represented by 0. Then the years since 1970 are the x-values. Let the population be the y-values.



Extension activities give students an extra challenge as they expand upon their knowledge of topics and concepts covered in the lesson.

Digital Practice Opportunities

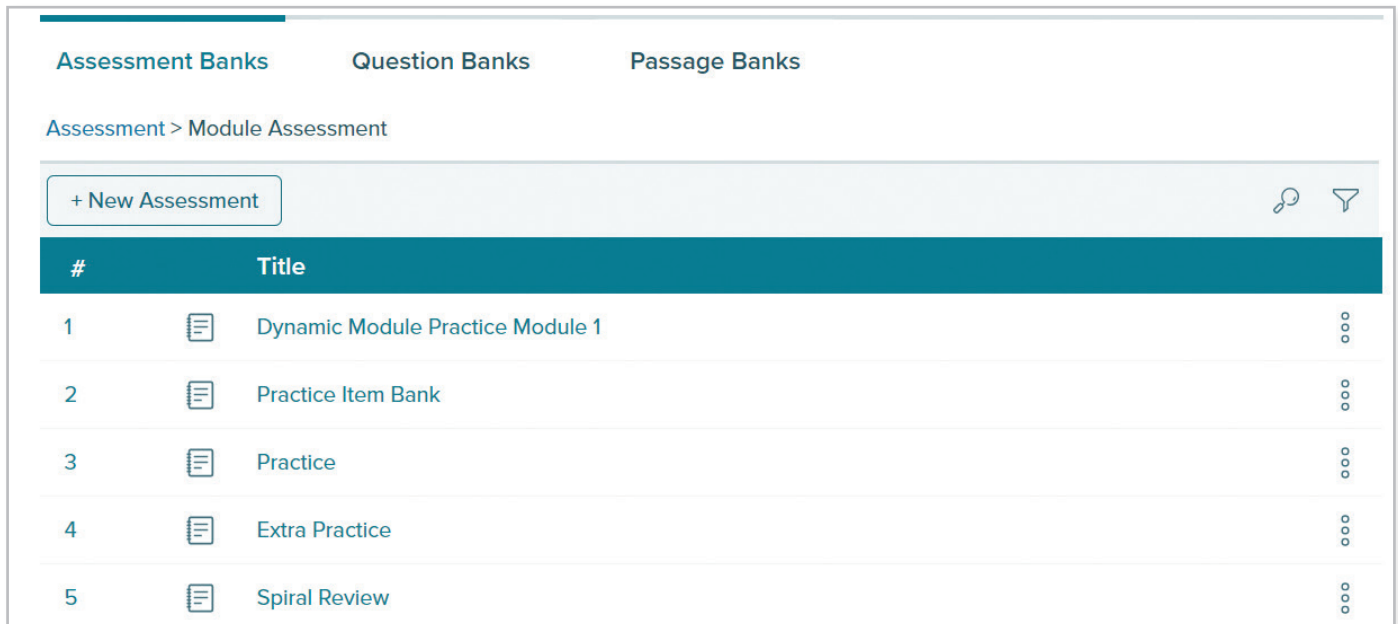
1. In the left hand sidebar, click **Assessments** to view all practice items. Click into any folder labeled “Practice Assignment Bank”.
2. This menu contains all **Practice** items, which can be edited, created, and digitally assigned to individual students, groups, or across multiple classes. All exercises have been created for automatic scoring when teachers choose to assign or create digital assignments.
3. All Module practice questions are available for use in the **Question Banks** when practice assignments are edited or created from scratch.
4. **My Assessments** folder will store your customized and newly created Practice forms.

The screenshot displays the McGraw Hill Revel Math Algebra 1 interface. The sidebar on the left contains navigation options: My Programs, Dashboard, Course, Gradebook, Calendar, Assessments, and My Tools. The main content area is titled 'Assessments' and shows a list of 26 results found. The list has columns for Type, Title, and Owner. A purple circle highlights the 'Practice Assignment Bank (RA1 M02)' entry, and a purple arrow points to the 'My Assessments' folder in the sidebar. Numbered callouts 1, 2, 3, and 4 are placed on the interface to indicate key features.

