



Waukegan Community Unit
School District #60
Lincoln Center for Educational Services
Division of Teaching, Learning, and Professional Practices

The Core Principals: Standards for Mathematical Practice

Grade Level: Grade 6

The goal of the Standards for Mathematical Practice is to complement the Common Core State Standards by working to engage students in the subject matter, ensuring that they grow in maturity and expertise from Pre-Kindergarten through High School.

According to the Common Core State Standards, at the completion of their 6th Grade year students should be able to:

Ratios and Proportional Relationships

- Understand ratio concepts and use ratio reasoning to solve problems

The Number System

- Apply and extend previous understandings of multiplication and division to divide fractions by fractions
- Compute fluently with multi-digit numbers and find common factors and multiples
- Apply and extend previous understandings of numbers to the system of rational numbers

Expressions and Equations

- Apply and extend previous understandings of arithmetic to algebraic expressions
- Reason about and solve one-variable equations and inequalities
- Represent and analyze quantitative relationships between dependent and independent variables

Geometry

- Solve real-world and mathematical problems involving area, surface area, and volume

Statistics and Probability

- Develop understanding of statistical variability
- Summarize and describe distributions

Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for an express regularity in repeated reasoning