# Algebra | Mathematics Common Core State Standards

## Quantities

1. Reason quantitatively and use units to solve problems.

## The Real Number System

**2.** Extend the properties of exponents to rational exponents and use properties of rational and irrational numbers.

### **Creating Equations**

3. Create equations that describe numbers or relationships.

## Seeing Structure in Expressions

**4.** Interpret the structure of expressions, perform arithmetic operations on polynomials, and write expressions in equivalent forms to solve problems.

## Reasoning with Equations & Inequalities

- **5.** Solve equations and inequalities in one variable.
- **6.** Represent and solve systems of equations and inequalities.

### **Interpreting Functions**

- **7.** Understand the concept of a function and use function notation.
- 8. Interpret functions that arise in applications in terms of a context.
- 9. Analyze functions using different representations.

### **Building Functions**

**10.** Build a function that models a relationship between two quantities and build new functions from existing functions.

### Linear, Quadratic, & Exponential Models

**11.** Construct and compare linear, quadratic, and exponential models, solve problems, and interpret expressions for functions in terms of the situation they model.

#### **Interpreting Categorical & Quantitative Data**

- 12. Summarize, represent, and interpret data on a single count or measurement variable.
- **13.** Summarize, represent, and interpret data on two categorical and quantitative variables, and interpret linear models.

#### **Building Functions**

**14.** Build a function that models a relationship between two quantities and build new functions from existing functions.

