

Eighth Grade Algebra A Curriculum Map

Note: The following timeline and sequence is meant to be a guide only and is subject to change.
(Revised 2008-09 school year)

Page 1

Grade Level Content Expectations

	1st Trimester			2nd Trimester			3rd Trimester			Ongoing	
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
L1.1.5 Justify numerical relationships.										X	
Resources:											
L1.1.1 Know the different properties that hold in different number systems and recognize that the applicable properties change in the transition from the positive integers to all integers, to the rational numbers, and to the real numbers.	X	X	X								
Resources: 1-5											
L1.1.2 Explain why the multiplicative inverse of a number has the same sign as the number, while the additive inverse of a number has the opposite sign.	X	X	X	X							
Resources: 1-2, 1-3											
L1.1.3 Explain how the properties of associativity, commutativity, and distributivity, as well as identity and inverse elements, are used in arithmetic and algebraic calculations.	X	X	X	X							
Resources: 1-2, 1-3, 1-7											
L1.1.4 Describe the reasons for the different effects of multiplication by, or exponentiation of, a positive number by a number less than 0, a number between 0 and 1, and a number greater than 1.		X	X	X					X	X	X
Resources: 1-3, 7-9, 7-4											
L2.1.2 Calculate fluently with numerical expressions involving exponents; use the rules of exponents; evaluate numerical expressions involving rational and negative exponents; transition easily between roots and exponents.			X	X						X	X
Resources:											
A1.1.2 Know the properties of exponents and roots and apply them in algebraic expressions.			X	X						X	X
Resources:											
A1.1.1 Give a verbal description of an expression that is presented in symbolic form, write an algebraic expression from a verbal description, and evaluate expressions given values of the variables.			X	X	X	X					
Resources:											
A1.2.1 Write equations and inequalities with one or two variables to represent mathematical or applied situations, and solve.				X	X	X	X	X	X		
Resources:											
A1.2.4 Solve absolute value equations and inequalities and justify steps in the solution.					X	X					
Resources:											
A1.2.8 Solve an equation involving several variables (with numerical or letter coefficients) for a designated variable. Justify steps in the solution.					X	X		X			
Resources:											
A2.4.1 Identify the family of function best suited for modeling a given real-world situation.					X						
Resources:											
L1.2.2 Interpret representations that reflect absolute value relationships.					X	X	X				
Resources: Ch. 3 Ext											

Eighth Grade Algebra A Curriculum Map

Note: The following timeline and sequence is meant to be a guide only and is subject to change.

(Revised 2008-09 school year)

Page 1

Grade Level Content Expectations

	1st Trimester			2nd Trimester			3rd Trimester			Ongoing
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Resources:										
A3.5.1 Write the symbolic form and sketch the graph of simple polynomial functions.						X X				
Resources:										
S2.1.1 Construct a scatterplot for a bivariate data set with appropriate labels and scales.						X X				
Resources:										
S2.1.2 Given a scatterplot, identify patterns, clusters, and outliers. Recognize no correlation, weak correlation, and strong correlation.						X X				
Resources:										
S2.1.4 Differentiate between correlation and causation. Know that a strong correlation does not imply a cause-and-effect relationship. Recognize the role of lurking variables in correlation.						X X				
Resources:										
S2.2.1 For bivariate data that appear to form a linear pattern, find the least squares regression line by estimating visually and by calculating the equation of the regression line. Interpret the slope of the equation for a regression line.						X X				
Resources:										
S2.2.2 Use the equation of the least squares regression line to make appropriate predictions.						X X				
Resources:										
A2.1.4 Recognize that functions may be defined by different expressions over different intervals of their domains; such functions are piecewise defined.						X X X				
Resources:										
A2.1.1 Determine whether a relationship (given in contextual, symbolic, tabular, or graphical form) is a function and identify its domain and range.						X X X X				
Resources:										
A3.1.1 Write the symbolic forms of linear functions (standard, point-slope, and slope-intercept) given appropriate information and convert between forms.						X X X X				
Resources:										
A2.1.6 Identify the zeros of a function, the intervals where the values of a function are positive or negative, and describe the behavior of a function as x approaches positive or negative infinity, given the symbolic and graphical representations.							X X			
Resources:										
A2.1.7 Identify and interpret the key features of a function from its graph or its formula(s).							X X			
Resources:										
A2.3.2 Describe the tabular pattern associated with functions having a constant rate of change (linear); or variable rates of change.							X X			
Resources:										
A3.1.2 Graph lines (including those of the form $x = h$ and $y = k$) given appropriate information.							X X			

