

21 CLE A 8: Academic Expectation: Use Mathematics to Function Successfully as Global Citizens

	Advanced	Proficient	Basic	Novice
<p>21 CLE A8.1 Understand financial well-being</p>	<p>Analyze and manage assets and liabilities to create a positive net worth</p> <p>Maintain a balanced budget</p> <p>Plan for retirement</p>	<p>Estimate assets and liabilities</p> <p>Balance checkbook and budget</p> <p>Calculate taxes, discounts, tips</p>	<p>Identify assets and liabilities</p> <p>Maintain a checkbook and create a budget</p> <p>Estimate taxes and discounts</p>	<p>Define assets and liabilities</p> <p>Define basic financial terms</p> <p>Understand taxes</p> <p>Locate tax forms</p>
<p>21 CLE A8.2 Understand the proper use of credit</p>	<p>Estimate debt to income ratio</p> <p>Analyze credit terms and conditions</p> <p>Project credit ratings in relation to net worth</p>	<p>Explain proper use of credit</p> <p>Calculate interest expenses</p> <p>Interpret credit ratings</p> <p>Explain terms and conditions of credit</p>	<p>Know how to complete and analyze credit applications</p> <p>Categorize credit</p> <p>Define credit rating</p>	<p>Define credit and terms</p> <p>Locate sources of credit</p>
<p>21 CLE A8.3 Make conclusions using graphical and numerical data</p>	<p>Critique conclusions and make predictions</p> <p>Create graphs to explain data</p>	<p>Read and make limited decisions based on data</p> <p>Analyze patterns, trends or distributions in data in a variety of context</p> <p>Solve problems involving samples and be able to determine biases</p>	<p>Read data and make conclusions</p>	<p>Read data, but unable to make conclusions</p>

<p>21 CLE A8.4 Understand Scale and Proportion</p>	<p>Determine the level of accuracy needed for the given situation</p> <p>Create and solve 3-dimensional problems and determine the impact of scaling</p>	<p>Use measurement conversion strategies within and across systems</p> <p>Determine the impact of scaling up or down on dimensions</p>	<p>Estimate measurements</p> <p>Use ratio proportions to solve the problem</p> <p>Apply appropriate units of measure</p>	<p>Measure accurately</p> <p>Identify a problem involving scaling</p>
<p>21 CLE A8.5 Achieve Numerical Competency without technology</p>	<p>Evaluate expressions involving single or multiple operations containing fractions, decimals or integers</p> <p>Demonstrates conceptual understanding of percents as a means of comparing values (parts of a whole) or as a way of describing change (increase /mark-up, decrease/discount)</p> <p>Evaluate expressions containing rational numbers(fractions, integer exponents and grouping symbols)</p>	<p>Know math facts for single digit integers</p> <p>Perform fraction operations for one-digit denominators</p> <p>Calculate two-digit decimal operations</p> <p>Know benchmark percents and related fractions and determine parts of a number</p> <p>Know order of operations with numbers</p> <p>Calculate with a high degree of accuracy</p>	<p>Know math facts for multiplication and division of integers</p> <p>Perform fraction operations for one-digit denominators</p> <p>Calculate two-digit decimal operations</p> <p>Know benchmark percents and related fractions and determine parts of a number</p> <p>Know order of operations with numbers</p> <p>Perform routine computations accurately and use estimation to monitor reasonableness of work</p>	<p>Calculate math facts for whole numbers</p> <p>Perform routine math computations with reasonable accuracy</p>

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21 CLE A8.6. Solve problems across disciplines	<p>Create and use a variety of strategies to solve problems effectively and efficiently</p> <p>Evaluate method used</p> <p>Provide extensive evidence for inferences and solutions</p> <p>Use mathematical language, including examples, generalizations, and formal notation, to communicate complex ideas logically, with sufficient substance and detail to convey in-depth understanding</p>	<p>Use at least two strategies to solve a problem effectively and efficiently and justify solution</p> <p>Analyze method used</p> <p>Provide evidence for inferences and solutions</p> <p>Communicate mathematical ideas effectively, with sufficient substance and detail to convey understanding</p>	<p>Perform basic computations accurately</p> <p>Solve a multiple step problem</p> <p>Apply mathematical knowledge and skills in addressing everyday situations and solving straight-forward problems</p> <p>Communicate understanding, problem-solving strategies, and solutions</p>	<p>Solve a one step problem</p> <p>Identify the question, facts and pertinent information</p> <p>Explain answers and problem-solving strategies</p>