

# WESTVIEW

## Guidelines for Incoming Ninth Graders And Their Parents Regarding Math Placement

### Introduction

One of the challenging decisions you will make is what level of mathematics to select for ninth grade. This decision has consequences throughout the rest of high school. The purpose of this document is to help families make the right choice so that students can be successful.

### Graduation Requirements, State Requirements and College Readiness

In order to graduate from high school, you must complete 20 units of mathematics. That is, you must pass four semesters (4 quarters) of mathematics (5 units per semester/quarter). At Westview, each semester lasts nine weeks. The Poway Unified School District and the State of California also require that a student complete first year Algebra, at a minimum, in order to receive a high school diploma.

If your student wishes to be successful in college and/or prepared for the working world, they need a strong background in mathematics. If our incoming ninth graders work until they are 62, many of them will be working until 2053! Think about how much different the world is now compared to 1957! A strong mathematical background will be indispensable! **To prepare our students for the future, we recommend four years of mathematics.** The minimum requirement to meet the State of California's College Readiness A-G requirements is three years of mathematics, including Algebra 3-4.

There are four options for your incoming ninth grader at **Westview**: Introduction to High School Algebra 1-2, Algebra 1-2, Geometry 1-2, and Algebra 3-4.

The registration form asks for the signature of the eighth grade math teacher because the high schools believe the eighth grade teacher has the best information regarding ninth grade math placement. These teachers are very familiar with your student's work and how it aligns to other students they have taught. Our experience is that when parents work hard to understand their student's math abilities, they can find the right placement.

Students and their families should remember that colleges are looking for students with above average mathematics grades. These students look more impressive to colleges than those who have accelerated through the math curriculum while earning average grades. It is important that your student study hard and do well rather than race through a curriculum feeling frustrated and "not good at math."

The following are descriptions of courses available to incoming freshmen.

Introduction to High School Algebra – this class is designed for the student who needs to master computational skills such as fractions, decimals, and percents. This class will also be helpful in preparing students for the California High School Exit Exam (CAHSEE), which students take in the spring of the tenth grade.

Algebra 1-2 – **A strong foundation in Algebra is crucial for future math study.** Many students may have taken Algebra in middle school. However, students who have not mastered this topic should repeat this class in high school. Algebra 1-2 classes are scheduled to have 20 students. Students who enroll in this class and continue with four years of successful math study will be college ready.

Geometry – This class is designed to have students continue to use the skills they developed in Algebra 1-2, while learning about geometric properties related to specific shapes and figures. Students should have earned a "B" grade or above in eighth grade Algebra. If not, they should strongly consider taking high school Algebra 1-2 as a ninth grader.

Engineering Geometry - This course is an integration of high school geometry and Project Lead the Way curriculum for Introduction to Engineering Design. The intent is to integrate more geometry and/or teach geometry as a basis for the course and use the project-based learning tools of Introduction to Engineering Design as problem solving to create a more in-depth learning experience for geometry students. It is based on the standards set by the State of California with a major emphasis on measurements of two- and three-dimensional figures, geometric constructions, Pythagorean applications, special right triangles, rigid motions on geometric figures, and coordinate geometry. The focus of the course is depth of knowledge, with less breadth than a standard geometry course.

Algebra 3-4 - This course is designed for the student who took Geometry at the middle school and earned at least a "B" grade. Since these students are a full two years advanced in their mathematical study, they will be in classes with older, more experienced students. They will also be relying heavily on their Algebra 1-2 and Geometry skills. Students and their families are cautioned not to take this class if there are signs of weakness in a student's background in Algebra (e.g. low grades, low STAR test scores, etc.).