

Algebra I Curriculum Map

Mr. Lovely, 2009 – 2010

TOPIC & TEXTBOOK SECTIONS	Duration	Month(s)
Unit 1: Expressions, Equations and Negative Numbers Chapters 1 & 2: Operations, Variables, Powers/Exponents, Order of Operations, Expressions, Equations, Negative Numbers, Commuting & Associating	3 wks	Aug/Sept
Unit 2: Properties, Axioms and Equations Chapters 3 & 4: Solving Two Step Equations, Application of Equations, Algebraic Properties/Axioms, Harder Equations	3 wks	Sept
Unit 3: Polynomials & Radicals Chapter 5: Polynomials, Names of Polynomials, Product of Binomials, Squaring a Binomial, Factoring Trinomials, Radicals, Irrational Numbers	4 wks	Sep/Oct
Unit 4: Quadratic Equations and Functions Chapter 6: Quadratic Formula, Evaluating Expressions with Radicals, Equations with Absolute Values and Squares, Completing the Square, Vertical Motion Problems, The Discriminant	4 wks	Oct/Nov
Unit 5: Two Variable Expressions and Equations Chapter 7: Cartesian Coordinate System, Graphs of Linear Equations, Slope, Slope-Intercept Form, Point-Slope Form, Standard Form, Systems of Equations, Linear Functions (8-1), Scatter Plots (8-2), Linear Regression (8-2)	5 wks	Nov/Dec
Unit 6: Probability and Exponents Chapter 9: Probability (8-3), Counting Techniques/Tools (Custom), Prime Numbers, Exponentiation, Exponents with Products and Quotients, Negative and Zero Exponents, Powers of 10, Scientific Notation	3 wks	Jan
Unit 7: More Operations with Polynomials Chapter 10: Multiplying and Factoring Polynomials, Greatest Common Factor, Factoring with GCF, Factoring by Grouping, Solving Quadratic Equations by Factoring	3 wks	Jan/Feb
Unit 8: Rational Algebraic Expressions Chapter 11: Rational Expressions, Simplifying/Multiplying/Dividing Rational Expressions, Least Common Multiple, Adding/Subtracting Rational Expressions, Fractional Equations, Problems Involving Ratio and Proportion	4 wks	Feb/Mar
Unit 9: Radical Algebraic Expressions Chapter 12: Sums/Differences/Products/Quotients of Radicals, Binomials with Radicals, Square Roots of Variable Expressions, Pythagorean Theorem, Higher-Order Radicals, Rational and Irrational Numbers	3 wks	Mar/Apr
Unit 10: Inequalities Chapter 13: Number Line Graphs, Solving Inequalities, Compound Inequalities, Equations with Absolute Value, Inequalities with Absolute Value, Linear Inequalities, Systems of Inequalities, Evaluating Inequalities	3 wks	Apr
Unit 11: Functions & Advanced Topics Chapter 14: Function Terminology, Direct and Inverse Variation Functions, Trigonometric Functions, Quadratic Functions, Quadratic Inequalities	3 wks	Apr/May