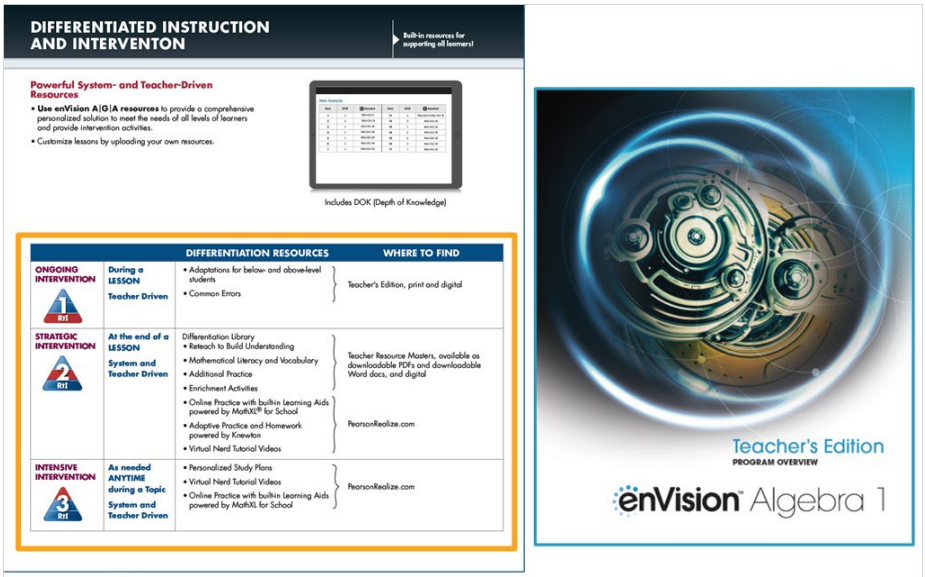
enVision A|G|A Differentiation

Introduction

Hi, **enVision** A|G|A teachers!

Let's look at the variety of resources available for differentiated instruction at both the topic and lesson levels. These resources can help you reach the range of learners in your classroom.

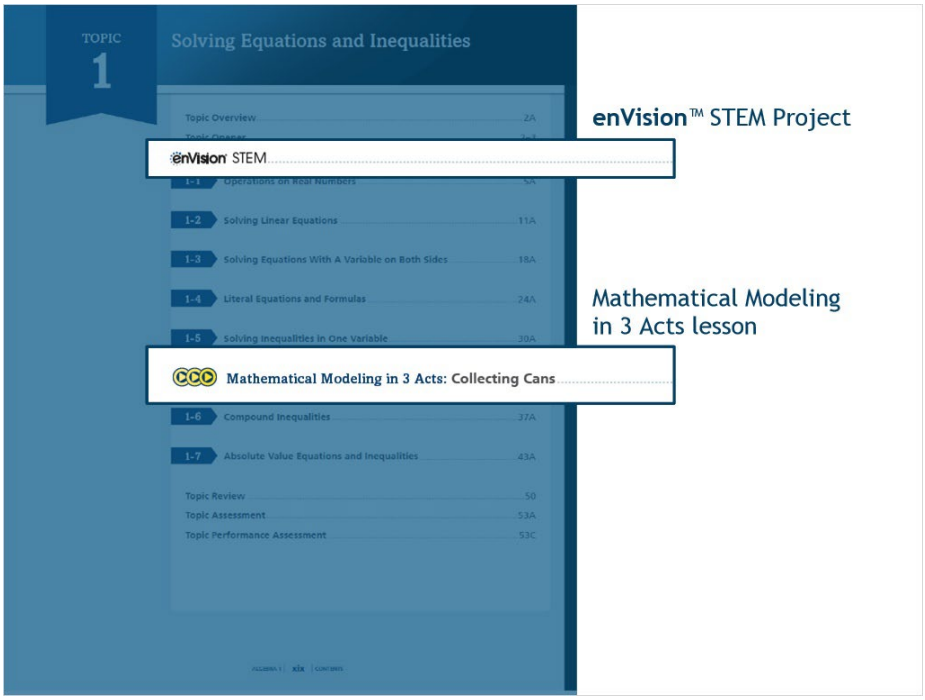
Quick Tip



QUICK TIP

Check out the Differentiation Resources chart in your *Teacher's Edition Program Overview* for a list of the **enVision A|G|A** differentiation resources and where to find them in the program materials.