Type	Title	Owner
Folder	My Assessments	Me
Folder	Copies Received	Me
Folder	Course Test Bank (RA1)	McGraw
Folder	Practice Test Bank (RA1)	McGraw
Folder	Practice Assignment Bank (RA1 M01)	McGraw
Folder	Practice Assignment Bank (RA1 M02)	McGraw
Folder	Practice Assignment Bank (RA1 M03)	McGraw
Folder	Practice Assignment Bank (RA1 M04)	McGraw
Folder	Practice Assignment Bank (RA1 M05)	McGraw
Folder	Practice Assignment Bank (RA1 M06)	McGraw
Folder	Practice Assignment Bank (RA1 M07)	McGraw
Folder	Practice Assignment Bank (RA1 M08)	McGraw
Folder	Practice Assignment Bank (RA1 M09)	McGraw
Folder	Practice Assignment Bank (RA1 M10)	McGraw
Folder	Practice Assignment Bank (RA1 Pythagorean Theorem)	McGraw
Folder	Test Bank (RA1 M01)	McGraw
Folder	Test Bank (RA1 M02)	McGraw
Folder	Test Bank (RA1 M03)	McGraw
Folder	Test Bank (RA1 M04)	McGraw

Next, click on a **Practice Bank** to view the numerous practice sets included.

The **Practice Banks** contain all the module and lesson practice questions for the course. The banks are organized by lesson. A majority of the pre-built banks contain questions, which provide students with immediate feedback and access to a variety of learning aids.



The screenshot shows a web interface for 'Assessment Banks'. At the top, there are three tabs: 'Assessment Banks' (selected), 'Question Banks', and 'Passage Banks'. Below the tabs is a breadcrumb trail: 'Assessment > Module Assessment'. A '+ New Assessment' button is on the left, and search and filter icons are on the right. A table lists five assessment banks with columns for '#', 'Title', and a vertical ellipsis menu icon.

#	Title	
1	Dynamic Module Practice Module 1	⋮
2	Practice Item Bank	⋮
3	Practice	⋮
4	Extra Practice	⋮
5	Spiral Review	⋮

Dynamic Module Practice contains questions that change value upon each attempt and provides teachers an unlimited number of practice questions to reinforce student knowledge.

Practice Item Banks contain every practice question from the lesson in one location and can be used as a source to create your own practice forms.

Practice includes pre-built digital practice sets that match the Interactive Student Edition.

Extra Practice contains additional opportunities for students, different from those in the Interactive Student Edition.

Spiral Reviews contain questions from previous lessons and include questions that change in value, while providing student learning support.

Digital Assessment Options

From the **Main Menu** in the left-hand sidebar, click **Assessments** to review all assessment items. Click on any item labeled “Test Bank”.

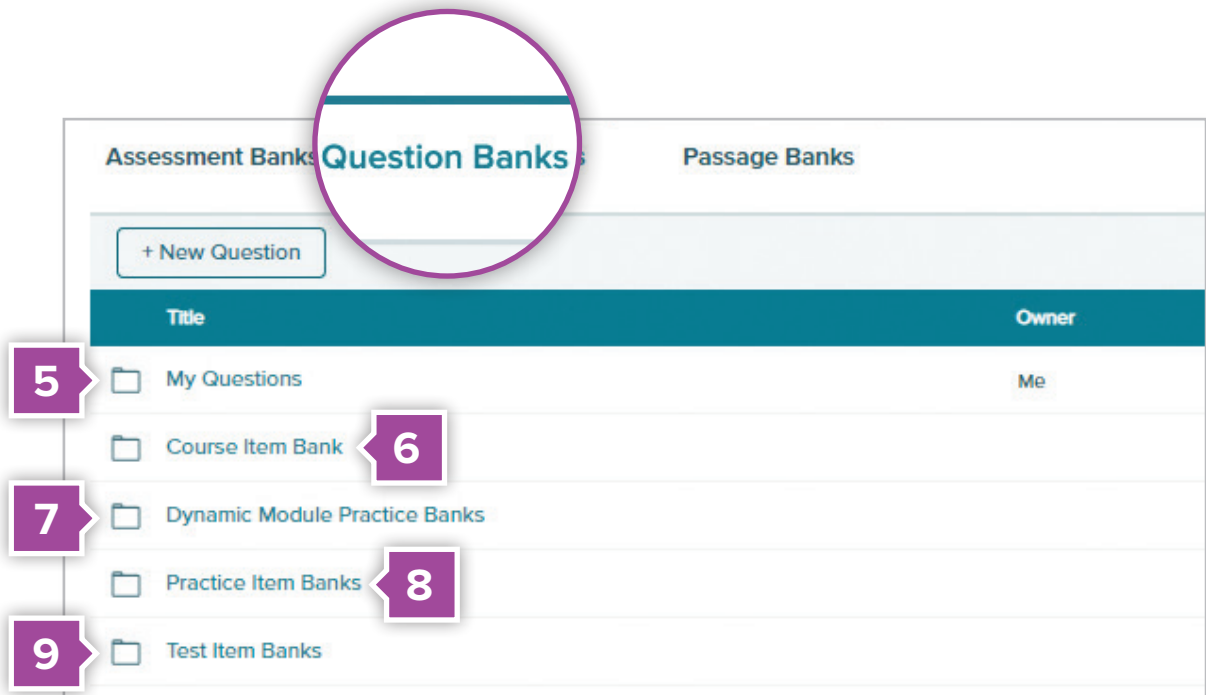
1. Create a **New Assessment**.
2. The **Course Test Bank** contains the Diagnostic and Placement Test, Benchmark Tests, and End-of-Course Test.
3. **Test Banks** contain the module-level tests.
4. Once you’ve viewed the **Assessment Banks**, click **Question Banks**.

