

Quantitative Reasoning

Quantitative Reasoning is a “habit of mind,” competency, and comfort in working with numerical data. Individuals with strong quantitative reasoning skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and in a variety of formats.

Quantitative Reasoning Rubric

	Proficient (3)	Emerging (2)	Insufficient (1)	Does Not Meet Minimum Benchmark (0)
Interpretation: <i>Ability to explain information presented in mathematical forms (e.g. equations, graphs, diagrams, tables, real world contexts)</i>	Provides accurate explanations of information presented in mathematical forms. <i>For instance, accurately explains the trend data shown in a graph.</i>	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. <i>For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line.</i>	Attempts to explain information presented in mathematical forms but draws incorrect conclusions about what the information means. <i>For example, attempts to explain the trend data shown in a graph, but will frequently misinterpret the nature of that trend, perhaps by confusing positive and negative trends.</i>	Does not attempt to explain information in mathematical forms.
Representation: <i>Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, real world contexts)</i>	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.	Completes conversion of information but resulting mathematical portrayal is inappropriate or inaccurate.	Does not attempt to represent information in mathematical forms,
Calculation	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.	Calculations are attempted but are both unsuccessful and are not comprehensive.	Calculations are not attempted.