

**LIBERTY LIBERAL ARTS ACADEMY**  
**Middle School Math**  
**Fractions, Decimals & Percents**

**Teacher:** Mrs. Lopez

**Grade Levels:** 5<sup>th</sup> & 6<sup>th</sup>

**Teacher Compensation:** \$270 annually payable in 9 monthly payments of \$30

**Semester Supply Fees:** \$30 due each semester. Fall Semester fee is due 1<sup>st</sup> week of July to secure Student's place in class or on Orientation day. Spring Semester fee is due in January.

**Curriculum:** Teacher will supply all texts and workbooks

**Student supply list:** Notebook, pens and pencils

**Class Description:** Fractions and other topics: Fractions are presented in an intuitive way with visual explanations of equivalent fractions, common denominators, and fractions and numbers larger than 1.

**Major Concepts and Skills Include:**

Recognizing and generating equivalent fractions

Understanding addition, subtraction, multiplication, and division of fractions and mixed numbers

Fluently adding, subtracting, multiplying, and dividing fractions and mixed numbers

**Additional Concepts and Skills:**

Using multiple strategies to recognize common factors

Understanding grouping symbols and their effect on order of operations

Interpreting and solving word problems

Comparing, and converting decimal fractions

Finding the area and circumference of circles

Classifying quadrilaterals

Representing fractions and fractional measurements on line plots and number lines

Using coordinates to represent ordered relationships

**Decimals, Percents, and other topics:** Students learn to complete core operations with decimals. The connection between fractions and decimals is presented.

**Major Concepts and Skills Include:**

Expanding understanding of place value from positive powers of ten to include decimals

Fluently adding, subtracting, multiplying, and dividing multiple digit decimals using place-value strategies

Solving real-world problems with decimals and percentages

Understanding the metric system and converting from one unit of measure to another

**Additional Concepts and Skills:**

Understanding and simplifying exponents

Understanding negative numbers and representing them on the coordinate plane

Using properties of operations to simplify and evaluate algebraic expressions

Interpreting and graphing relationships between dependent and independent variables

Understanding of plane geometry & geometric symbols