

How To Guide for *Algebra 2: Advanced Algebra*

Welcome to *Algebra 2: Advanced Algebra*!

Algebra 2: Advanced Algebra is a comprehensive, standards-based curriculum designed to prepare students for higher-level learning, regardless of their post-secondary education and career goals.

This course is about more than formulas and computations. It encourages and empowers students to develop and use critical thinking and problem-solving skills as they pursue mastery.

Student Readiness

Here are important notes on student readiness for *Algebra 2: Advanced Algebra*:

- **Required prerequisite:** Students must have completed *Algebra 1: Principles of Secondary Mathematics* or another Algebra 1 course with a similar scope and sequence.
- **Recommended prerequisite:** If you are unsure of your student's readiness or if the student needs to review critical concepts before getting started, see *Readiness & Review for Algebra 2*.
- Our *Algebra 1: Legacy* course is NOT a sufficient prerequisite for this course.
- A full-year geometry course is NOT a necessary prerequisite for this course.

What is included with access to *Algebra 2: Advanced Algebra*?

Algebra 2: Advanced Algebra is a fully online curriculum. From the Online Lessons, you can access everything you need to succeed!

Course components include:

- How To Guide
- Pacing Guide
- Online Lessons with videos
- Printable Lesson Pages
- Printable Tests
- Online Solutions

Additionally, resources are available online that include:

- Formula Sheets
- Record Keeping Sheets
- Mastery Check Rubric
- Graph Paper
- Blank Graphs

Technology Tools (not included with *Algebra 2: Advanced Algebra*)

Throughout the course, students are instructed to use technology to:

- Check their work
- Graph equations and perform calculations with extremely large or small values
- Ensure accuracy

In these instances, students can use the free suite of online math software tools, Desmos®, which includes graphing and scientific calculators. If your student is unsure how to use these tools, consult the Help Center on the Desmos® website.

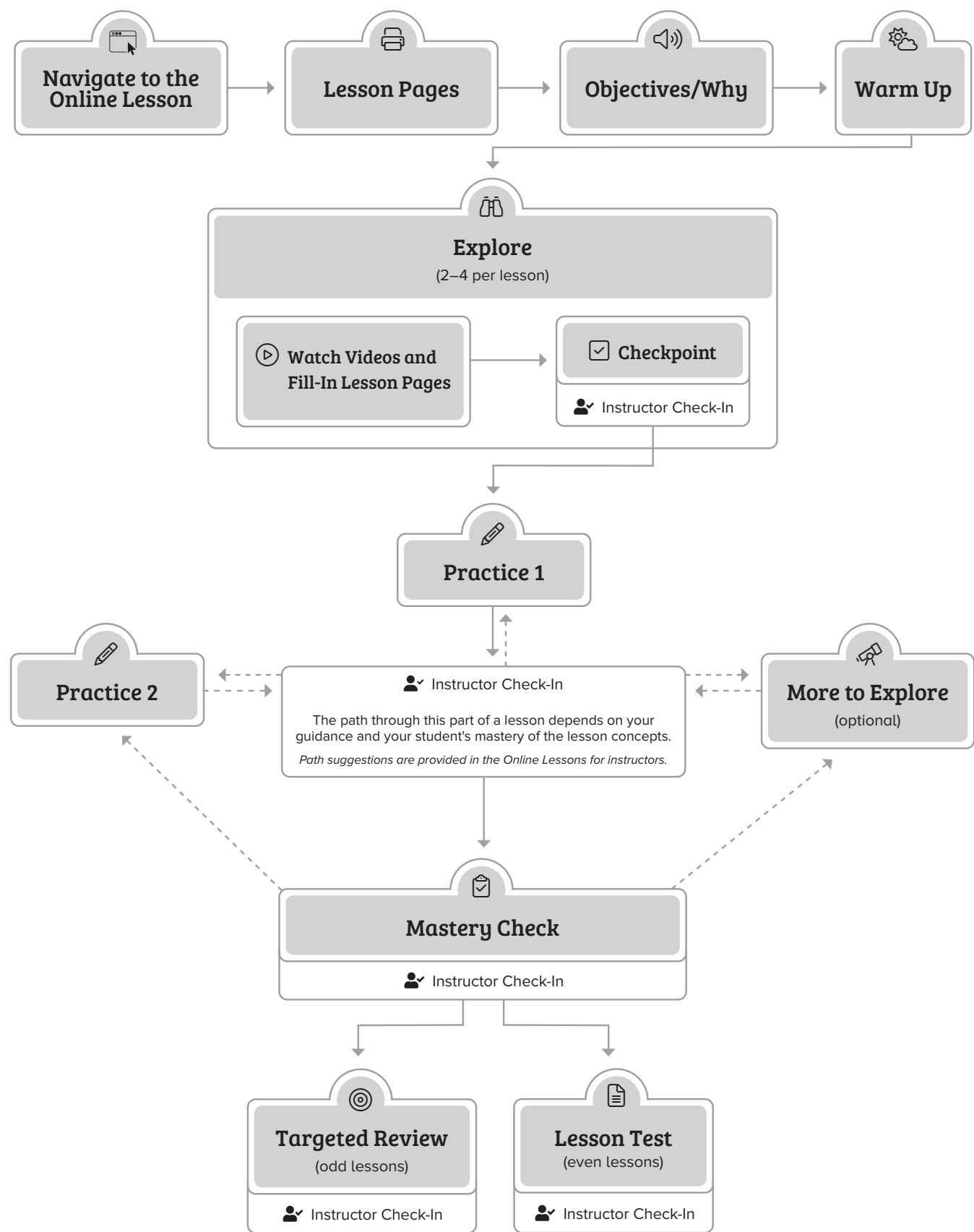
If students prefer not to use Desmos®, they can use graphing and scientific calculators.

