

Algebra 1 Part 1 Course Outline 2008-2009

Text: Glencoe Algebra Vol 1: Concepts and Applications

WEEK	SOL	TEXTBOOK	SUPPLEMENTS
1st Six Weeks	A.2 A.3	<p>Ch 1 The Language of Algebra</p> <p>Review of Prerequisite Skills</p> <p>1.1 Writing Expressions and Equations 1.2 Order of Operations 1.3 Commutative and Associative Properties 1.4 Distributive Property 1.5 Problem Solving 1.6 Collecting Data 1.7 Displaying and Interpreting Data (stem and leaf plots)</p>	<p>Study Organizer: Foldables</p> <p>Technology: Order of Operations worksheet in Algebra Packet</p> <p>Manipulative Activity: Modeling the Distributive Property</p> <p>Technology: Have students determine for which operations commutative and associative properties hold true</p>
	A.3 A.4	<p>Ch 2 Integers</p> <p>2.1 Graphing Integers on a Number Line 2.2 The Coordinate Plane 2.3 Adding Integers 2.4 Subtracting Integers 2.5 Multiplying Integers 2.6 Dividing Integers</p>	<p>Study Organizer: Foldables</p> <p>Activity: “Two-Colored Counter” manipulatives for modeling integers Civilization (portfolio)</p> <p>Investigation: Manipulation of matrices</p> <p>Application: Matrices</p> <p>Technology: Interactive Website http://www.shodor.org/</p>

Note: Matrix math (A.4) should be taught with chapter 2. Additional materials will be needed. May begin working with Hands-on-Equations now so the students are proficient by the second six weeks.

WEEK	SOL	TEXTBOOK	SUPPLEMENTS
2 nd Six Weeks	A.1 A.3 A.17	Ch 3 Addition and Subtraction Equations p. 684-688 Prerequisite Skills review 3.1 Rational Numbers 3.2 Adding and Subtracting Rational Numbers 3.4 Equations 3.5 Solving Equations by Using Models 3.6 Solving Addition and Subtraction Equations 3.7 Solving Equations Using Absolute Value	Study Organizer: Foldables Activity: Fraction Tower activity sheets Manipulatives: “Hands-On Equations,” manipulative set from Algebra Portfolio Activity: Backtracking Technology: Solve Equations on Calculator
Note: Chapter 3.3 – Mean, median, mode and range will be taught with the section on graphing and statistics during the 4 th six weeks.			
3 rd Six Week	A.1 A.3	Ch 4 Multiplication and Division of Equations 4.1 Multiplying Rational Numbers 4.2 Counting Outcomes 4.3 Dividing Rational Numbers 4.4 Solving Multiplication and Division Equations 4.5 Solving Multi-Step Equations 4.6 Variables on Both Sides 4.7 Grouping Symbols	Study Organizer: Foldables Manipulative Activity: Use Hands on Equations or Algebra Tiles to model solutions of equations.

WEEK	SOL	TEXTBOOK	SUPPLEMENTS
4 th Six Week	A.1	<p>Ch 5 Proportional Reasoning and Probability</p> <p>p.689-691 Prerequisite Skills Review 3.3 Mean, Median, Mode and Range p. 210-211 box-and-whisker plot 5.1 Solving Proportions 5.2 Scale Drawings and Models 5.3 The Percent Proportion 5.4 The Percent Equation</p>	<p>Study Organizer: Foldables</p> <p>Investigation: Comparing data sets using statistics</p> <p>Use proportions to solve percent problems</p> <p>Activity: Activity in portfolio on mean, median and mode</p> <p>Activity: Base Ten tiles to demonstrate decimals and percents</p>
	A.5 A.6 A.15 A.18	<p>Ch 6 Functions and Graphs</p> <p>6.1 Relations 6.2 Equations as Relations 6.3 Graphing Linear Relations 6.4 Functions 6.5 Direct Variation 6.6 Inverse Variation</p>	<p>Study Organizer: Foldables</p> <p>Activity: Discovering Direct and Inverse Variation (portfolio)</p> <p>Technology: Interactive Website http://www.shodor.org/</p>
<p>Notes: Ch 5.5-5.7 are on probability which isn't an algebra SOL. However, they may be used for extensions if needed.</p>			

WEEK	SOL	TEXTBOOK	SUPPLEMENTS
5 th Six Weeks	A.6 A.7 A.8 A.15 A.16	Ch 7 Linear Equations 7.1 Slope 7.2 Writing Equations in Point-Slope Form 7.3 Writing Equations in Slope-Intercept Form 7.4 Scatterplots pp. 308-309 Best fit lines 7.5 Graphing Linear Equations 7.6 Families of Linear Graphs 7.7 Parallel and Perpendicular Lines	Study Organizer: Foldables Activity: Create a “Slope-o-meter” to find slope (portfolio) Technology: Use TI-83 to verify equations Technology: Finding line of best fit on TI-83 (portfolio) Activity: Spreadsheet Activity (portfolio)
6 th Six Weeks	A.10 A.13	Ch 8 Powers and Roots 8.1 Powers and Roots 8.2 Multiplying and Dividing Powers 8.3 Negative Exponents 8.4 Scientific Notation 8.5 Square Roots 8.6 Estimating Square Roots 8.7 The Pythagorean Theorem	Study Organizer: Foldables Manipulative Activity: “Base-10 Blocks” for finding Square Roots Estimating Square Roots Technology: Solve application problems using scientific notation on the TI-83 Technology: Estimate Square Roots using TI-83 Activity: Geoboard or Dot Paper activities for Pythagorean Theorem
		<i>Review for Exams</i>	
		<i>Exam</i>	