**Algebra I – Semester 1 Pacing Guide**

Resource: emathinstruction.com

Unit 1 - Building Blocks of Algebra

Variables and Expressions (Order of Operations & Vocabulary) (1 -2) 1day

Word Phrases to Algebraic Expressions and v.v. (1-10) 1 day

Combine Like Terms using Commutative /Associative Properties (1 – 3) 1 day

Distributive Property (Including more combining like terms) (1 – 4) 2 days

Equivalent Expressions (1 – 5) 1 day

Seeing Structure in Expressions (1 - 6) 1 day

Exponents as Repeated Multiplication (Some exponent rules) (1 – 7) 2 days

More Complex Equivalency (Multiplying binomials) (1 – 8) 2 days

More Structure Work (Intro to Factoring) (1 – 9) 1 day

Algebraic Puzzles (Words to Algebra) (1 – 11) 1 day

Assessment 1 day

Unit 2 – Linear Expressions, Equations, and Inequalities

Rates, Patterns, and Problem Solving (1 – 1) 1 day

Conversions (4 – 2) 2 days

Write and Solve 2 step equations (Explain steps as you go.) (2-1) 1 day

Write and solve Multi Step Equations (2 - 2) (2 – 3) 2 days

Justifying Steps in Solving Equations (2 – 4) 1 day

Linear Word Problems (2 – 5) 1 day

More Linear Equations & Consecutive Integers (2 – 6) 1 day

Literal Equations (2- 7) 2 days

Assessment (Equations) 1 day

Inequalities (Write, Solve & Graph) 1 day

Inequalities (2– 8) 1 day

Solving 2 step Inequalities 1 day

Solving Inequalities & Words (2– 9) 1 day

Solving Compound Inequalities (2 – 10) 1 day

More Compound Inequalities (2 – 11) 1 day

Modeling with Inequalities (2 -13) 1 day

Assessment (Inequalities) 1 day

Unit 3 – Functions

Intro to Functions (3-1) 1 day

Function Notation (3 -2) 1 day

Graphs of Functions (3 – 3) 1 day

Graphical Features (3 – 4) 1 day

Using Graphing Calculator (3 -5) 1 day

Slope (Find using 2 points or a graph) Use supplemental material 1 day

Average Rate of Change (3 -6) 1 day

Domain and Range of a Function (3 – 7)(Include end behaviors) 1 day

Assessment 1 day

Unit 4 – Linear Functions and Sequences

(Linear graphs grow by equal differences over equal intervals.)

Proportional Relationships (Direct Variation) (4-1) 1 day

Non-proportional Linear Relationships (Y = mx + b) (4 -3) 1 day

More Work Graphing Linear Functions (4 – 4) 1 day

Writing Equations in Slope Intercept Form (4 – 5) 2 days

Write an Equation Given 2 points 1 day

Modeling with Linear Functions (4 – 6) 1 day

More Linear Modeling (4 – 7) 1 day

Writing Equations in Slope Intercept Form ( 4 – 5) 1 day

Write an equation Given 2 points 1 day

Modeling with Linear Functions (4 – 6) 1 day

More Modeling with Linear Functions (4 – 7) 1 day

Strange Lines – Horizontal and Vertical (4 – 8) (Include Parallel lines) 1 day

Absolute Value Equations 1 day

Absolute Value Graphs and Step Functions (4 -9) 1 day

Absolute Value Graphs and Transformations 1 day

Graphs of Linear Inequalities (4 – 11) 1 day

Introduction to Sequences (4 – 12) 1 day

Arithmetic Sequences (4 – 13)

Review 1 day

Assessment 1 day

Unit 5 – Systems of Linear Equations and Inequalities

The Truth About Graphs (4 – 10) 1 day

Solutions to Systems and Solving by Graphing (5 – 1) 2 days

Solving Systems by Substitution (5 – 2) 2 days

Properties of Systems and their Solutions (5 – 3) 1 day

The Elimination Method (5 – 4) 2 days

Modeling with Systems of Equations (5 – 5) 2 days

Using a Matrix on the Calculator to solve Systems 1 day

Solving Equations Graphically (5 – 6) 1 day

Solving Systems of Inequalities (5 – 7) 2 days

Modeling with Systems of Inequalities (5 – 8) 1 day

Assessment 1 day

Review for Exam 1 day

Exams 2 days