Cord Algebra 1, Learning in Context, 3rd edition
correlation to Hawaii's HCPS III Algebra Benchmarks

Benchmarks	**Cord Algebra I Lesson(s)**
Standard 1: Numbers and Operations: NUMBER SENSE: Understand numbers, ways of representing numbers, relationships among numbers, and number systems	
MA.AI.1.1 Recognize situations that can be represented by matrices	1.6
Standard 2: Numbers and Operations: OPERATION SENSE: Understand the meaning of operations and how they relate to each other	
MA.AI.2 No benchmark for Algebra I	
Standard 3: Numbers and Operations: COMPUTATION STRATEGIES: Use computational tools and strategies fluently and, when appropriate, use estimation	
MA.AI.3.1 Apply arithmetic properties to operate on and simplify expressions that include radicals and other real numbers	13.3
MA.AI.3.2 Apply the laws of exponents to perform operations on expressions with integral exponents	10.2, 10.3
MA.AI.3.3 Use addition, subtraction, and scalar multiplication of matrices to solve problems	1.6
Standard 4: Measurement: FLUENCY WITH MEASUREMENT: Understand attributes, units, and systems of units in measurement; and develop and use techniques, tools, and formulas for measuring	
MA.AI.4.1 Use formulas, functions, or conversion equations to solve problems dealing with determining a measurement based on another derived or given measurement	2.2, 3.2
Standard 5: Geometry and Spatial Sense: PROPERTIES AND RELATIONSHIPS: Analyze properties of objects and relationships among the properties	
MA.AI.5 No benchmark for Algebra I	
Standard 6: Geometry and Spatial Sense: TRANSFORMATIONS AND SYMMETRY: Use transformations and symmetry to analyze mathematical situations	
MA.AI.6 No benchmark for Algebra I	
Standard 7: Geometry and Spatial Sense: VISUAL AND SPATIAL SENSE: Use visualization and spatial reasoning to solve problems both within and outside of mathematics	
MA.AI.7 No benchmark for Algebra I	
Standard 8: Geometry and Spatial Sense: REPRESENTATIONAL SYSTEMS: Select and use different representational systems, including coordinate geometry	
MA.AI.8.1 Graph linear equations using slope-intercept, point-slope, and x- and y-intercept techniques	4.3, 4.4, 4.5, 4.6, 4.7
MA.AI.8.2 Determine the slope of a line when given the graph of a line, two points on the line, or the equation of the line	4.2, 4.3, 4.4
Standard 9: Patterns, Functions, and Algebra: PATTERNS AND FUNCTIONAL RELATIONSHIPS: Understand various types of patterns and functional relationships	
MA.AI.9.1 Determine if a linear pattern exists in a set of data and represent the data algebraically and graphically	4.2,4.3, 4.4, 4.5, 4.6
MA.AI.9.2 Compare and contrast the concepts of direct and inverse variation of a relation	5.3

MA.AI.9.3 Determine the zeros of a linear or quadratic function algebraically and graphically	4.3, 4.4, 4.5, 4.6, 4.7, 11.1, 11.2, 11.3, 11.4, 11.5, 11.6
MA.AI.9.4 Compare and contrast the properties of linear functions and exponential functions	5.6
Standard 10: Patterns, Functions, and Algebra: SYMBOLIC REPRESENTATION: Use symbolic forms to represent, model, and analyze mathematical situations	
MA.AI.10.1 Solve linear equations and inequalities in one variable using a variety of strategies (e.g., algebraically, by graphing, by using a graphing calculator)	3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 9.2, 9.3, 9.4, 9.5
MA.AI.10.2 Translate between verbal mathematical situations and algebraic expressions and equations	1.8, 3.1, 3.2, 3.3, 3.4, 3.5
MA.AI.10.3 Justify the steps used in simplifying expressions and solving equations and inequalities	3.1, 3.2, 3.3, 3.4, 3.5, 9.2, 9.3
MA.AI.10.4 Determine the equation of a line when given the graph of the line, the slope and a point on the line, or two points on the line	4.4, 4.5
MA.AI.10.5 Solve systems of two linear equations in two variables algebraically and graphically	8.1, 8.2, 8.3, 8.4, 8.5
MA.AI.10.6 Factor first- and second-degree binomials and trinomials in one or two variables	10.5, 10.6, 10.7
MA.AI.10.7 Solve quadratic equations in one variable algebraically, graphically, or by using graphing technology	11.1, 11.2, 11.3, 11.4, 11.5, 11.6
MA.AI.10.8 Select and use a variety of strategies (e.g., concrete objects, pictorial representations, algebraic manipulation) to perform operations on polynomials	10.1, 10.2, 10.3, 10.4, 10.5, 10.6, 10.7
MA.AI.10.9 Analyze transformations of lines and understand how the transformation are represented in equations	4.4, 4.5, 4.6, 4.7
Standard 11: Data Analysis, Statistics, and Probability: FLUENCY WITH DATA: Pose questions and collect, organize, and represent data to answer those questions	
MA.AI.11 No benchmark for Algebra I	
Standard 12: Data Analysis, Statistics, and Probability: STATISTICS: Interpret data using methods of exploratory data analysis	
MA.AI.12.1 Compare data sets using statistical techniques (e.g., measures of central tendency, standard deviation, range, stem-and-leaf plots, and box-and-whisker graphs)	7.1, 7.2, 7.3, 7.4, 7.5, 7.6
MA.AI.12.2 Display bivariate data in a scatter plot, describe its shape, and determine the line of best fit that models a trend (if a trend exists)	7.3
Standard 13: Data Analysis, Statistics, and Probability: DATA ANALYSIS: Develop and evaluate inferences, predictions, and arguments that are based on data	
MA.AI.13 No benchmark for Algebra I	
Standard 14: Data Analysis, Statistics, and Probability: PROBABILITY: Understand and apply basic notions of chance and probability	
MA.AI.14 No benchmark for Algebra I	