

## Elementary Advanced Math Program Grades 4 and 5

#### Overview

The Elementary Advanced Math Program is designed to provide elementary school students with an opportunity to explore and engage in advanced mathematical concepts and problem-solving skills beyond the regular grade-level curriculum. This program aims to challenge and nurture the mathematical talents of students who demonstrate exceptional aptitude and interest in mathematics. Teachers will accelerate students by teaching concepts covered in the current grade-level curriculum as well as introducing concepts from the next grade level, preparing them for advanced courses in middle school.

### Program Objectives:

- 1. Develop Advanced Problem-Solving Skills: The program focuses on developing students' ability to think critically, analyze complex problems, and apply advanced mathematical techniques to solve them.
- 2. Foster Mathematical Creativity: Students are encouraged to think creatively and develop innovative approaches to problem-solving, fostering a deeper understanding of mathematical concepts.
- 3. Enhance Logical Reasoning Abilities: The program aims to strengthen students' logical reasoning skills by introducing them to advanced mathematical reasoning and proof techniques.
- 4. Promote Mathematical Fluency: Students engage in rigorous mathematical exercises and practice to enhance their computational skills and develop a strong foundation in mathematical fluency.
- 5. Introduce Higher-Level Mathematical Concepts: The program covers topics beyond the regular elementary school curriculum, including algebra, geometry, number theory, probability, and statistics, to expose students to a broader range of mathematical concepts.

#### Benefits:

- 1. Academic Challenge: The program provides intellectually stimulating challenges that cater to the abilities of mathematically gifted students, keeping them engaged and motivated in their mathematical studies.
- 2. Skill Development: Students develop advanced problem-solving skills, logical reasoning abilities, and mathematical fluency, which not only benefit their math proficiency but also enhance their overall cognitive abilities.
- 3. Future Opportunities: The program prepares students for higher-level math courses, competitions, and advanced academic programs in mathematics, paving the way for future academic opportunities.
- 4. Personal Growth: Through the program, students build confidence, resilience, and perseverance as they tackle complex mathematical problems and overcome challenges.
- 5. Community Engagement: The program fosters a sense of community among mathematically talented students, allowing them to interact with like-minded peers, collaborate on projects, and form lasting friendships.

Overall, the Elementary Advanced Math Program offers an enriching and challenging mathematical experience for elementary school students, nurturing their mathematical talents, and fostering a lifelong love for mathematics.

# Frequently Asked Questions

- 1. How does a student qualify for the advanced math program in grades 4 and 5? Students are chosen based on multiple criteria, including the math profile score, math placement test score, and inView score.
- 2. Once a student qualifies for the advanced math program in grades 4 and 5, are they automatically placed in the program the following year?

  No, students must qualify for the program each year.
- 3. How many students will qualify for the advanced math program? Approximately 25 students will qualify for the program.
- 4. Who will teach the advanced math class?

  There is one teacher assigned to teach advanced math at each grade level. Therefore, students may have a different teacher for math than for their other subjects.
- 5. Does my child have to be in the Enrichment Program to qualify for advanced math?

No, there are different criteria to be considered for each program. Although some students will qualify for both, there will be others who only qualify for one or the other program.

- 6. Does my child have to maintain a certain grade to remain eligible for the program? Yes, we want students to be successful in the advanced math program, and we do not want them to struggle with learning advanced concepts. The teacher will communicate with parents when a child may be struggling and may need to be placed in the on-level math program.
- 7. How will I know if my child qualifies for the advanced math program?

  A letter will be sent home notifying the students and their parents/guardians that they have qualified for the program.
- 8. What if my child does not qualify for the program, but I feel they should participate? Students must qualify for the program based on the established criteria. The development of foundational math skills at the elementary level is critical to their future success in math. Thus, it is important not to rush students through math content that could create significant gaps in their learning. Additionally, we don't want young children to develop an aversion to math because they are overwhelmed by the content.
- If my child does not qualify for advanced math this year, is it possible to qualify next year?
   Absolutely, students are considered for the program each year based on the established criteria.
- 10. Who should I contact if I have a question about my child's placement? You should contact the building principal, who can share your child's assessment data.
- 11. What is the curriculum for the advanced math class?

  The curriculum will be posted on the website. The goal is for students to be accelerated so that they can learn a portion of the next grade level content. This will allow middle school students to participate in high school level courses (Algebra I and Geometry).