Topic-level Differentiation

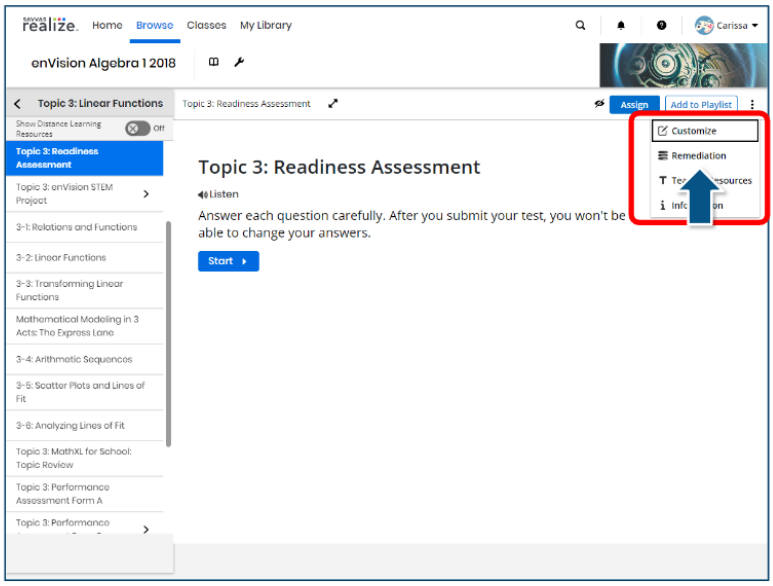


There are several topic-level opportunities to differentiate instruction for your students.

The Topic Readiness Assessment determines your students' readiness for the topic content and prescribes interventions as needed. The digital version of the assessment is auto-scored, and a personalized study plan is generated for each student based on his or her score. Students receive practice tasks in their Savvas Realize™ accounts tailored to their specific needs based on the results of the online assessments.

Each topic also includes an **enVision™** STEM Project and a Mathematical Modeling in 3 Acts lesson. These activities make math inviting with high-interest, low-entry tasks. Students can choose how they show what they know as they work on these tasks.