The screenshot shows the 'Assessments' page in a learning management system. The left sidebar contains navigation options: My Programs, Dashboard, Course, Gradebook, Calendar, Assignments, Roster, and Reports. The main content area has tabs for 'Assessment', 'Question', 'Passage', and 'Deleted Items'. Below the tabs are buttons for 'New Folder' and 'New Assessment'. A table lists 26 results found, with columns for 'Type', 'Title', and 'Owner'. The table includes folders like 'My Assessments' and 'Copies Received', and several 'Course Test Bank' entries. A purple circle highlights the 'Course Test Bank' and 'Test Bank (RA1 M12)' entries, with callout boxes 1, 2, and 3 pointing to the 'New Assessment' button, the 'Course Test Bank' link, and the 'Test Bank (RA1 M12)' link respectively. Callout box 4 points to the 'Assessments' header.

Type	Title	Owner
Folder	My Assessments	Me
Folder	Copies Received	Me
Course Test Bank	Course Test Bank	McGraw-Hill
Test Bank	Test Bank (RA1 M12)	McGraw-Hill
Test Bank	Test Bank (RA1 M11)	McGraw-Hill
Test Bank	Test Bank (RA1 M10)	McGraw-Hill
Test Bank	Test Bank (RA1 M09)	McGraw-Hill
Test Bank	Test Bank (RA1 M08)	McGraw-Hill
Test Bank	Test Bank (RA1 M07)	McGraw-Hill
Test Bank	Test Bank (RA1 M06)	McGraw-Hill
Test Bank	Test Bank (RA1 M05)	McGraw-Hill
Test Bank	Test Bank (RA1 M04)	McGraw-Hill
Test Bank	Test Bank (RA1 M03)	McGraw-Hill
Test Bank	Test Bank (RA1 M02)	McGraw-Hill
Test Bank	Test Bank (RA1 M01)	McGraw-Hill

Question Banks

The **Questions Banks** contain all the questions found throughout assessments. Most question banks are organized by module. You can create your own questions or customize the preexisting questions from this bank to better suit your needs.



5. When you create a new question or customize an existing question, it will be saved in the **My Questions** folder.
6. **Course Item Banks** contain questions from every module.
7. **Dynamic Module Practice Banks** contain the questions from dynamic practice which change question values per each attempt.
8. **Practice Item Banks** contain the homework assignments for each module.
9. **Test Item Banks** contain the questions for module-level tests.

Flexible assessment formats

Course, module, and lesson assessments can be customized, printed, and/or assigned. Most assessments are available in a digital format. The following table displays the formats in which each assessment is available.

Print Edition: These assessments appear in your student's Interactive Student Edition or other ancillary materials.

Printable: These assessments can be printed as a PDF from the **Assessments** menu or appear as a word document within a module or lesson.

Digital: These assessments can be assigned digitally from the **Assessments** menu or within a module or lesson.

