## 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 pi | ieces.                    |

| Doesn't recognize the problem |   | Recognizes problem but method is |   | Recognizes problem and organizes |   |
|-------------------------------|---|----------------------------------|---|----------------------------------|---|
|                               |   | unable to break it down          |   | 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 inapport problem posed | ropriate for the | Reasoning is plau optimal | sible, but not | Reasoning is correlis optimal | ect, and response |
|-------------------------------------|------------------|---------------------------|----------------|-------------------------------|-------------------|
| 1                                   | 2                | 3                         | 4              | 5                             | 6                 |

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

| _ | o. Student is able to identify patterns and use them in a new situation. |   |                                     |   |                                   |   |  |
|---|--|---|-------------------------------------|---|-----------------------------------|---|--|
|   | Doesn't recognize patterns   |   | Recognizes patterns but cannot      |   | Student recognizes patterns and   |   |  |
|   |  |   | transfer them to a new situation or |   | transfers them correctly in a new |   |  |
|   |  |   | transfers them incorrectly          |   | 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.

|                             | mamonoai cymbolo. |                                      |   |                                      |   |   |
|-----------------------------|-------------------|--------------------------------------|---|--------------------------------------|---|---|
| Interpretation is not valid |                   | Interpretation is valid, at least in |   | Interpretation is valid, and student |   |   |
|                             |                   | part, but full understanding is not  |   | can create an appropriate symbolic   |   |   |
|                             |                   | evident                              |   | 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 r connections are in |   | Recognizes relevated relationships, but connections to sol | cannot make | Recognizes releva<br>and makes approp<br>connections to sol | riate and precise |
|--|---|--|-------------|---|-------------------|
| 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 | Knows and unders  | tands rules, but | Knows and unders                       | tands necessary |
|-------------------|---------------|-------------------|------------------|--|-----------------|
| necessary rules   |               | cannot apply them | appropriately    | tely rules and applies them appropriat |                 |
| 1                 | 2             | 3                 | 4                | 5                                      | 6               |

| Behavior Absent Behavior Developing Behavior Strongly Prese |
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