

Algebra 1

State Standard Number	State Standard Area/Description	Unit Name	Course Topic Description
3102.1	Mathematical Processes		
CLE 3102.1.1	Use mathematical language, symbols, definitions, proofs and counterexamples correctly and precisely in mathematical reasoning.	Dispersed throughout all units.	
CLE 3102.1.2	Apply and adapt a variety of appropriate strategies to problem solving, including testing cases, estimation, and then checking induced errors and the reasonableness of the solution.	Real Numbers Dispersed through many other units as well.	Section 4
CLE 3102.1.3	Develop inductive and deductive reasoning to independently make and evaluate mathematical arguments and construct appropriate proofs; include various types of reasoning, logic, and intuition.	Variables and Expressions	Section 5
CLE 3102.1.4	Move flexibly between multiple representations (contextual, physical, written, verbal, iconic/pictorial, graphical, tabular, and symbolic), to solve problems, to model mathematical ideas, and to communicate solution strategies.	Dispersed throughout all units.	
CLE 3102.1.5	Recognize and use mathematical ideas and processes that arise in different settings, with an emphasis on formulating a problem in mathematical terms, interpreting the solutions, mathematical ideas, and communication of solution strategies.	Variables and Expressions Dispersed through many other units as well.	Section 4
CLE 3102.1.6	Employ reading and writing to recognize the major themes of mathematical processes, the historical development of mathematics, and the connections between mathematics and the real world.	Dispersed through all units	
CLE 3102.1.7	Use technologies appropriately to develop understanding of abstract mathematical ideas, to facilitate problem solving, and to produce accurate and reliable models.	Variables and Expressions Quadratics and Radicals	Section 4 Section 1

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3102.2	Number & Operations		
CLE 3102.2.1	Understand computational results and operations involving real numbers in multiple representations.	Variables and Expressions Real Numbers Polynomials Quadratics and Radicals	Sections 1, 3, 4 Sections 2, 3 Section 1 Sections 3, 4
CLE 3102.2.2	Understand properties of and relationships between subsets and elements of the real number system.	Variables and Expressions Real Numbers	Section 2 Sections 1, 5
3102.3	Algebra		
CLE 3102.3.1	Use algebraic thinking to analyze and generalize patterns.	Functions and Linear Equations Exponentials	Section 3 Section 3
CLE 3102.3.2	Understand and apply properties in order to perform operations with, evaluate, simplify, and factor expressions and polynomials.	Variables and Expressions Real Numbers Equations Polynomials	Sections 2, 4 Section 5 Section 1 Sections 2, 3, 4, 5
CLE 3102.3.3	Understand and apply operations with rational expressions and equations.	Variables and Expressions Equations Polynomials Rational Expressions	Sections 1, 3, 4, 5 Sections 1, 2 Sections 2, 3 Sections 2, 3, 4
CLE 3102.3.4	Solve problems involving linear equations and linear inequalities.	Equations Functions and Linear Equations Inequalities	Sections 1, 2 Sections 1, 2, 4, 5 Entire Unit
CLE 3102.3.5	Manipulate formulas and solve literal equations.	Equations	Section 4
CLE 3102.3.6	Understand and use relations and functions in various representations to solve contextual problems.	Functions and Linear Equations	Sections 1, 2, 4
CLE 3102.3.7	Construct and solve systems of linear equations and inequalities in two variables by various methods.	Solving Systems	Sections 1, 2, 3

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CLE 3102.3.8	Solve and understand solutions of quadratic equations with real roots.	Polynomials Quadratics and Radicals	Sections 4, 5, 6 Sections 1, 2, 5
CLE 3102.3.9	Understand and use exponential functions to solve contextual problems.	Exponentials	Entire Unit
3102.4	Geometry & Measurement		
CLE 3102.4.1	Use algebraic reasoning in applications involving geometric formulas and contextual problems.	Variables and Expressions Polynomials	Section 4 Section 3
CLE 3102.4.2	Apply appropriate units of measure and convert measures in problem solving situations.		
3102.5	Data Analysis, Statistics, & Probability		
CLE 3102.5.1	Describe and interpret quantitative information.	Variables and Expressions Functions and Linear Equations Solving Systems	Section 5 Section 5 Sections 4, 5
CLE 3102.5.2	Use statistical thinking to draw conclusions and make predictions.	Variables and Expressions Functions and Linear Equations Solving Systems	Section 5 Section 5 Sections 4, 5
CLE 3102.5.3	Understand basic counting procedures and concepts of probability.	Rational Expressions	Section 5