

Self-Paced Precalculus

Textbook: *Precalculus: Mathematics for Calculus*, 5th Edition by James Stewart, Lothar Redlin, and Saleem Watson

Unlimited Teacher Support

One of the greatest benefits of this course is that **your student has unlimited access to a qualified math teacher for the entire school year.**

Self-paced does **not** mean self-taught.

Whenever students encounter a difficult concept or become stuck on a homework problem, they can:

- Ask questions at any time.
- Attend scheduled help sessions.
- Meet with the teacher for additional instruction.
- Receive step-by-step explanations.
- Review challenging concepts until they understand them.

Our goal is not simply for students to finish the course, but to truly master the material and gain confidence in mathematics.

Course Description

This self-paced Precalculus course is designed for students who are ready to prepare for Calculus while maintaining the flexibility of learning on their own schedule. Students will develop a strong understanding of advanced algebra, functions, trigonometry, analytic geometry, exponential and logarithmic functions, systems of equations, sequences and series, vectors, matrices, and introductory limits.

Although students progress independently, they are never learning alone. Throughout the school year, students have continuous access to an experienced teacher who is available to answer questions, explain difficult concepts, and provide additional support whenever needed.

Course Structure

Students work through the course at their own pace while following the recommended weekly schedule provided in the course.

Each lesson includes:

- Video instruction covering the textbook material
- Guided examples

- Suggested practice problems
- Homework assignments
- Chapter assessments to be graded by the teacher.

Students are encouraged to work consistently each week to remain on track for completing the course during the academic year.

Homework Expectations

Students are assigned the **odd-numbered homework problems** from each section of the textbook.

Choosing the odd-numbered problems allows students to:

- Check their work using the answers provided in the back of the textbook.
- Identify mistakes independently.
- Develop confidence in solving problems correctly.

If a student's answer does not match the textbook solution, they should:

1. Rewatch the lesson video for additional explanation.
2. Compare their work carefully to locate the error.
3. Bring any remaining questions to the teacher during office hours or scheduled meetings or schedule a sooner time.

Learning from mistakes is an important part of mastering mathematics, and students are encouraged to ask questions whenever something is unclear.

Teacher Support

One of the greatest benefits of this course is that **your student has access to a real teacher for the entire school year.**

When questions arise, students are never expected to struggle alone. They can:

- Attend scheduled help sessions.
- Meet with the teacher to review difficult concepts.
- Receive step-by-step explanations of challenging problems.
- Ask questions about homework, quizzes, or tests.
- Gain additional practice when needed.

Our goal is not simply to help students finish assignments, but to ensure they truly understand the mathematics and build confidence for future courses, including Calculus.

Parent Involvement

Parents are encouraged to monitor student progress throughout the course.

Since homework uses the odd-numbered exercises, students can immediately check their own work. Parents can also review completed assignments and encourage students to seek help whenever they encounter difficulties.

Assessments

Student understanding will be evaluated through:

- Chapter tests
- Comprehensive quarter exams

Suggested Pacing

Students should complete approximately **one section each school day** or follow the recommended pacing guide provided in the course. Staying close to the suggested schedule will allow students to comfortably complete the course during the school year.

Technology Requirements

Students should have:

- Reliable internet access
- A computer or laptop (recommended)
- The required textbook
- Paper, pencils, and a scientific or graphing calculator

Communication

Questions are welcome throughout the year. Students are encouraged to reach out whenever they need clarification rather than becoming frustrated or falling behind.

Mathematics is best learned through practice, discussion, and asking questions. We are committed to partnering with your family to ensure your student succeeds in Precalculus.

Course Goal

By the end of this course, students will possess the algebraic and trigonometric skills necessary for success in Calculus, college mathematics, and STEM-related fields while developing the confidence to solve complex mathematical problems independently.