

## **CSUN SAEP Program**

### **I. Objectives and Guidelines for classroom success in Geometry AB**

Welcome to a very exciting mathematical adventure. Geometry is challenging, but not too hard and those of you who love to solve puzzles will delight in the geometry problems and proofs.

The objective in this course is to provide a foundation in the spatial, logical aspect of mathematics. It provides study of the structure of geometry as a mathematical system that develop powers of spatial visualization, stresses induction as a method of discovery, and helps to develop understanding and use of deductive proof. The course provides opportunities for the study of angle relationships, perpendicularity, and basic properties of parallel lines and planes. It includes the study of right triangles and the Pythagorean Theorem, congruent triangles and other planar figures, similar polygons, geometric inequalities, and proportional line segments. It expands on the concepts of solid figures based on polygons. This includes the studies of circles and properties related to cones, cylinders and spheres. Practice will be provided in the technique of geometric construction. It introduces the concept of loci, expands on the topic of transformational geometry and relates geometry to algebra through the study of coordinate geometry. This class provides the student with the opportunity to develop reading skills along with math skills. The course is normally taken during the second year in the basic sequence of college preparatory mathematics.

The student gives evidence of having achieved the objectives of this course when he/she has the ability to:

- employ the vocabulary of geometric concepts
- use measuring devices to explore the ideas of size and shape
- apply algebraic methods to find angle measures
- analyze figures containing congruent triangles
- formulate the proof of a theorem
- use proportions to determine the measure of corresponding sides of similar polygons
- formulate an indirect proof
- apply the Pythagorean Theorem
- use the properties of special right triangles
- apply the trigonometric ratios of sin, cosine, and tangent
- find the area of various planar figures
- analyze problems involving circles and arcs
- use various properties to calculate the measures of arcs
- apply volume and surface area formulas
- employ the technique of geometric construction to analyze the loci of coplanar points
- relate the concepts of coordinate geometry and two and three dimensions to linear equations
- analyze geometric figures using the concepts of transformational geometry

## II. Homework Policy

Homework will be assigned daily and will be an extension of topics covered in class. One year of mathematics will be covered in five weeks so obviously there will be considerable home study required. Most of the homework will be to review those concepts covered in class because each day this summer session is almost one-week work. Actual practice of the recently presented lessons is not intended to exceed one hour.

## III. Grading Policy

### Work Habits

Absence is no excuse for missing homework, class assignments, tests, or quizzes. All work missed is to be made up as soon as possible after your return. Remember, if you miss one day of class you miss almost one week of work.

In general,

E – no more than one missing assignment

S – 2 or 3 missing assignments

U – more than 3 missing assignments or 3 or more unexcused tardies to class from breaks

### Cooperation

Reflects in general how the student's behavior and attitude allow for an orderly and instructive class session.

### Letter Grade

Based mainly on the average of quizzes and tests.

100% - 90% - A

89 % - 80% - B

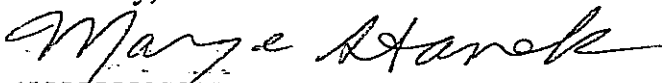
79 % - 65% - C

64 % - 50% - D

Below 49% is FAIL

Tutoring is available to any student having difficulty. If you find things are tough let me know as soon as possible.

Sincerely,



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We have read and understood the Objectives and Guidelines for Geometry AB.

Pupil \_\_\_\_\_ Parent Signature \_\_\_\_\_

Home Phone \_\_\_\_\_ Work Phone \_\_\_\_\_