Quick Tip



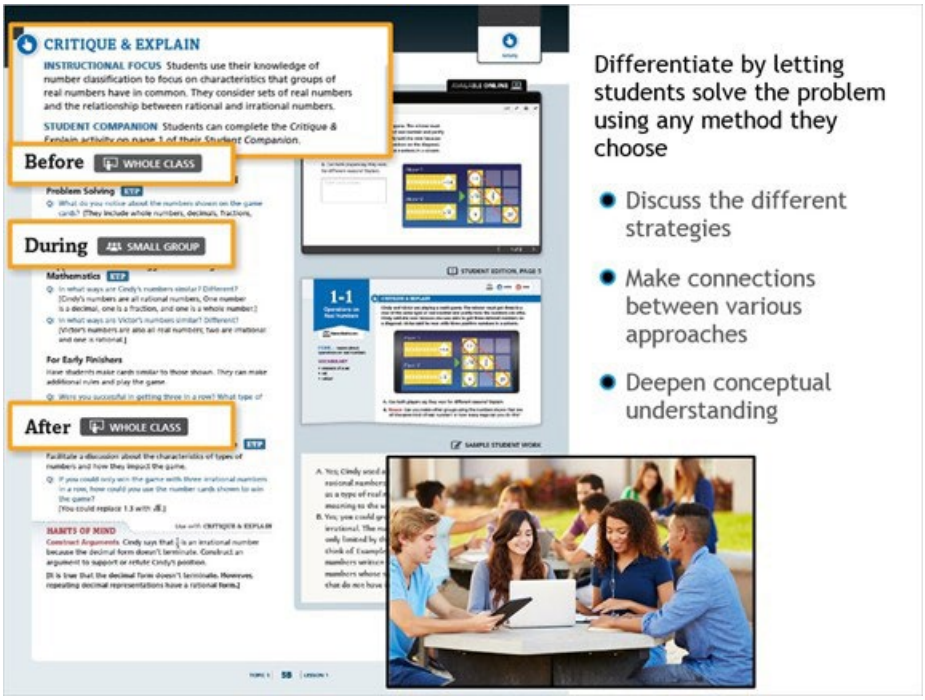
QUICK TIP

Click the Remediation option under online assessments to see a list of the remediation resources you can use to differentiate instruction based on your students' results.

Lesson-level Differentiation

You'll find differentiation resources and tips in each step of a four-step **enVision** A|G|A lesson.

Step 1: Explore



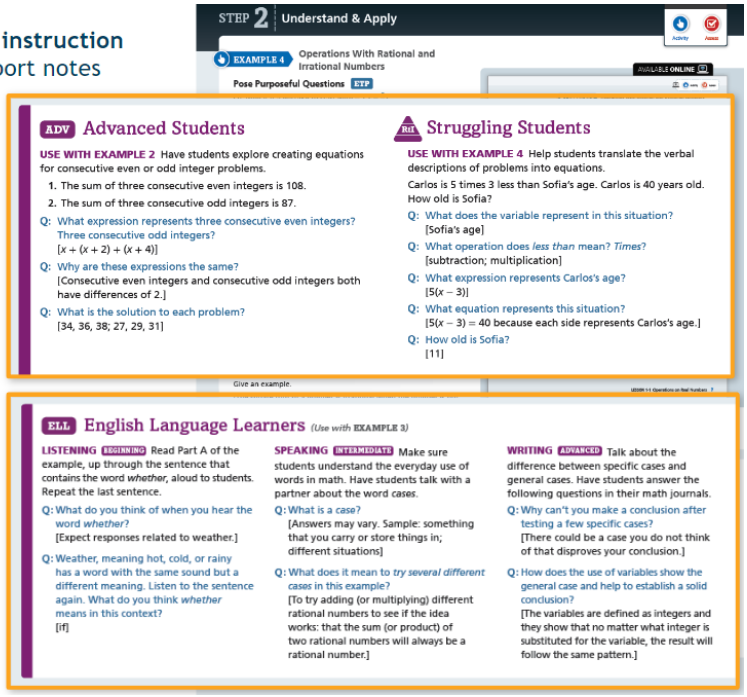
In Step 1: Explore, differentiate instruction by letting students solve the problem-based learning activity using any method they choose.

As you and your students discuss the different strategies used to solve the problem, students can make connections between various approaches and deepen their conceptual understanding.

The Teacher's Edition provides support to facilitate these conversations before, during, and after the activity.

Step 2: Understand & Apply

Differentiate instruction
using the support notes



STEP 2 Understand & Apply

EXAMPLE 4 Operations With Rational and Irrational Numbers

Pose Purposeful Questions ETP

ADV Advanced Students

USE WITH EXAMPLE 2 Have students explore creating equations for consecutive even or odd integer problems.

1. The sum of three consecutive even integers is 108.
2. The sum of three consecutive odd integers is 87.

Q: What expression represents three consecutive even integers? Three consecutive odd integers?
[$x + (x + 2) + (x + 4)$]

Q: Why are these expressions the same?
[Consecutive even integers and consecutive odd integers both have differences of 2.]

Q: What is the solution to each problem?
[34, 36, 38; 27, 29, 31]

RtI Struggling Students

USE WITH EXAMPLE 4 Help students translate the verbal descriptions of problems into equations.

Carlos is 5 times 3 less than Sofia's age. Carlos is 40 years old. How old is Sofia?

