

Course Syllabus
Algebra I
Mrs. Dreas

First Semester

- I. Expressions, Equations and Functions
 - A. Evaluate Expressions
 - B. Order of Operations
 - C. Writing Expressions
 - D. Equations and Inequalities
 - E. Algebraic Models
 - F. Functions as Tables and Rules
 - G. Functions as Graphs

Mid Chapter 1 Test-week of August 24
Chapter 1 Test-week of September 7

II. Properties of Real Numbers

- A. Real Number Line
 - 1. Addition
 - 2. Subtraction
 - 3. Multiplication
 - 4. Division
- B. Comparing Real Numbers
- C. Distributive Property

Mid Chapter 2 Test-week of September 14
Chapter 2 Test-week of September 21

III. Solving Linear Equations

- A. Solving Equations
 - 1. One Transformation
 - 2. Two Transformations
 - 3. Variables on Both Sides
- B. Ratios and Proportions
- C. Equations and Formulas

Mid Chapter 3 Test-week of October 5
Chapter 3 Test-week of October 12
Cumulative Review and Test (chapters 1-3)-week of October 19

V. Graphing Linear Equations (graph paper required)

A. Graphing

1. Plotting Points
2. Two Variables
3. Intercepts
4. Slope-Intercept Form
5. Slope

B. Direct Variation

Mid Chapter 4 Test-week of October 26

Chapter 4 Test-week of November 9

V. Writing Linear Equations

A. Equations

1. Slope-Intercept Form
2. Slope and a Point
3. Two Points

B. Standard Form

C. Point-Slope Form

D. Parallel and Perpendicular Lines

Mid Chapter 5 Test-week of November 23

Chapter 5 Test-week of November 30

SEMESTER EXAM- December 11, 14-16

̄
Second Semester

I. Solving and Graphing Linear Inequalities

A. Solving Inequalities

1. One Variable
2. Multi-step
3. Compound Inequalities

B. Absolute Value Equations

Mid Chapter 6 Test-week of January 11

Chapter 6 Test-week of January 18

II. Systems of Linear Equations and Inequalities

A. Solving

1. Graphing
2. Substitution
3. Linear Combination

B. Problem Solving

C. Special Types of Linear Systems

D. Solving Linear Inequalities

Mid Chapter 7 Test-week of January 25

Chapter 7 Test-Week of February 8

III. Powers and Exponent

A. Exponents

1. Multiplication
2. Negative
3. Zero
4. Division

B. Scientific Notation

Mid Chapter 8 Test-week of February 15

Chapter 8 Test-week of March 1

IV. Polynomials and Factoring

A. Polynomial Combination

1. Addition and Subtraction
2. Multiplying

B. Factoring Trinomials

1. Solving
2. Factoring

Mid Chapter 9 Test-week of March 8

Chapter 9 Test-week of March 29

- V. Quadratic Equations and Functions
 - A. Solving by Square Roots
 - B. Graphing Quadratics
 - C. The Quadratic Formula

Mid Chapter 10 Test-week of April 5

Chapter 10 Test-week of April 19

VI. Radicals

- A. Simplifying
- B. Solving Equations

Chapter 11 Test-week of April 26

VII. Rational Equations

- A. Dividing Polynomials
- B. Operations with Rational Expressions
 - 1. Addition and Subtraction
 - 2. Multiplying and Dividing
 - 3. Solving

Chapter 12 Test-week of May 3

SEMESTER EXAM-week of May 17

The year will also include extra work with story problems, graphing calculators and occasional writing assignments. Test dates may vary due to a change in scheduling but tests will always be announced in advance both in class and on my web page.

Textbook: Algebra I-Larson, Boswell,
Kanold, Stiff McDougal-Littell, 2007

Instructor: Marilyn Dreas e-mail: mdreas@ndsion.com