



Toms River Regional Schools
and The New Jersey State Core Curriculum Standards
Making It Work

ACADEMIC STANDARDS—MATHEMATICS

4.1. NUMBER AND NUMERICAL OPERATIONS

All students will develop number sense and will perform standard numerical operations and estimations on all types of numbers in a variety of ways.

- Number Sense
- Numerical Operations
- Estimation

4.2. GEOMETRY AND MEASUREMENT

All students will develop spatial sense and the ability to use geometric properties, relationships, and measurement to model, describe and analyze phenomena.

- Geometric Properties
- Transforming Shapes
- Coordinate Geometry
- Units of Measurement
- Measuring Geometric Objects

4.3. PATTERNS AND ALGEBRA

All students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes.

- Patterns and Relationships
- Functions
- Modeling
- Procedures

4.4. DATA ANALYSIS, PROBABILITY, AND DISCRETE MATHEMATICS

All students will develop an understanding of the concepts and techniques of data analysis, probability, and discrete mathematics, and will use them to model situations, solve problems, and analyze and draw appropriate inferences from data.

- Data Analysis (Statistics)
- Probability
- Discrete Mathematics — Systematic Listing and Counting
- Discrete Mathematics — Vertex-Edge Graphs and Algorithms

4.5. MATHEMATICAL PROCESSES

All students will use mathematical processes of problem solving, communication, connections, reasoning, representations, and technology to solve problems and communicate mathematical ideas.

- Problem Solving
- Communication
- Connections
- Reasoning
- Representations
- Technology