

Reason Quantitatively & Symbolically Evaluation Rubric

| Behavior Absent | Behavior Developing | Behavior Strongly Present |
|-----------------|---------------------|---------------------------|
|-----------------|---------------------|---------------------------|

1. Student is able to break down and organize a problem into its component pieces.

| | | |
|-------------------------------|--|---|
| Doesn't recognize the problem | Recognizes problem but method is unable to break it down | Recognizes problem and organizes it appropriately |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

2. Student is able to estimate and check answers to problems in order to determine reasonableness and validity, identify alternatives, and select optimal results.

| | | |
|--|---|---|
| Reasoning is inappropriate for the problem posed | Reasoning is plausible, but not optimal | Reasoning is correct, and response is optimal |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

3. Student is able to identify patterns and use them in a new situation.

| | | |
|----------------------------|---|---|
| Doesn't recognize patterns | Recognizes patterns but cannot transfer them to a new situation or transfers them incorrectly | Student recognizes patterns and transfers them correctly in a new situation |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

4. Student is able to interpret and create graphs, charts, tables, and/or other visual, verbal, and/or numerical symbols.

| | | |
|-----------------------------|--|--|
| Interpretation is not valid | Interpretation is valid, at least in part, but full understanding is not evident | Interpretation is valid, and student can create an appropriate symbolic representation |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

5. Student is able to recognize relevant, appropriate, and precise relationships in problem solving situations.

| | | |
|---|---|--|
| No recognition of relationships, or connections are invalid | Recognizes relevance of relationships, but cannot make connections to solve the problem | Recognizes relevant relationships and makes appropriate and precise connections to solve the problem |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

6. Student knows and understands the necessary rules, and is able to apply them appropriately in a variety of problem-solving situations

| | | |
|--|--|--|
| Doesn't know and/or understand necessary rules | Knows and understands rules, but cannot apply them appropriately | Knows and understands necessary rules and applies them appropriately |
| 1 | 2 | 3 |
| 4 | 5 | 6 |

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|-----------------|---------------------|---------------------------|