Assessment	Print	Printable	Digital
Course Diagnostic		X	X
Module Pretest		X	X
Checks	X		X
Exit Tickets			X
Put It All Together		X	X
Cheryl Tobey Formative Assessment Math Probes		X	
Module Assessment: Forms A (three versions), B, and C		X	X
Performance Task		X	
End-of-Year Course Assessment		X	X

Question options to fit your needs

Over a dozen different question types can be used in your custom digital assessments to provide students with an opportunity to solve problems in different ways. Most appear in the pre-built assessments. These question types are similar to question types found on end-of-year and state tests to help prepare students for those tests.

Multiple Choice: Students select an answer from a myriad of options.

Short Answer: Students write a brief response or reasoning to a question.

Fill-in-the-Blank: Students use the correct words or numbers to complete a sentence or answer a problem.

Essay: Students write a brief essay in response to a question or word problem.

Cloze: Students select items from a drop-down menu to fill in the blank of the word problem provided.

True/False: Students read a sentence and decide whether it is true or false.

Multiple Choice/Multi-Select: Students can select one or more choices to answer a question.

Equation Entry: Students build an equation that completes or answers the question provided. Teachers also have the option to allow for numerical equivalency if students provide the same answer in a different equation.

Matching: Students are provided with one or more prompts and must match the correct response from a bank of possible answers.

Bucketing: Students are presented with a question and then must move answer options into different buckets that fit the correct response.

Ordering: Students reorder items to correctly answer the question provided.

Select Text: Students answer the question by choosing the correct word, sentence, or paragraph provided. Teachers can also require that students provide a brief explanation for their answers.

Image Labeling: Teachers provide an image and indicate which parts need to be labeled. Then, students fill in the blank labels with the correct answer.

Choice Matrix: Students select one or more correct answers from a matrix table.

Grid-In: Students use drop-down menus to select the correct numerical answer to a question.

Number Line: Students use a number line to provide their answer to a question.

Audio Recording: Students answer a question by recording audio of their answer and/or reasoning.

Instructions: This lets you provide instructions at any point in the test: at the beginning of the assessment before it is started, in-between questions, or at the end in order to provide directions for submitting the completed assessment.

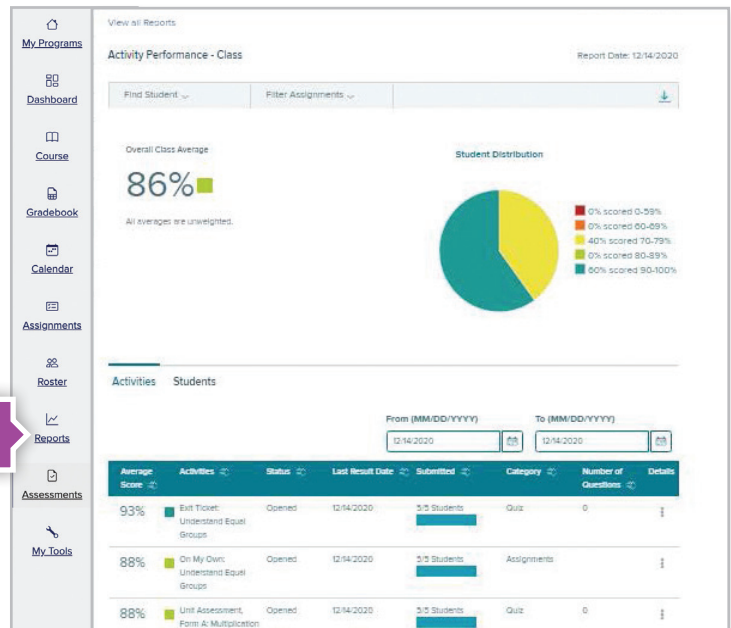
Utilize Reporting Features

From the **Main Menu** in the left-hand sidebar, click **Reports**. *West Virginia's Reveal Math's* interactive performance reports provide immediate feedback that allows teachers to make data-driven instructional decisions.

1. From the Main menu, click **Reports**.

Activity Performance Report

Review useful data points for class assignments, including item analysis by student and class.



West Virginia Standards Performance Report

Provides information on class performance by standard, including a cumulative score by class and student.