Q: What does the variable represent in this situation?
[Sofia's age]

Q: What operation does *less than* mean? *Times*?
[subtraction; multiplication]

Q: What expression represents Carlos's age?
[$5(x - 3)$]

Q: What equation represents this situation?
[$5(x - 3) = 40$ because each side represents Carlos's age.]

Q: How old is Sofia?
[11]

ELL English Language Learners *(Use with EXAMPLE 3)*

LISTENING BEGINNING Read Part A of the example, up through the sentence that contains the word *whether*, aloud to students. Repeat the last sentence.

Q: What do you think of when you hear the word *whether*?
[Expect responses related to weather.]

Q: Weather, meaning hot, cold, or rainy has a word with the same sound but a different meaning. Listen to the sentence again. What do you think *whether* means in this context?
[if]

SPEAKING INTERMEDIATE Make sure students understand the everyday use of words in math. Have students talk with a partner about the word *cases*.

Q: What is a case?
[Answers may vary. Sample: something that you carry or store things in; different situations]

Q: What does it mean to *try several different cases* in this example?
[To try adding (or multiplying) different rational numbers to see if the idea works: that the sum (or product) of two rational numbers will always be a rational number.]

WRITING ADVANCED Talk about the difference between specific cases and general cases. Have students answer the following questions in their math journals.

Q: Why can't you make a conclusion after testing a few specific cases?
[There could be a case you do not think of that disproves your conclusion.]

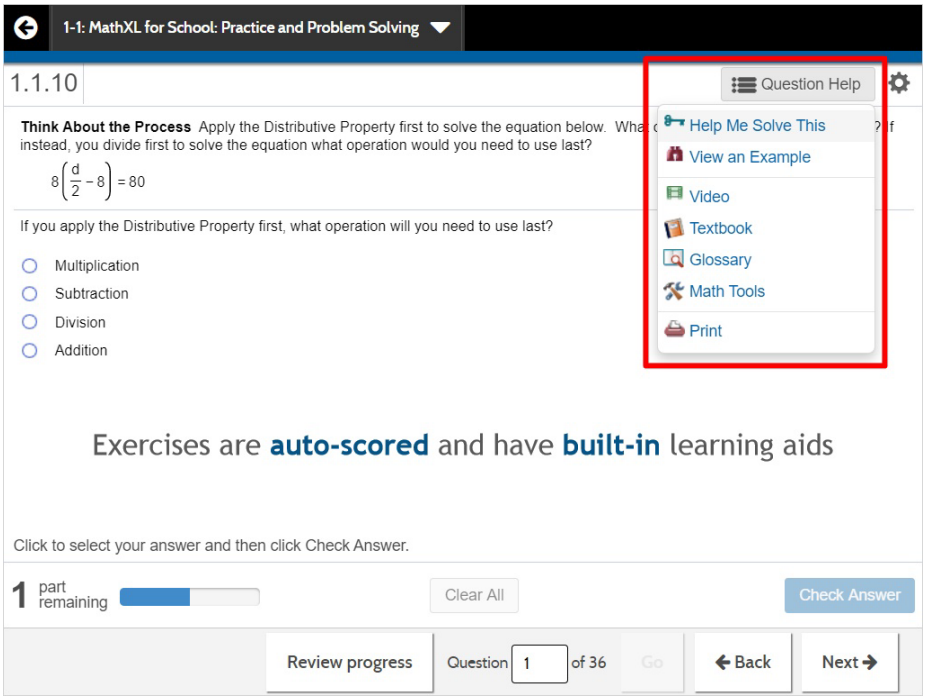
Q: How does the use of variables show the general case and help to establish a solid conclusion?
[The variables are defined as integers and they show that no matter what integer is substituted for the variable, the result will follow the same pattern.]

Next, in Step 2: Understand & Apply, check for understanding using Examples, Try It! exercises, and Additional Examples.

Notice the support notes in your Teacher's Edition that can help you differentiate instruction for English language learners, advanced students, and struggling students.

Use the Do You Understand? and Do You Know How? as formative assessment opportunities to help you decide how much and what type of practice to assign students in Step 3.

