

Mathematics Recommendations for Rising 9th Grade Students

Please note that all classes listed are not offered every year. Please refer to the Course List on the website for the classes offered during the current school year.

If your 8 th grader is currently enrolled in:	And their <u>TEST</u> average is:	They should register for:
8 th grade Math (any level)	Less than 83	Introduction to High School Mathematics
8 th grade Math (any level)	83 or higher	Algebra 1 - Part 1 and Part 2
Algebra 1	Less than 85	Algebra 1 - Part 1 and Part 2
Algebra 1	85 - 90	Algebra 1 Plus*
Algebra 1	90 or higher	Honors Geometry
Geometry	Less than 85	Algebra 1 Plus Honors Geometry
Geometry	85 or higher	Honors Algebra 2
Algebra 2	Less than 88	Honors Algebra 2
Algebra 2	88 or higher	Pre-Calculus

- Please note: Algebra 1 is a prerequisite for Algebra 1 Plus. Student enrolled in 8th Grade Math Plus **DO NOT** qualify for participation in Algebra 1 Plus.
- Students who wish to enroll in **Computer Science 1/2** must have completed **Algebra 1** with a test average of 90 or higher.

Students enrolling in courses beyond Algebra 1 should be able to:

Perform operations with fractions (without a calculator)
 Calculate mean, median, and mode for a given set of data
 Apply the laws of exponents
 Apply the distance and midpoint formulas
 Recognize and use function notation
 State the domain and range of a function using set notation
 Identify the independent and dependent variables in a relation
 Solve linear equations and inequalities
 Graph linear equations and inequalities (with and without a calculator)
 Slope-intercept and two-intercept methods
 Write linear equations (slope-intercept and standard form)
 Set up and solve equations involving direct variation
 Solve and graph absolute-value functions
 Multiply polynomials (including squaring a binomial)
 Factor polynomial expressions
 Solve quadratic equations (including application of the quadratic formula)
 Apply the zero product property
 Simplify radical expressions
 Simplify rational expressions
 Solve rational equations (with linear denominators)
 Solve a system of equations (graphing, elimination, substitution)
 Perform arithmetic operations with matrices (addition, subtraction, and scalar multiplication)