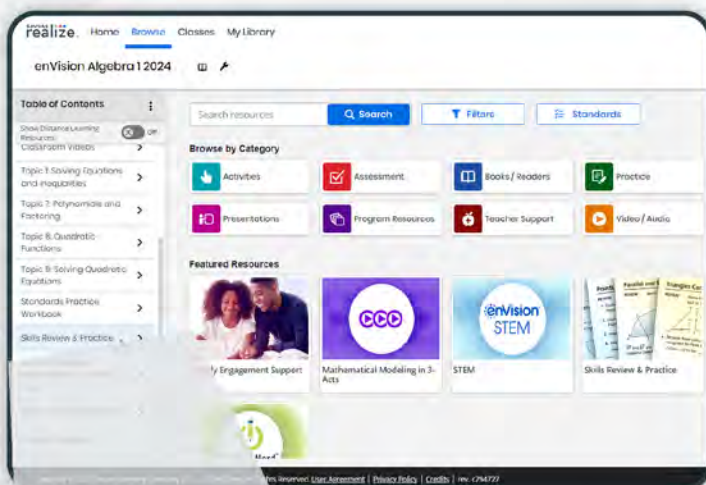


enVision™ A|G|A

Skills Review & Practice

This new tool was built for *enVision Algebra 1*, *Geometry*, and *Algebra 2* teachers to help meet the needs of learners who may benefit from additional support to

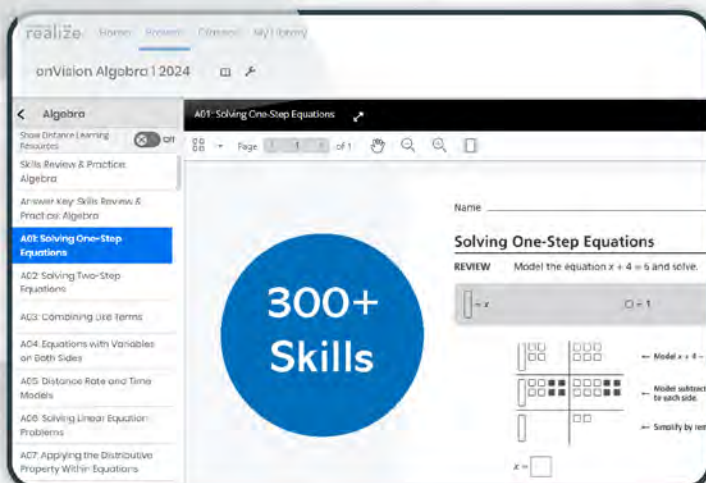
1 accelerate, 2 practice, 3 review, and/or 4 remediate learning.



SAVVAS
realize™

Easy to Access

Lessons are found in the main Table of Contents for the course on Savvas Realize™. Scroll down the page to **Skills Review & Practice**.



Extensive Library of Skills

More than 300 skills have been identified across 6 domains:

- Algebra
- Geometry
- Data & Probability
- Number Sense
- Functions
- Requisite Skills

Built for Flexibility!



Teacher Assigned

The complete **Skills Review & Practice** Library is included in each *enVision A/G/A* course, giving teachers the flexibility to assign any of the skill PDFs as needed to students in any of these courses.



Use as Needed, When Needed

Teachers can use these skill PDFs as baseline exercises for all students, to help fill gaps for students, refresh a past skill, or even just for extra practice, among others. The PDFs can be assigned when needed - at the beginning, middle or end of a course, Topic or lesson.



Auto-Remediation

When teachers assign an assessment or Lesson Quiz and select the auto-remediation option, these skill-based PDFs are among the many activities that are eligible to be auto-assigned to students as part of their personalized study plan.

Name _____

F16

Quadratic Functions

REVIEW Sketch the graph of the equation $f(x) = -3 - 2x + x^2$.

STEP 1 Write the quadratic function in standard form.

$$y = x^2 - 2x - 3$$

STEP 2 Find the axis of symmetry, the x-coordinate of the vertex.

$$x = -\frac{b}{2a}$$

$$x = -\frac{-2}{2(1)}$$

$$x = \square$$

STEP 3 Find the vertex.

$$y = (1)^2 - 2(1) - 3$$

$$y = \square$$

vertex: _____

STEP 4 Make a table of values.

x	$x^2 - 2x - 3$	y
-2	$4 + 4 - 3$	
0		
2		

STEP 5 Graph.



PRACTICE Find each of the following to graph $y = x^2 + 16 + 4x$.

- Standard form
- Axis of symmetry
- Vertex
- Table of values
- Graph

Graph each function.

- $y = x^2 - 1 + 2x$
- $f(x) = -4x + 3 + x^2$

Skills Review & Practice • F16 Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Scaffolded Support and Problem Sets

A single page PDF has been created for each skill, beginning with scaffolding, followed by a problem set of exercises.

Interactive PDF Annotation Tool

Students can draw on, highlight, annotate, and submit PDF assignments online without needing to download or print.

Program Assessments

Assessments in the program measure student understanding, expose areas needing improvement, and drive assignment of **Skills Review & Practice**.

Item Analysis

Use the Item Analysis Charts and student scores to prescribe differentiated assignments.

STEP 4 Assess & Differentiate

LESSON QUIZ

Use the Lesson Quiz to assess students' understanding of the mathematics in the lesson.

Students can take the Lesson Quiz online or you can download a printable copy from www.g5math.com. The Lesson Quiz is also available in the Assessment Sourcebook.