West Virginia Standards Performance Report

West Virginia | College- and Career | Mathematics | Algebra 1

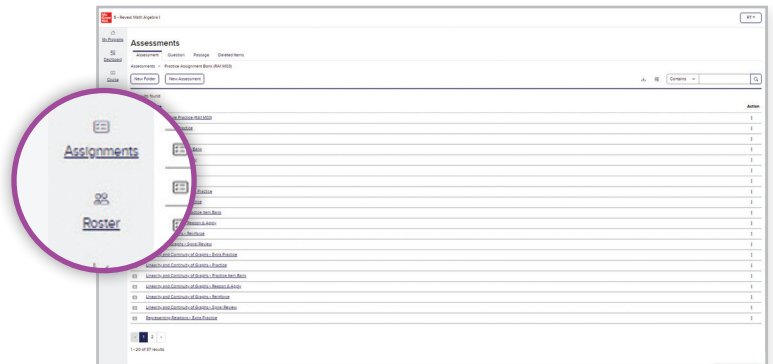
Show Description

0 - 59% | 60 - 69% | 70 - 79% | 80 - 89% | 90 - 100%

Standards	Description	Class Average	Questions
M.A1HS.11	Solve quadratic equations in one variable by inspection (e.g., for $x^2 = 49$), taking square roots, factoring, completing the square when $a = 1$ only, and the quadratic formula, as appropriate for the initial form of the equation.	75%	12
M.A1HS.11a	Recognize the concept of complex solutions when the quadratic formula gives complex solutions.	75%	12
M.A1HS.11b	Use the method of completing the square to transform any quadratic equation in x into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this method of completing the square.	75%	12

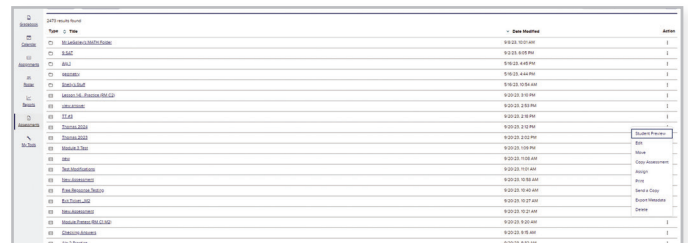
Tools to Streamline Your Classes

See **Assignments** and **Roster** to view some of the tools that make planning easier.



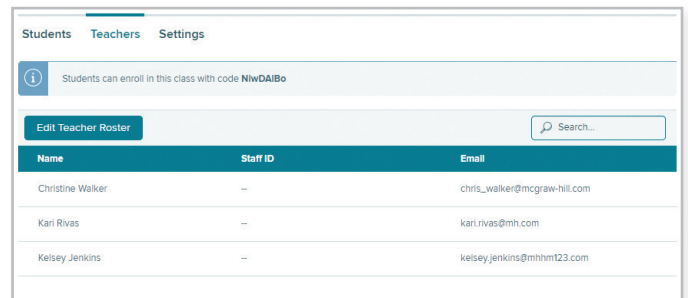
Assessment Sharing

If you've edited a pre-made assessment or created a new one, share it to your other classes by clicking **Send a Copy** from the My Assessments folder. This allows you to administer the same assessments to all of your students.



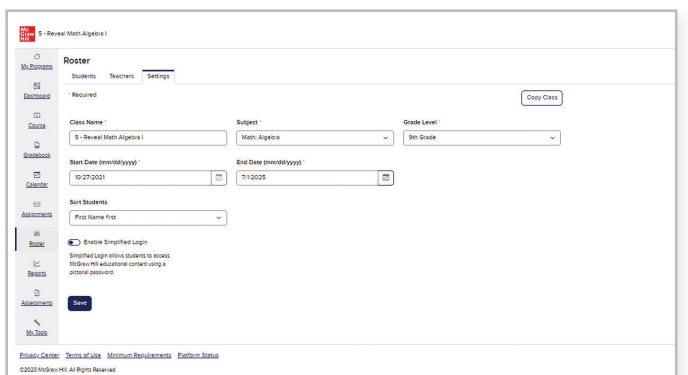
Share Your Class

Teachers can share class rosters, groupings, reports, assignments, lesson plans, and more with colleagues for co-teaching, intervention, or instructional planning.



Copy Class

Copy functionality allows teachers to copy all course assignments and customizations to another class.



West Virginia Reveal
MATH[®]
Algebra 1 • Geometry • Algebra 2

Reveal the Full Potential in Every Student

Learn more at
mheonline.com/westvirginia

