

Standard 1 : Mathematical Processes	Level 1	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 2	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 3	<p>CLE 3103.1.1 Use mathematical language, symbols, definitions, proofs and counterexamples correctly and precisely in mathematical reasoning.</p> <p>CLE 3103.1.4 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.</p> <p>CLE 3103.1.5 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.</p> <p>CLE 3103.1.6 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.</p>
	Level 4	<p>CLE 3103.1.2 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.</p> <p>CLE 3103.1.3 Develop inductive and deductive reasoning to independently make and evaluate mathematical arguments and construct appropriate proofs; include various types of reasoning, logic, and intuition.</p> <p>CLE 3103.1.7 Use technologies appropriately to develop understanding of abstract mathematical ideas, to facilitate problem solving, and to produce accurate and reliable models.</p>

Standard 2: Number and Operations	Level 1	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 2	CLE 3103.2.1 Understand the hierarchy of the complex number system and relationships between the elements, properties and operations.
	Level 3	CLE 3103.2.3 Use appropriate technology (including graphing calculators and computer spreadsheets) to solve problems, recognize patterns and collect and analyze data.
	Level 4	<p>CLE 3103.2.2 Connect numeric, analytic, graphical and verbal representations of both real and complex numbers.</p> <p>CLE 3103.2.4 Understand the capabilities and limitations of technology when performing operations, graphing, and solving equations involving complex numbers.</p>

Standard 3 : Algebra	Level 1	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 2	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 3	CLE 3103.3.1 Understand and apply properties of rational exponents and perform basic operations to simplify algebraic expressions.
	Level 4	<p>CLE 3103.3.2 Understand, analyze, transform and generalize mathematical patterns, relations and functions using properties and various representations.</p> <p>CLE 3103.3.3 Analyze and apply various methods to solve equations, absolute values, inequalities, and systems of equations over complex numbers.</p> <p>CLE 3103.3.4 Graph and compare equations and inequalities in two variables. Identify and understand the relationships between the algebraic and geometric properties of the graph.</p> <p>CLE 3103.3.5 Use mathematical models involving equations and systems of equations to represent, interpret and analyze quantitative relationships, change in various contexts, and other real-world phenomena.</p>

Standard 4 : Geometry and Measurement	Level 1	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 2	<p>CLE 3103.4.2 Know and use the basic identities of sine, cosine, and tangent as well as their reciprocals.</p> <p>CLE 3103.4.3 Graph all six trigonometric functions and identify their key characteristics.</p>
	Level 3	<p>CLE 3103.4.1 Understand the trigonometric functions and their relationship to the unit circle.</p> <p>CLE 3103.4.4 Know and use the Law of Sines to find missing sides and angles of a triangle, including the ambiguous case.</p>
	Level 4	CLE 3103.4.5 Use trigonometric concepts, properties and graphs to solve problems.

Standard 5 : Data, Probability, and Statistics	Level 1	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 2	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 3	THIS LEVEL IS NOT REPRESENTED AT THIS GRADE
	Level 4	<p>CLE 3103.5.1 Describe, interpret, and apply quantitative data.</p> <p>CLE 3103.5.2 Evaluate and critique various ways of collecting data and using information based on data published in the media.</p> <p>CLE 3103.5.3 Use data and statistical thinking to draw inferences, make predictions, justify conclusions and identify and explain misleading uses of data.</p> <p>CLE 3103.5.4 Develop an understanding of probability concepts in order to make informed decisions.</p>