



LINCOLN-WOODSTOCK COOPERATIVE SCHOOL DISTRICT COURSE SYLLABUS

Course Name: Integrated I Math
Semester: Full Year Course
Teacher: Sarah Kraus

Course Description:

This course is designed to extend and apply grade 8 math content knowledge in the following content areas: the number system, equations and inequalities, functions, geometry, and statistics. Problem-solving and critical thinking skills, along with the use of technology, will be emphasized and utilized throughout the course.

PRE-REQUISITES: Completed Grade 8 Math course with a passing grade for the year or competence demonstrated on the math placement exam.

Competencies or Standards Assessed:

Key Concepts:

- 1. Solving Equations and Inequalities
- 2. Functions
- 3. Linear Functions and Equations
- 4. Exponential Functions and Equations
- 5. Foundations of geometry
- 6. Angle Relationships
- 7. Congruence
- 8. Statistics

Mathematical Practices and Processes:

- Problem Solving
- Reasoning and Communicating
- Representing and Connecting
- Seeing Patterns and Generalizing

Anchor Texts or Major Curriculum:

Integrated I Envision Math 2.0 Savvas Realize Program (includes textbook and digital platform)

Course Outline (major units of study):	
Unit Title	Essential Question or Overarching Understanding
Topic 1 Solving Equations and Inequalities	What general strategies can you use to solve simple equations and inequalities?
Topic 2 Linear Equations	Why is it useful to have different forms of linear equations?
Topic 3 Linear Functions	How can linear functions be used to model situations and solve problems?
Topic 4 Systems of Linear Equations and Inequalities	How do you use systems of linear equations and inequalities to model situations and solve problems?
Topic 5 Exponents and Exponential Functions	How do you use exponential functions to model situations and solve problems?
Topic 6 Foundations of Geometry	What are some of the fundamentals of geometry?
Topic 7 Parallel and Perpendicular Lines	What properties are specific to parallel and perpendicular lines?
Topic 8 Transformations	What are the properties of the four types of rigid motion?
Topic 9 Triangle Congruence	What relationships between sides and angles of triangles can be used to prove triangle congruence?
Topic 10 Statistics	How do you use statistics to model situations and solve problems?



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COURSE SYLLABUS

Portrait of a Learner

Independent Learner

I make thoughtful plans and do my best to reach personal goals using feedback to work through challenges.

Responsible Collaborator

I work with others to achieve shared goals by listening actively, contributing ideas, and managing conflict.

Critical Thinker

I analyze information, ask thoughtful questions, and apply reasoning skills to solve problems and make decisions.

Effective Communicator

I express ideas clearly, adapting strategies based on the audience, setting, and/or purpose.

Global Citizen

I show that I care and take responsibility by helping in my community and the world around me.

Additional Classroom Expectations:

Be respectful, be responsible, and be open-minded.