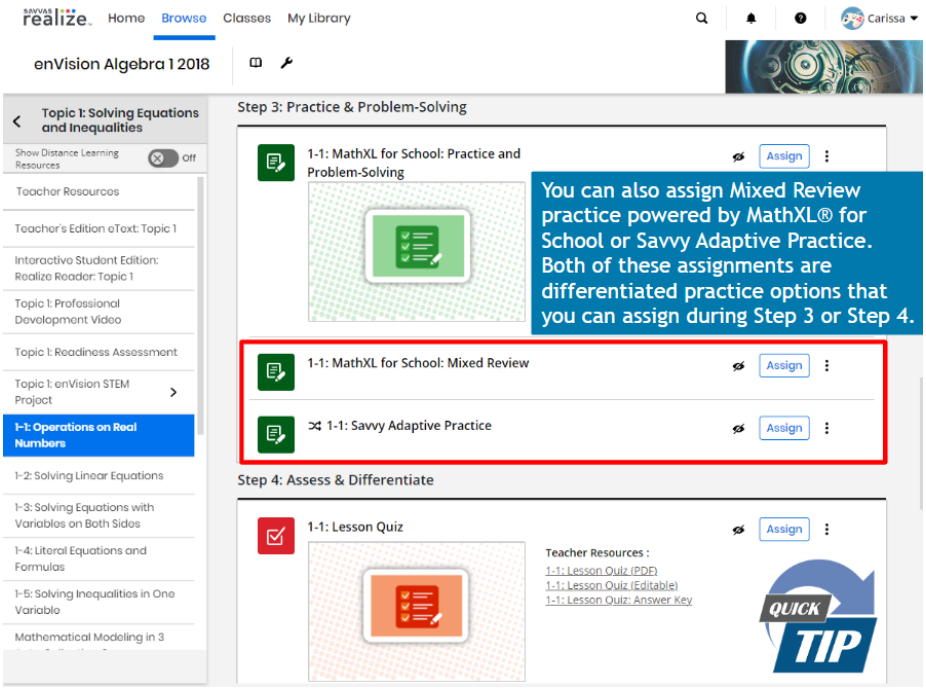
Step 3: Practice & Problem Solving



Then, in Step 3: Practice & Problem Solving, assign differentiated practice to solidify student understanding. Use the Assignment Guide and Item Analysis to choose the amount and difficulty level of practice for groups of students.

Alternatively, you can assign the online version of Practice and Problem Solving to differentiate instruction. These exercises are auto-scored and have built-in learning aids to provide support to students.

