

Molalla River Academy Philosophy on Mathematics

At Molalla River Academy we believe that all students are capable math learners. The teaching of mathematics is approached from a variety of avenues to reach all styles of learning and challenge students where they are developmentally. In addition to arriving at the correct answer, students are engaged in a meaningful practice of solving mathematical problems. Math teaching is based on research which has shown that critical thinking, analysis and communicating about thinking processes result in excellence in student performance in math. MRA uses Bridges in K-5th grade and CPM (College Preparatory Math) in grades 6 to 8.

The Bridges curriculum “focuses on developing students’ deep understandings of mathematical concepts, proficiency with key skills, and ability to solve complex and novel problems. Bridges blends direct instruction, structured investigation, and open exploration. It taps into the intelligence and strengths of all students by presenting material that is as linguistically, visually, and kinesthetically rich as it is mathematically powerful.” Bridges teaches students the skills of problem solving, communication, critical thinking, and analysis. Hands-on activities and math games deepen and enrich student understanding and application of math concepts. Oral and written communication of mathematical ideas as well as metacognitive behaviors in analyzing problems are important in developing a deep understanding of math and transitioning into the more abstract math concepts.

Students enter the sixth grade math class with a strong foundation in mathematical learning, allowing them to go more deeply into advanced creative analysis and sequential thinking. Most math concepts are learned collaboratively in order to facilitate a broader and deeper understanding. The mission of CPM includes, “engaging all students in learning mathematics through problem solving, reasoning, and communication.”

All math classes at MRA are busy. Students talk about math, solve problems together, explore concepts, and manipulate math. Mathematical learning is approached with respect to each student’s developmental level. The result gives students the deep understanding, knowledge and skills necessary for them to be successful in high school math programs.

Because math concepts and strategies build on each other from year to year, we keep students in their current grade of math through 5th grade. This prevents creating holes in a student’s math knowledge base. Students do have the opportunity to test out of 6th grade math by taking the 7th grade pre-test at the beginning of their 6th grade year. These students will then take 7th grade math, 8th grade math, and in 8th grade they will take Algebra. A second opportunity for advancement is available for seventh graders who did not skip 6th grade math but who still wish to take Algebra in 8th grade. These students must show proficiency on the 8th grade math pre-test prior to enrolling in Algebra.

In order for a student to receive Algebra 1 credit at Molalla High School the student must:

- Receive a grade of A, B, or C for both terms.
- Pass the final exam.

If those criteria are met, the student will be assigned 1.0 credit of mathematics in high school. The credit will be applied to the transcript in September of the freshman year. If the student receives math credit, the grade earned will be reflected in the GPA. Parents have the option of choosing not to have the course placed on their child's transcript. This request must be made in writing and submitted to the high school registrar prior to the end of the first week of school. Requests received after this date will not be honored. Additionally, students who do not meet the above criteria will not receive high school credit of any kind, and will be required to enroll in Algebra 1 their freshman year.