



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 7

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 7th Grade year students should be able to:

Ratios and Proportional Relationships

- Analyze proportional relationships and use them to solve real-world and mathematical problems

The Number System

- Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers

Expressions and Equations

- Use properties of operations to generate equivalent expressions
- Solve real-life and mathematical problems using numerical and algebraic expressions and equations

Geometry

- Draw, construct and describe geometrical figures and describe the relationships between them
- Solve real-life and mathematical problems involving angle measure, area, surface area, and volume

Statistics and Probability

- Use random sampling to draw inferences about a population
- Draw informal comparative inferences about two populations
- Investigate chance processes and develop, use, and evaluate probability models

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