

## Quantitative Reasoning

**Definition:** The ability to use and understand numbers to interpret, evaluate, and express information in quantitative terms.

OBJECTIVES	EXCELLENT 4	PROFICIENT 3	DEVELOPING 2	BEGINNING 1	NOT EVIDENT 0
<b><u>Interpretation</u></b> Ability to explain mathematical information presented in various forms (equations, graphs, diagrams, tables, words, etc.)	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information.	Provides accurate explanations of information presented in mathematical forms.	Provides somewhat accurate explanations of information presented in mathematical forms but makes some errors.	Attempts to explain information presented in mathematical form, but draws incorrect conclusions about what the information means.	Makes no attempt to explain information presented in mathematical forms.
<b><u>Organization and Presentation</u></b> Ability to present relevant information in various mathematical forms (equations, graphs, diagrams, tables, words, etc.)	Skillfully organizes relevant information into an insightful presentation in a way that contributes to a further or deeper understanding.	Competently organizes relevant information into an appropriate and desired presentation.	Completes organization of information, but resulting representation is only partially appropriate or accurate.	Attempt organization of information, but resulting mathematical presentation is inappropriate or inaccurate.	Makes no attempt to organize and present information.
<b><u>Calculation</u></b>	Calculations attempted are all successful and sufficiently comprehensive to solve the problem. Calculations are also expertly presented with exceptional detail.	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 not comprehensive.	Calculations are not attempted.
<b><u>Analysis/Synthesis</u></b> Ability to make and draw conclusions based on quantitative analysis.	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, careful qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriate qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, drawing plausible conclusions from this work.	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions from this work.	Does not use quantitative analysis as the basis for judgments.