Item Analysis

Item	DOK	Skills Review and Practice
1	1	A16
2	1	A18
3	2	A18
4	3	A18
5	2	F30

Use the student scores on the Lesson Quiz to prescribe differentiated assignments.

If students take the Lesson Quiz online, it will be automatically scored and appropriate differentiated practice will be assigned based on student performance.

Intervention 0-3 points

- Reteach to Build Understanding
- Mathematical Literacy and Vocabulary

On-Level 4 points

- Mathematical Literacy and Vocabulary
- Additional Practice
- Enrichment

Advanced 5 points

- Enrichment

Item Analysis

Item	DOK	Skills Review and Practice
1	1	A16
2	1	A18
3	2	A18
4	3	A18
5	2	F30

Or,
Let Realize
Auto-Assign
for you!

Additional Opportunities to Practice and Differentiate!

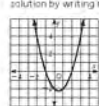
Skills Review & Practice can be used in conjunction with *MathXL*® Practice & Problem Solving, *Savvy*™ Adaptive Practice and differentiation support: Reteach to Build Understanding, Additional Practice, Mixed Review, and Enrichment.

Name _____

8-1 Reteach to Build Understanding

Solving Quadratic Equations Using Graphs and Tables

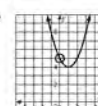
1. The graph and table both show methods that can be used to solve the equation $x^2 - x - 2 = 0$. Circle the points in the graph and the numbers in the table that indicate the solutions of the equation. Then complete the statement about the solution by writing numbers in the blanks.



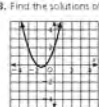
-2	4
-1	0
0	-2
1	-2
2	0

The solutions of the equation $x^2 - x - 2 = 0$ are _____ and _____.

2. Marcela incorrectly used graphing to find the solution of $x^2 - 2x + 5 = 0$. Find and correct her error. Graph the related function $f(x) = x^2 - 2x + 5$. The graph intersects the y -axis at (0, 5). The solution of the equation is 5.



3. Find the solutions of the equation $x^2 + 3x + 2 = 0$.



-2	4
-1	0
0	-2
1	-2
2	0

The solutions of the equation $x^2 + 3x + 2 = 0$ are _____ and _____.

©VisionPrep Inc. B.E.S.T. Algebra 1 • Teaching Resources

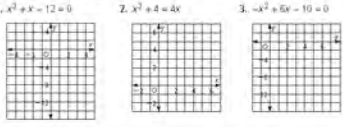
Name _____

8-1 Additional Practice

Solving Quadratic Equations Using Graphs and Tables

Solve each equation by graphing.

- $x^2 + x - 12 = 0$
- $x^2 + 4 = 4x$
- $-x^2 + 5x - 10 = 0$



Use a table to find the solutions for each equation. You may use a calculator. For approximate solutions, use the average rounded to the nearest tenth of the two consecutive x -values for which the sign of the y -values changes.

- $4x^2 - 36 = 0$
- $x^2 + 4x = 5$
- $x^2 + 2x + 6 = 0$
- $2x^2 - 3x + 1 = 0$
- $x^2 + 3x - 6 = 0$
- $4x^2 + 20x + 25 = 0$

10. Armando kicks a football into the air. The equation $f(x) = -4x^2 + 28x + 0.25$ models the height of the football from the ground, in feet, with respect to the time x in seconds. Use a graph or table to estimate the time for the ball to return to the ground after being kicked.

11. When using a table to find the solutions to a quadratic equation, how can you be sure you have found all the solutions?

©VisionPrep Inc. B.E.S.T. Algebra 1 • Teaching Resources

Name _____

8-1 Enrichment

Solving Quadratic Equations Using Graphs and Tables

Match the sentence in Column A with the equation in Column B. Graph the equation if needed. Then write the number matching each letter in the empty puzzle grid. The sum of all the numbers in every column, row, and diagonal should be the same.

Column A	Column B
1. The graph of this equation is wider than $y = x^2$.	A. $y = x^2 - 3$
2. The graph of this equation has a minimum at (0, -4).	B. $x = 0$, $25x^2 + 1$
3. The graph of this equation has the range $y \geq -2$.	C. $y = x^2 - 4$
4. The graph of this equation has a vertex at (6, 3).	D. $y = x^2 + 3$
5. This is the quadratic parent function.	E. $y = x^2 - 2$
6. This equation is not in standard form.	F. $y = x^2$
7. This equation's graph is the same as $y = x^2$, translated down by 3.	G. $y = 2 - 3x^2$
8. The graph of this equation does not intersect the line $y = 2$.	H. $y = -2x^2 + 3$

A. _____	12	B. _____	14	_____
C. _____	18	D. _____	10	_____
16	E. _____	16	F. _____	_____
8	G. _____	15	H. _____	_____

What is the sum of every column, row, and diagonal?

©VisionPrep Inc. B.E.S.T. Algebra 1 • Teaching Resources

Reteach to Build Understanding:
Guided reteaching offers a fresh approach. Stepped-out, scaffolded support solidifies understanding.

Additional Practice:
More practice for each lesson builds student mastery.

Enrichment:
Promotes critical thinking and problem-solving.



Mathematical Literacy and Vocabulary Practice
also available.



Digital Practice on Savvas Realize™

The **Reteach to Build Understanding**, **Additional Practice**, **Mixed Review** and **Enrichment** activities are available as digital assignments powered by *MathXL*® for School.

These activities are automatically assigned when students complete the Lesson Quiz online and are automatically scored.