Quick Tip


realize
Home
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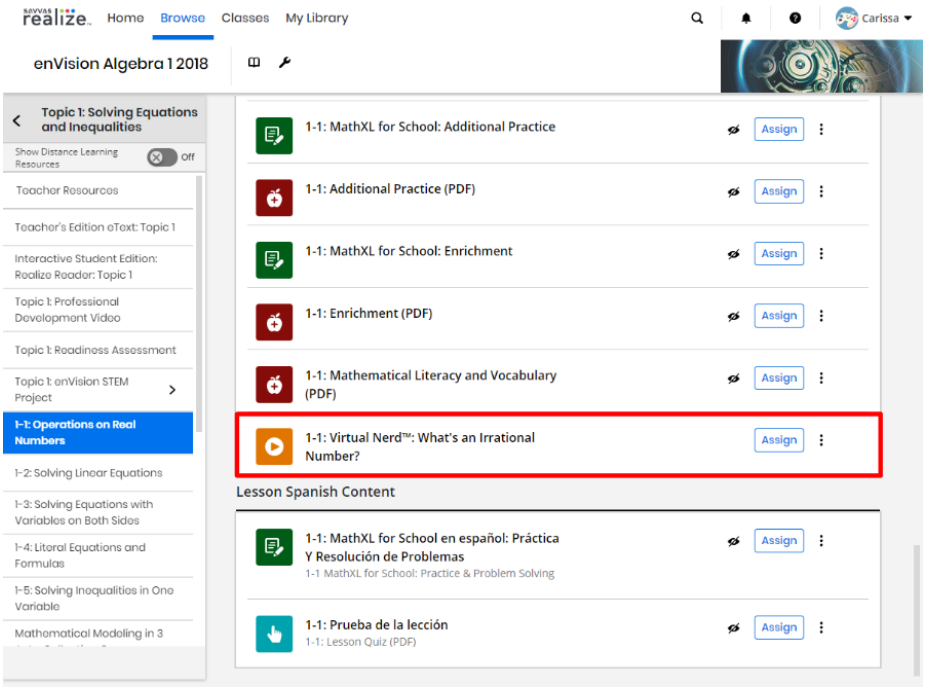
Carissa
enVision Algebra 1 2018
Topic 1: Solving Equations and Inequalities
Show Distance Learning Resources
Off
Teacher Resources
Teacher's Edition eText: Topic 1
Interactive Student Edition: Realize Reader: Topic 1
Topic 1: Professional Development Video
Topic 1: Readiness Assessment
Topic 1: enVision STEM Project
1-1: Operations on Real Numbers
1-2: Solving Linear Equations
1-3: Solving Equations with Variables on Both Sides
1-4: Literal Equations and Formulas
1-5: Solving Inequalities in One Variable
Mathematical Modeling in 3
Step 3: Practice & Problem-Solving
1-1: MathXL for School: Practice and Problem-Solving
Assign
You can also assign Mixed Review practice powered by MathXL® for School or Savvy Adaptive Practice. Both of these assignments are differentiated practice options that you can assign during Step 3 or Step 4.
1-1: MathXL for School: Mixed Review
Assign
1-1: Savvy Adaptive Practice
Assign
Step 4: Assess & Differentiate
1-1: Lesson Quiz
Assign
Teacher Resources :
1-1: Lesson Quiz (PDF)
1-1: Lesson Quiz (Editable)
1-1: Lesson Quiz: Answer Key
QUICK
TIP

Step 4: Assess & Differentiate



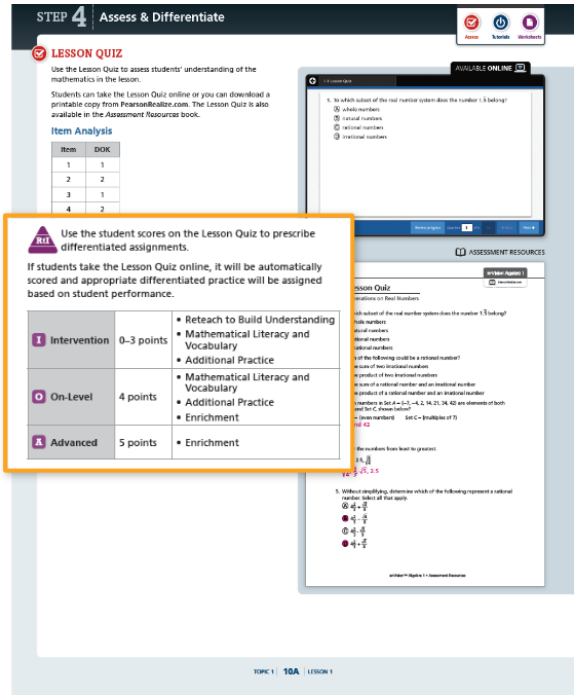
Finally, in Step 4: Assess & Differentiate, administer the Lesson Quiz and then provide differentiation based on the results. Use the Item Analysis and RtI information to prescribe differentiated assignments.

You'll find a library of resources on Savvas Realize.

You'll also find digital differentiated assignments powered by MathXL® for School and video tutorials powered by Virtual Nerd.

Quick Tip

You can assign the digital Lesson Quiz and have the system create differentiated assignments. The online version of the quiz is auto-scored, and you can choose to have the system provide auto-assigned intervention or enrichment activities for students based on their results.



Closing

Thanks for discovering how **enVision** A|G|A resources can help you differentiate instruction and provide targeted support to all your students.