

Relevant 8th-12th grade California SCORE Standards
“Math: Batter Up”

Algebra 1

Symbolic reasoning and calculations with symbols are central in algebra. Through the study of algebra, a student develops an understanding of the symbolic language of mathematics and the sciences. In addition, algebraic skills and concepts are developed and used in a wide variety of problem-solving situations.

- 1.0** Students identify and use the arithmetic properties of subsets of integers and rational, irrational, and real numbers, including closure properties for the four basic arithmetic operations where applicable:

 - 1.1 Students use properties of numbers to demonstrate whether assertions are true or false.

- 3.0** Students solve equations and inequalities involving absolute values.
- 5.0** Students solve multi-step problems, including word problems, involving linear equations and linear inequalities in one variable and provide justification of each step.
- 10.0** Students add, subtract, multiply, and divide monomials and polynomials. Students solve multistep problems, including word problems, by using these techniques.
- 12.0** Students simplify fractions with polynomials in the numerator and denominator by factoring both and reducing them to the lowest terms.
- 13.0** Students add, subtract, multiply, and divide rational expressions and functions. Students solve both computationally and conceptually challenging problems by using these techniques.
- 25.0** Students use properties of the number system to judge the validity of results, to justify each step of a procedure, and to prove or disprove statements:
 - 25.1 Students use properties of numbers to construct simple, valid arguments (direct and indirect) for, or formulate counterexamples to, claimed assertions.
 - 25.2 Students judge the validity of an argument according to whether the properties of the real number system and the order of operations have been applied correctly at each step.