



Quantitative Reasoning Rubric

Intended Learning Outcome:

Analyze problems, including real-world scenarios, through the application of mathematical and numerical concepts and skills, including the interpretation of data, tables, charts, or graphs.

| Criteria | Inadequate | Developing | Competent | Proficient |
|---|--|--|--|--|
| Identifies relevant information or data | No relevant information or data is identified | Some relevant information or data is identified but not accurately | Accurately identifies some, but not all relevant information or data | Accurately identifies all relevant information or data |
| Performs relevant calculations and/or converts information/data | Does not calculate and/or convert information/data | Calculates and converts with many errors | Calculates and converts with a few errors | Calculates and converts with no errors |
| Analyzes results to address the problem/scenario | Does not analyze the result | Analyzes results with no relevant or usable conclusions | Analyzes results with relevant or usable conclusions, but with some gaps | Analyzes results with relevant and usable conclusions |

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Guide to Quantitative Reasoning

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Analyze problems, including real-world scenarios, through the application of mathematical and numerical concepts and skills, including the interpretation of data, tables, charts, or graphs.

Assessment may include but is not limited to the following criteria and intended outcomes:

Identifies and explains information or data

- Identifies appropriate data to solve a problem
- Accurately seeks information and data from appropriate sources
- Expands upon ideas to foster new lines of inquiry
- Forms relevant assumptions using sound quantitative reasoning

Performs relevant calculations and/or converts information/data

- Applies appropriate formulas in mathematical calculations
- Converts charts, graphs and/or other numerical data effectively
- Evaluates costs and benefits of potential solutions

Analyzes results to address the problem/scenario

- Applies sound quantitative reasoning to the analysis of data or information
- Accurately and proficiently synthesizes data and information to form logical conclusions
- Uses analysis/synthesis in response to problems, including real-world scenarios
- Understands limitations of analysis
- Interprets data and information to analyze real-world problems based on analysis/synthesis

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