



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 5**

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 5th Grade year students should be able to:

#### **Operations and Algebraic Thinking**

- Write and interpret numerical expressions
- Analyze patterns and relationships

#### **Number and Operations in Base Ten**

- Understand the place value system
- Perform operations with multi-digit whole numbers and with decimals to hundredths

#### **Number and Operations – Fractions**

- Use equivalent fractions as a strategy to add and subtract fractions
- Apply and extend previous understandings of multiplication and division to multiply and divide fractions

#### **The Number System**

- Gain familiarity with concepts of positive and negative integers

#### **Measurement and Data**

- Convert like measurement units within a given measurement system
- Represent and interpret data
- Geometric measurement: Understand concepts of volume and relate volume to multiplication and division

#### **Geometry**

- Graph points on the coordinate plane to solve real-world and mathematical problems
- Classify two-dimensional figures into categories based on their properties

#### **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

