

## QUANTITATIVE REASONING RUBRIC

Competency in quantitative reasoning is a student's ability to interpret, explain, represent, and apply quantifiable information to identify connections, formulate reasonable solutions, and defend conclusions.

*Scores should be assigned for all applicable skills dimensions outlined below. If the parameters of the assignment used to measure this student learning outcome do not offer the opportunity to demonstrate a given performance criterion, a score of N/A should be recorded.*

ISLO 3	4 Exemplary	3 Accomplished	2 Developing	1 Beginning
<b>Perform Computations</b>	Calculations attempted are all successful and sufficiently comprehensive to solve the problem. Calculations are also presented clearly and concisely, fully demonstrating the validity of the results.	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented clearly, sufficiently demonstrating the validity of the results.	Calculations attempted are successful but only a portion of the calculations required to comprehensively solve the problem are represented.	Calculations are attempted but are unsuccessful and may not be comprehensive.
<b>Represent Numerical Information</b>	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	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.	Attempts conversion of information but resulting mathematical portrayal is incomplete or inaccurate.
<b>Interpret Numerical Information</b>	Provides accurate explanations of information presented in numerical information/mathematical forms. Makes appropriate inferences based on that information.	Provides accurate explanations of information presented in numerical information/mathematical forms.	Provides explanations of information presented in numerical information/mathematical forms, but makes errors within the explanation or inappropriate inferences based on the information.	Attempts to explain information presented in numerical information/mathematical forms, but draws incorrect conclusions about what the information means.
<b>Formulate Reasonable Solutions</b>	Uses quantitative analysis as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work. [aware of assumptions]	Uses quantitative analysis as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses quantitative analysis as the basis for tentative, basic judgments, drawing plausible conclusions from this work.	Uses quantitative analysis as the basis for unskilled judgments, is hesitant or uncertain about drawing conclusions from this work.

Rubric adapted from the Colorado Department of Higher Education (CDHE) Quantitative Literacy rubric specifically for community college use.