

Foundational Competencies: Quantitative Analysis

8/2/22

		Exceeded (5)	Met (3)	Not Met (1)
Find and pose precise questions that can be appropriately analyzed by quantitative methods	2A3	Identifies questions <i>to be analyzed by more advanced</i> quantitative methods	Identifies questions <i>to be analyzed by straightforward</i> quantitative methods	Identifies questions that <i>cannot be analyzed</i> by quantitative methods
Identify appropriate quantitative methodology	2A3b	Identifies an <i>appropriate and thorough</i> quantitative methodology for analyzing the questions	Identifies an <i>appropriate methodology</i> for analyzing the questions	Provides an <i>incorrect quantitative methodology</i> or <i>fails to include a quantitative methodology</i> for analyzing the questions
Think critically about quantitative statements	2B1	Includes evidence of <i>advanced critical thinking</i> , and <i>all</i> of the possible conclusions are <i>presented and are reasonable and correct</i> ; all conclusions are discussed <i>in the context of the problem without errors</i>	Includes evidence of <i>critical thinking</i> , and <i>most</i> of the possible conclusions are <i>presented and are reasonable and correct</i> ; most conclusions are discussed in <i>proper context</i> of the problem with, at most, <i>only minor errors</i>	Includes <i>minimal or no evidence of critical thinking</i> , but many conclusions reached are <i>unreasonable and/or not correct</i> ; <i>Fails to discuss</i> conclusions in the context of the problem or discusses them with <i>significant errors</i>
Recognize sources of error	2B2	Correctly recognizes <i>all</i> possible sources of error, and uses the appropriate terminology <i>without errors</i>	Correctly recognizes <i>most</i> of the possible sources of error, and uses the appropriate terminology with <i>at most, only minor errors</i>	Correctly recognizes <i>only a few</i> sources of error, with <i>incorrect or misused</i> terminology
Represent data	2C2	Represents <i>all</i> data using appropriate and correctly executed techniques <i>without errors or omissions</i>	Represents <i>most</i> data using appropriate and correctly executed techniques, <i>with, at most, only minor errors in execution or omissions</i>	Represents <i>only a few</i> data using a <i>mix of appropriate and misused or incorrectly used</i> techniques and/or <i>significant omissions</i> are present
Draw inference from data	2D1b	<i>All</i> inferences drawn from data are appropriate and correct.	<i>Any/most</i> inferences drawn from data are appropriate and correct <i>with, at most only minor errors</i> .	<i>Only a few, if any</i> , inferences are drawn from data and/or includes those drawn <i>using incorrect techniques</i> .