

CONTENT AREA: MATHEMATICS

Graduation Proficiency	Performance Indicators	Standard Alignment
1. Math Practices: Students can clearly convey meaning and concepts about math to varied audiences using appropriate methods.	a. Students will use correct notation, mathematical vocabulary, and appropriate units. b. Students will show work in an organized, precise manner. c. Students will answer the question in its entirety. d. Students will explain their reasoning. e. Students will create models and describe relationships. f. Students will use models to solve problems. g. Students will check the solution and determine if the answer makes sense in the context of the question.	
2. Algebraic Literacy: Students can create, interpret, use, and analyze expressions, equations, and inequalities.	a. Students will manipulate and evaluate expressions and equations using algebraic properties. b. Students will solve multistep equations and inequalities. c. Students will solve systems of equations and inequalities. d. Students will translate between graphical and algebraic relationships. e. Students will apply, analyze and interpret relationships. f. Students will perform operations on numbers, expressions and equations.	
3. Geometric Literacy: Students can use geometric concepts to prove theorems and solve problems.	a. Students will use coordinates and equations to apply geometric theorems algebraically.. b. Students will prove geometric statements and properties using formal logic and algebra (involving angles, triangles, quadrilaterals). c. Students will solve problems involving perimeter, area and volume. d. Students will solve problems involving right triangles (including trigonometric ratios). e. Students will identify and apply formulas.	
4. Statistics and Probability: Students can interpret and apply statistics and probability to analyze data, reach and justify conclusions, and make inferences.	a. Students will explore data to describe patterns and departures from patterns. b. Students will use statistical modeling appropriate to data. c. Students will describe the principles of sampling and experimentation. d. Students will anticipate patterns by exploring random phenomena using probability and simulation. e. Students will use probability distributions and sampling distributions. f. Students will use statistical inference to estimate population parameters. g. Students will use statistical inference to test hypotheses. h. Students will make inferences and justify conclusions.	
5. Financial Literacy:	a. Students will apply numerical relationships (fractions, decimals, percent change). b. Students will understand the principles of saving and investing. c. Students will manage banking accounts and calculate interest. d. Students will understand wages and apply tax laws. e. Students will understand loans, finance charges, and calculate monthly payments. f. Students will understand the composition of credit scores and how to use credit.	

6. Trigonometric Literacy	a. Students will solve problems in the Cartesian coordinate system. b. Students will solve problems using right triangle trigonometry. c. Students will model periodic phenomena with trigonometric functions. d. Students will prove and apply trigonometric identities. e. Students will inverse functions and other methods to solve trigonometric equations. f. Students will use radian relationships to solve problems. g. Students will use trigonometric formulas to solve problems (arc length, sector area, sum, difference, multi-angle etc.).	
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