

# Algebra 1 Concepts

## **First Semester**

Integers and Variable Expressions

Solving Equations

Applications of Linear Equations

Using Proportional Reasoning

Relations and Functions

Linear Functions

Writing Equations of Lines

Systems of Linear Equations

Applications of Systems of Linear Equations

## **Second Semester**

Inequalities

Polynomials

Dividing Polynomials

Factoring

Solving Quadratic Equations

Quadratic Functions

Exponential Functions and Radicals

Operations with Radicals

# Algebra 1: 1<sup>st</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
August 14  Staff Development	15  Introduction and Pre-test	16  Order of Operations	17  Integers, Absolute Value Properties	18  Adding/Subtracting Integers
21  Subtracting Integers	22  Multiplying/Dividing Integers	23  Integer War  Quiz # 1-1	24  Evaluating Expressions/ Combining Like Terms	25  Distributing Negatives (Quiz # 1-2))
28  Review #1	29  Test #1	30  One-Step Equations	31  Two-Step Equations	September 1  Multi-Step Equations
4  Labor Day	5  Equations with Variables on Both Sides	6  Equations w/ Variables on Both Sides/ Quiz 2-1	7  Equation Cross-out or Equation Bingo	8  Review #2
11  Test #2	12  Expressions and Number Problems	13  Perimeter Problems	14  Flexible Instruction	15  Flexible Instruction
18  Percent Problems	19  Formulas  Quiz 3-1	20  Literal Equations	21  Review #3	22  Test #3 or 6-week test

## Algebra 1: 2<sup>nd</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
September 25 Ratio and Proportion	26 Coordinate Plane	27 Relations/ Domain and Range	28 Functions  Report Cards	29 Functions
October 2 Constant Rate of Change	3 Constant Rate of Change	4 Graphs and Functions	5 Review #5	6 Test #5
9 Graphing Linear Functions	10 What's My Rule	11 Slope as a Rate of Change	12 Flexible Instruction	13 Flexible Instruction
16 Slope by Formula	17 Graphing $Y = mx + b$	18 Changing Slope Forms	19 Graphing Special Cases	20 Interpreting Slope
23 Graph Match-up and Rev #6, part 1	24 Review 6, Part 2	25 Test #6	26 Writing the Equation of a Line	27 Writing the Equation of a Line
30 Writing the Equation of a Line	31 Graphing Lines on the Calculator	November 1 Interpreting Graphs	2 Scatter Plots/ Lines of Best Fit	3 Pythagorean Theorem

# Algebra 1: 3<sup>rd</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
November 6 Review #7	7 Test # 7	8 Exploring Data	9 Exploring Data	10 Graphing Systems
13 Solving Systems by Substitution	14 Solving Systems by Graphing and Substitution	15 Solving Systems by Elimination	16 Solving Systems by Elimination	17 Review #8
20 Test # 8	21 Early Release Systems Applications	22 Thanksgiving	23 Holidays	24
27 Systems Applications	28 Systems Applications	29 Systems Reversed	30 Review # 9	December 1 Test #9
4 Parallel and Perpendicular Lines	5 Direct and Inverse Variation	6 Probability	7 Measurement/ Volume	8 Volume/ Surface Area
11 Effects of Changing Dimensions on Area & Volume	12 Review for Finals	13 Review/ Finals	14 Early Release Finals	15 Early Release Finals

# Algebra 1: 4<sup>th</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
January 1  New Year's Day	2  Staff Development	3  Solving One-step Inequalities	4  Solving Multi-step Inequalities Report Cards	5  Inequality Applications
8 Graphing Inequalities with Two Variables	9 Graphing Systems of Inequalities	10 Graphing Systems of Inequalities	11 Review #1	12 Test #1
15  Martin Luther King	16 Adding and Subtracting Polynomials	17 Multiplying Monomials	18 Powers Of Monomials	19 Multiplying Polynomials
22 Multiplying Monomials and Polynomials	23 Polynomials in Geometric Form	24 Quiz Review	25 Review	26 Test #2
29 Dividing Monomials	30 Dividing Polynomials by a Monomial	31 Finding Missing Factors	February 1 Factoring with GC F	2 Quiz/ Exponent Bingo
5 Review # 3	6 Test #3	7 Blocks and Boxes	8 Flexible Instruction	9 Flexible Instruction
12 Sums and Products	13 Factoring Trinomials	14 Factoring Trinomials	15 Difference of Squares	16 Factoring Revisited

# Algebra 1: 5<sup>th</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
February 19  Quiz/ Factor Completely	20  Factor Completely	21  Factor Blackout  Quiz	22  Review #4	23  Test #4
26  Solving Equations by Factoring	27  Solving Equations by Factoring	28  Quadratic Formula	March 1  Quadratic Formula	2  Quadratic Applications
5 Quiz  Review	6  Review #5	7  Test #5	8 Graphing Quadratic Functions	9 Graphing Quadratic Functions with Calculators
19 Solving Quadratic Functions with Calculators	20  Review Quiz	21  Graphing $y = ax^2$ and $y = x^2 + k$	22  Graphing $y = (x \pm h)^2$	23  Graphing $y = (x \pm h)^2 \pm k$
26  Linear Translations	27  Review #6, Part 1	28  Review #6, Part 2	29  Test #6	30  Translations Reflections Dilations
April 2  Similarity 3-D Drawings	3  Pythagorean Theorem	4  Algebra Tiles	5  TAKS Review  Early Release	6  Snow Day

# Algebra 1: 6<sup>th</sup> Six Weeks

Monday	Tuesday	Wednesday	Thursday	Friday
April 9 TAKS Review	10 TAKS Review	11 TAKS Review	12 Flexible Instruction  Report Cards	13 Flexible Instruction
16 <b>TAKS</b>	17 <b>TAKS</b>	18 <b>TAKS</b>	19 <b>TAKS</b>	20 <b>TAKS</b>
23 Review #7	24 Test #7	25 Graphing Exponential Functions	26 Growth and Decay	27 Perfect Squares
30 Irrational Square Roots	May 1 Radical Bingo	2 Review Quiz	3 Simplifying Radicals	4 Simplifying Radicals
7 Review #8	8 Test #8	9 Multiplying Radicals	10 Adding and Subtracting Radicals	11 Dividing Radicals
14 Dividing Radicals	15 Review	16 Test	17 Review	18 Review
21 Review	22 Finals	23 Finals  Early Release	24 Finals  Early Release	25 Snow Day Teacher Work Day

Saturday, May 26<sup>th</sup>: Graduation