

5th Grade Math --- Pre-Algebra

Course Code: MATH 5A

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Textbook:

Holt Pre-Algebra, 1992, Eugene D. Nichols, etc. ISBN: 0-03-047068-4

Note: This textbook need to be ordered by student's parents on www.amazon.com.

Reference Book used on class

Math 24 game(Double digit digit)

Math contests for Math League.,

Math Olympiad competition problems.

Note: There is no need to order these books.

Prerequisite

4th grade math level or above.

About Class

The class will focus on understanding math concept through doing drills for math problems on the class. First, Holt Pre-Algebra is the primary textbook. Second, Math Contests from Math league will help students to prepare for math competition. Third, Math 24 game is designed for fast mental calculation for addition, subtraction, multiplication and division, and also have fun for competition. Fourth, Problems for Math Olympiad is designed for help students to have skills for solving problems. Parent's involvement after class is a plus.

Contents for Fall Semester

Integers

Definition

Comparing and ordering integers

Integers: Addition, subtraction, multiplying, and division

Variables and expressions

Evaluating expressions

Order of Operations

Basic properties

Using the distributive properties

Formulas: Perimeter, Area, Average

Contents for Spring Semester

Equations and problem solving

Equations and inequalities

Solving equations

Solving addition and subtraction equations

Solving multiplication and division equations

Rational numbers

Factors and multiples

Tests for divisibility

Prime number

Prime factorization

Exponents

LCM and GCF

Fractions

Equivalent fractions

Problem solving Exploration

Multiplying fractions

Multiplying mixed numbers

Problem solving strategies

Using reciprocals to solve equations

Dividing fractions and mixed numbers

Fractions with like denominators

Fractions with unlike denominators

Subtracting mixed numbers

Probability

Ratio and proportion

Problem solving: Using proportions

Ratio and measurement

Problem solving strategies

Probability

Independent and dependent events

Making choices

Permutations

