

**Numeric Literacy
Level 6**

State Performance Standards	GLE	Content:	Math VI	Skills	Analytical	Contextual	
		Numeration					
	[10]N-1	NL.NM.06.01	Identify and classify subsets of the real number system as natural, whole, integer, rational, irrational, real, or imaginary.				
		Measurement					
	[10]MEA-1	NL.MS.06.01	Use, compare, and convert between units in the metric and standard system for length, mass, area, volume and temperature and apply the appropriate measurement system.				
	[10]MEA-2	NL.MS.06.02	Calculate unknown dimensions of a geometric figure using indirect methods and formulas (i.e. Pythagorean theorem, alternate interior angles).				
		Estimation and Computation					
A3.4.3, A3.4.4	[10]E&C-2	NL.EC.06.01	Add, subtract, multiply, and divide in various forms including scientific notation, powers, and roots with and without variables.				
A1.3.4, A3.4.5	[10]N-3	NL.EC.06.02	Translate between equivalent representations of algebraic expressions (to include expressions with fractional and negative exponents).				
		NL.EC.06.03	Estimate an equation for a line or curve which models the scatter plot for a given set of data.				
	[10]E&C-1	NL.EC.06.04	Estimate solutions to evaluate reasonableness of results from multi-step problems.				
		NL.EC.06.05	Add, subtract, multiply, divide, and simplify common irrational and rational expressions (i.e. radicals).				
	[10]N-3	NL.EC.06.06	Convert from exact to decimal representations of irrational numbers.				
	[9] F&R-7, [10] F&R6	NL.EC.06.07	Evaluate formulas including quadratic equation, distance formula, slope and midpoint formulas.				
	[10]N-3	NL.EC.06.08	Use unit analysis with standard and metric systems.				
		Functions and Relationships					
	[10]F&R-1	NL.FR.06.01	Observe and collect data from a physical event and develop a function that describes and predicts that behavior all with the use of technology (i.e. probes, graphing calculator).				
	[10]F&R-5	NL.FR.06.02	Create and solve systems of linear and second degree equations, algebraically and graphically, with or without the use of technology.				
		NL.FR.06.03	Identify the dimensions of a matrix and represent a system of linear equations in matrix form.				
	[10]F&R-7	NL.FR.06.04	Translate multiple step word problems into symbolic expressions, equations, or inequalities and solve for unknowns.				
	[10]F&R-1	NL.FR.06.05	Identify, graph, and describe the graphs of basic families of functions including linear, absolute value, quadratic, inverse and exponential with or without the use of technology.				
A4.4.5		NL.FR.06.06	Add, subtract, multiply, divide, and simplify polynomials.				

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		Geometry				
	[10]G-1	NL.GO.06.01	Identify and label angles, segments, and lines as they relate to circles, and use the properties to solve problems (i.e. tangents, arcs).			
	[10]G-3	NL.GO.06.02	Draw and label triangles illustrating the congruency relationships of SSS, SAS, ASA, AAS.			
	[10]G-3	NL.GO.06.03	Draw and label similar figures showing the correct relationship between corresponding parts.			
	[10]G-6	NL.GO.06.04	Determine if the coordinates of a point satisfy the equation of a graph.			
	[10]G-6	NL.GO.06.05	Calculate the distance and midpoint between two points on a coordinate plane.			
	[10]G-6	NL.GO.06.06	Explain how the graph of a line changes when the slope or y-intercept changes.			
	[10]G-1	NL.GO.06.07	Identify the relationships among alternate interior angles, alternate exterior angles, corresponding angles, supplementary angles, and vertical angles.			
	[10]G-6	NL.GO.06.08	Solve geometrical congruence problems using the relationship between parallel, perpendicular, and oblique lines.			
A5.4.3	[10]G-3	NL.GO.06.09	Solve problems using similarity and congruence (i.e. prove two triangles are congruent).			
		Statistics and Probability				
	[10]S&P-3	NL.SP.06.01	Compute the range, mean, median, mode, and standard deviation of a set of data and explore applications of each.			
	[10]S&P-5	NL.SP.06.02	Analyze data from multiple events and predict theoretical probability.			
	[10]S&P-2	NL.SP.06.03	Make inferences based on available data and evaluate whether inferences are valid.			
	[10]S&P-1	NL.SP.06.04	Create and analyze graphical displays from collected data with and without technology.			
	[10]S&P-3	NL.SP.06.05	Identify central tendencies and describe various distribution patterns from a set of data.			
	[10]S&P-6	NL.SP.06.06	Design and conduct an experiment that compares both experimental and theoretical probability.			
A6.3.5, A6.4.5	[10]S&P-5	NL.SP.06.07	Calculate probability of independent and compound events.			
		NL.SP.06.08	Define and calculate problems using the fundamental counting principle, factorials, combinations and permutations.			
		Problem Solving				
	[9]PS-5, [10]PS-5	NL.PS.06.01.01	Applies practical skills in problems solving using typical business, consumer and real world problems			
	[10]PS-3, [10]PS-1	NL.PS.06.02.01	Applies multi-step integrated mathematical problem solving strategies and verifies accuracy of solutions with alternative strategies			
	[10]PS-3	NL.PS.06.03.01	Explain, justify and defend mathematical ideas, solutions and methods using multimedia presentations and appropriate visual aids.			
	[9]PS-1	NL.PS.06.04.01	Recognizes and applies inductive and deductive reasoning.			

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	[9]PS-1	NL.PS.06.05.01	Explains the logic and reasoning of an argument.			
	[9]PS-3	NL.PS.06.06.01	Maintain a math journal that expresses goals, successes, and areas for improvement and explains mathematical ideas, solutions, and methods.			