

# Master Math with Purpose

Algebra 2 invites students to go beyond the basics and discover how mathematics can be a tool for both understanding the world and living out their faith. Through the lens of a biblical worldview, students tackle real-world challenges using advanced concepts like polynomial, radical, and rational functions, systems of equations, trigonometric identities, and probability. As they dive into topics such as linear programming, quadratic modeling, and data analysis, they'll see that math isn't just about numbers—it's about purpose. Each lesson encourages students to use their mathematical skills to serve others, think critically, and glorify God in all they do.

## How We Teach It

### Step-by-Step Explanations

Lessons feature step-by-step explanations and carefully modeled examples that promote understanding over memorization, equipping students to follow mathematical reasoning.

### Engaging, Real-World Learning

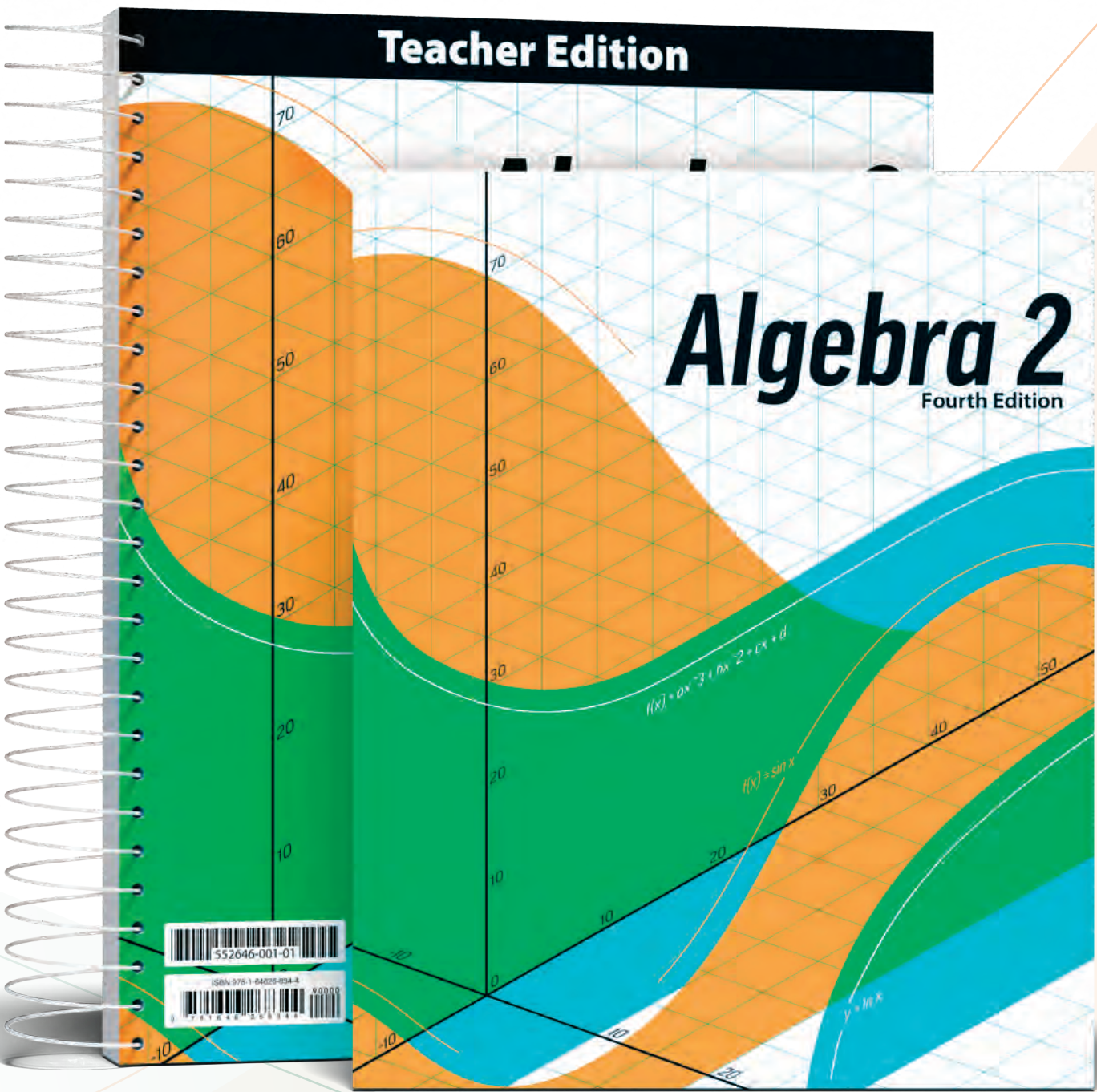
Interactive activities, STEM projects, and technology-based tools empower students to think critically and apply mathematical concepts in practical ways.

### Assessments and Cumulative Reviews

Assessments like Skill Check exercises are included throughout the lessons to provide immediate feedback, while Cumulative Reviews strengthen long-term retention and prepare students for standardized testing.

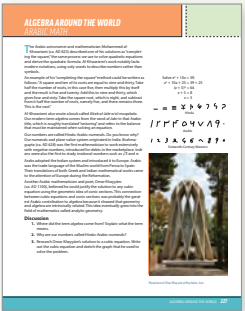
### Integrating a Biblical Worldview

Each chapter includes a biblical worldview theme, helping students to connect math to God's truth. Through guided reflection and real-life applications, students learn to see mathematics not only as part of God's orderly creation, but also as a tool they can use to serve others.

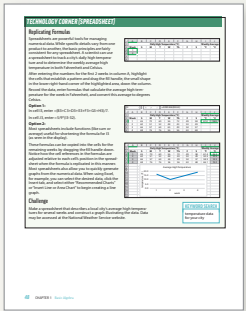


*eTexts of student and teacher materials, along with resources referenced in the Teacher Edition, are available in BJU Press Trove.*

Algebra Around the World



Technology Corner



STEM Projects



## Materials

### Student Edition

The *Algebra 2* Student Edition encourages students to see math as a way to understand the world and live out their faith. Grounded in a biblical worldview, this edition applies advanced topics—such as functions, systems of equations, trigonometry, and probability—to real-world problems, helping students use their God-given abilities to serve others and glorify God. Each section of the Student Edition is introduced with an Essential Question and learning target, guiding students to think critically, make connections, and approach mathematics with purpose.

### Teacher Edition

The Teacher Edition offers effective teaching strategies, presentation tips, and additional practice problems, while also addressing common student misconceptions. It includes references to Skill Checks, flags for essential mathematical practices, and biblical worldview guidance. Digital resources such as charts, PowerPoints, programming solutions, and Mathardy games provide support for teaching Algebra 2 with confidence.

### Activities

The student activities book supplements the Student Edition as needed. It includes extra practice activities aligned with key chapter concepts and 2 new STEM projects to support hands-on learning and concept reinforcement.

### Assessments & Assessments Answer Key

There are 14 chapter tests, 4 quarterly exams (which can be combined into semester finals), and 3–4 quizzes per chapter to help assess student learning. The Assessments Answer Key provides step-by-step solutions, references to objectives, and difficulty levels for each question.

*Also available is the Activities Answer Key.*