

GE SLO 2.2 Use graphs, tables, etc. to represent and explain mathematical models and/or quantitative data.

GE SLO 5.2 Use graphs, tables, etc. to represent and explain scientific models and/or data.

	Initial 1	Emerging 2	Developing 3	Highly Developed 4
Represent – “Ability to construct a quantitative object that appropriately conveys information”	Converts mathematical or scientific data into an incomplete or inaccurate representation.	Converts data into a complete representation that is minimally accurate or appropriate.	Competently converts data into an appropriate and accurate representation that focuses on important or key aspects.	Skillfully converts relevant data into an accurate, insightful, and creative representation.
Assumptions – "Ability to understand the scope and limitations of a quantitative representation of information"	Attempts to describe assumptions.	Explicitly describes assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions
Interpretation – “Ability to explain information presented in a graph, table, etc.”	Attempts to explain information presented in quantitative forms, but does so inaccurately or incompletely.	Provides somewhat accurate explanations of information presented in quantitative forms, but occasionally makes minor errors related to computations or units.	Provides accurate explanations of information presented in quantitative forms.	Provides accurate explanations of information presented in quantitative forms. Makes appropriate inferences based on that information.
Analysis – “Draw appropriate conclusions or judgments from quantitative objects”	Uses the quantitative analysis of data as the basis for tentative, basic judgments, although is hesitant or uncertain about drawing conclusions.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions.	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions.
Communicate – “Select and express quantitative evidence to appropriately support an argument or purpose of work”	Presents an argument for which quantitative evidence is pertinent, but does not provide adequate explicit numerical support.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.

(Updated September 2025)