# **6th Grade Math Goals**

### State Goal 6: Numbers and Operations

- Compute accurately and efficiently using the order of operations.
- Demonstrate understanding of the commutative, associative, and distributive properties.
- Compare and order fractions, decimals, and percents.
- Demonstrate a mastery of multiplication and division of fractions and mixed numbers.
- Read, write, and round decimals through the billionths place.
- Demonstrate a mastery of multiplication and division of decimals.
- Know fraction, decimal, and percent equivalencies for halves, thirds, fourths, fifths, eighths, and tenths.
- Read and write numbers with positive exponents.
- Calculate the value of a number with a positive exponent.
- Write any number as a product of prime numbers.
- Use prime factors to find greatest common factor and least common multiple.

#### State Goal 7: Measurement

- Demonstrate the ability to calculate perimeter and area for rectangles and squares and find the area of right triangles.
- Calculate conversions between measures of length, weight, and capacity within customary and metric situations.

#### State Goal 8: Algebraic Methods

- Represent, analyze, and generalize a variety of patterns with tables, graphs, words, and when possible, symbolic rules.
- Relate and compare different forms of representation for a relationship using tables, graphs, words, sketches, and symbols.
- Solve one-step equations and inequalities.
- Identify and plot ordered pairs for points on the Cartesian plane.

### State Goal 9: Geometry

- Classify angles in two- and three-dimensions as acute, right, or obtuse.
- Draw figures given information about the measures of their sides and angles.

## State Goal 10: Data and Probability

- Collect data relating to school or school subject situations using observations, measurement, surveys, or experiments.
- Collect, organize, record, and analyze the data using known graphical approaches, as well as histograms, box-plots, and scatterplots.
- Determine all possible outcomes of a simple event.