Instructor vs Student Access

There are some important differences between instructor and student sign-ins. This chart shows the differences between instructor and student access.

All student and instructor components and materials are accessible online.	Instructor Access	Student Access
Instructions for navigating the lesson	✓	✓
Access to print Lesson Pages	✓	✓
Presentation videos of concepts and example problems	✓	✓
“See It Solved” videos for Warm Up and Checkpoint problems	✓	✓
Instructions to check in with the instructor	✓	✓
Instructions for acquiring and completing tests	✓	✓
Lesson Solutions	✓	
Helpful instructor tips and notes	✓	
Access to print tests for students	✓	
Test Solutions	✓	
Course and Unit References	✓	✓

Algebra 2: Advanced Algebra Lesson Flow



How to Complete a Lesson for Students and Instructors

This course allows for considerable student independence. For students, the Online Lesson is the “control center” for moving through a lesson. When unsure about what to do next, students can rely on the Online Lesson.

However, there are several places in each lesson where your student is instructed to check in for guidance and direction on their path toward mastery.

Online Lesson Item	Student Description	Instructor Description
Get Started	Instructions are available online.	Instructions and Lesson Solutions are available online.
Lesson Pages button	At the start of each lesson, your student uses it to access and print Lesson Pages.	
Objectives and Why?	Lists what the student will learn during the lesson and why it is important. Your student can click the sound icon to listen as they read.	
Warm Up	Prepares the student’s mind for what they are about to learn. Your student can watch the “See It Solved” video after they complete the Warm Up problems independently.	Instructions and Solutions are available online.
Explore (2–4 per lesson)	This is where the learning happens. Your student watches concept and example problem videos online as they fill in their Lesson Pages. At the end of each Explore topic, your student completes a Checkpoint and watches the “See It Solved” video after they complete the Checkpoint independently.	Instructions and Solutions are available online.
Check In	After each Checkpoint, your student is directed to check in.	If your student understands the Checkpoint, direct them to continue or end the learning session.
Practice 1	Now it’s time for your student to practice what they have learned by completing problems on their own.	Instructions and Solutions are available online.
Check In	Your student is directed to check in.	Direct your student where to go next based on how they did on Practice 1 or end the learning session.
Practice 2 (optional)	Your student only completes Practice 2 if you assign it.	Instructions and Solutions are available online.

Online Lesson Item	Student Description	Instructor Description
Check In	Your student is directed to check in.	Direct your student where to go next based on how they did on Practice 2 or end the learning session.
More to Explore (optional)	Your student only completes the More to Explore if you assign it.	Instructions are available online.
Mastery Check	Your student completes a multi-part problem directly related to the lesson objectives as they show and say what they know.	Instructions, Rubric, and Solutions are available online. For "Say What You Know," verify your student can restate the lesson objectives in their own words.
Check In	Your student is directed to check in.	Direct your student where to go next based on how they did on the Mastery Check or end the learning session.
Targeted Review (odd lessons)	Your student completes problems that gradually prepare them for Unit Tests, Midterm, and Final.	Instructions and Solutions are available online.
Check In	Your student is directed to check in.	Direct your student to end the learning session or to continue to the next lesson.
Lessons Test (even lessons)	Your student will take a Lessons Test that covers the two previous lessons.	Access to print the test for your student, instructions, and Solutions are available online.
Check In	Your student is directed to check in.	Direct your student to end the learning session or to continue to the next lesson.

Planning and Pacing

Because mastery is individual, pacing is a challenge to construct and predict.

For information about planning and pacing for *Algebra 2: Advanced Algebra*, see the **Pacing Guide** on the course Overview page.