Quantitative Rubric	Algebraic	Graphic	Numeric	Verbal
4 Exemplary	 Accurately derives, uses, and/or manipulates algebraic representations of pertinent data and/or problem elements. Interprets logical relationships between problem elements and aptly characterizes the underlying logic with mathematical symbols. 	 Graphic displays accurately and completely represent the data and/or algebraic relationships between problem elements, are accompanied by equations from analysis, and have clear labels. Analysis draws appropriate inferences from graphic displays. 	 Accurately identifies quantitative information pertinent to the solution of a problem. Uses quantitative information in a solution that supports appropriate translations between different modes of thinking (algebraic, graphic, and/or verbal) about the problem. 	 Succinct explanation presents a reasoned account of the answer, which may include pertinent examples or counter-examples. Appropriate translations between different modes of thinking (algebraic, graphic, and/or numeric) about the problem are used to establish a sound scholarly explanation and explicate the underlying logic of the answer.
3 Competent	 Algebraic representations are accurate and demonstrate competent translation of the problem into mathematical symbols. Logical interpretations of problem elements are correct, but are in some ways incomplete to support full integration of different modes of thinking (graphic, numeric, and/or verbal). 	 Graphic displays are accurate and completely represent the data and/or algebraic relationships between problem elements. Graphic displays may not be accompanied with complete and appropriate analytic inference. 	 Correctly identifies quantitative information to solve the problem. Numeric information asked for in the problem is given, but the solution does not go beyond the question posed. Robust interpretation of the numeric information is not presented. 	 The answer is correct and demonstrates thoroughness and competence working with the task's mathematical concepts and processes. The argument may not completely capture appropriate translations between different modes of thinking (algebraic, graphic, and/or numeric) about the problem.
2 Developing	- It may be unclear what algebraic relationships are used that best and/or correctly characterize pertinent data and/or problem elements.	 Graphic displays are incomplete, poorly labeled, and/or hard to follow. Graphic displays are not presented in ways that support further interpretation of the elements of the problem. 	 Quantitative information is partially correct but incomplete. Quantitative information is presented in ways that do not lead to other modes of thinking (algebraic, graphic, and/or verbal) about the problem. 	 The answer may be partially correct, but the argument may be poorly focused or weak or poorly conceived. Major ideas related to the content may be ignored or inadequately explored. Appropriate translations between different modes of thinking (algebraic, graphic, and/or numeric) about the problem may to inadequately explored or incorrectly reported.

Quantitative				
Rubric	Algebraic	Graphic	Numeric	Verbal
1 Beginning	- Presentation fails to correctly identify mathematical variables and processes pertinent to the solution of the problem.	- Graphic displays do not accurately represent data and/or algebraic relationships between problem elements.	- Quantitative information given is incorrect.	 Content is poorly focused and lacks organization. Fails to demonstrate thoroughness and competence. The reader is left with little information about or understanding of the solution and its interpretation.