

ACADEMIC EXPECTATION: Math Applications

Students will apply fundamental numerical, algebraic, geometric and statistical concepts and skills in order to deduce, analyze, and solve abstract and real world problems.

CRITERIA	EXEMPLARY 4	PROFICIENT 3	DEVELOPING 2	BEGINNING 1	S	T
Comprehension	Demonstrates a complete understanding of all concepts and processes presented. Understands what is being asked and how to use the information given to find the appropriate solution.	Demonstrates a good understanding of the concepts and processes presented. Understands what is being asked, and has a reasonable understanding of how to use the information that is provided, and what mathematical processes are needed.	Demonstrates a limited understanding of the concepts and processes presented. Shows a minimal understanding of what is being asked and how to use the information that is given.	Demonstrates merely an awareness of the concepts presented. Shows little or no understanding of how to use the information that is provided.		
Communication	Supporting work is shown through the use of appropriate formulas, calculations, graphs and diagrams. The work is clear, organized, and supports all conclusions. There are no flaws in communication.	Supporting work is shown through the use of formulas, calculations, graphs and diagrams where appropriate. The work is organized and clear with some minor flaws. Some flaws with labeling.	Some work is shown to support answers. Some appropriate formulas, calculations, graphs or diagrams are used, but the work is incomplete, unorganized and difficult to follow logically. Errors with the use of units exist	Does not show adequate supporting work. Does not show adequate formulas, calculations, graphs or diagrams to show thought process for solving.		
Calculations	Demonstrates complete mastery of all relevant computational skills. Numerical answers are correct and have appropriate units.	Demonstrates a clear understanding of all mathematical skills and procedures needed. Errors result from insufficient non mathematical knowledge; rounding values, and some minor mistakes in calculations.	Demonstrates a reasonable understanding of the mathematical skills and procedures that are needed. Errors resulting from faulty reading, writing and drawing; insufficient non mathematical knowledge; and careless mistakes in work.	There are many errors related to mathematical skills and procedures. Mistakes in numerical calculations including the use of order of operations, the use of appropriate units in calculations, and rounding errors exist.		

Teacher Comments
