California 8th Grade Math Standards Overview

California's Grade 8 math curriculum, based on the Common Core, covers the following key domains:

1. The Number System (NS)

- Know and apply the properties of integer exponents.
- Use scientific notation to express very large or small numbers.
- Perform operations with numbers expressed in scientific notation.
- Understand irrational numbers and approximate them on the number line.

2. Expressions and Equations (EE)

- · Work with radicals and integer exponents.
- Understand and apply the Pythagorean theorem in various contexts.
- Solve linear equations, including those with rational number coefficients.
- Analyze and solve systems of linear equations.
- Use functions to model relationships between quantities.

3. Functions (F)

- Define, evaluate, and compare functions.
- Use functions to describe quantitative relationships.
- Interpret the rate of change in various contexts.
- Graph functions and understand their properties.

4. Geometry (G)

- Understand congruence and similarity using transformations.
- Understand and apply the Pythagorean theorem.
- Solve problems involving volume of cylinders, cones, and spheres.
- Work with the coordinate plane to solve real-world and mathematical problems.

5. Statistics and Probability (SP)

- Investigate patterns of association in bivariate data.
- Understand scatter plots and correlation.
- Make predictions based on data.

© Learning Goals for 8th Grade

- Master exponents, radicals, and scientific notation.
- Solve and graph linear equations and systems.
- Understand and work with functions.
- Apply geometric concepts including transformations and volume.
- Analyze bivariate data to make informed predictions.