## Constructed Response Rubric

| Content Rubric | |
|---|---|
| 2 | A score of two indicates a **thorough understanding** of the mathematical concepts embodied in the task. The response<br>• shows algorithms, computations, and other content related work executed correctly and completely. |
| 1 | A score of one indicates a **partial understanding** of the mathematical concepts embodied in the task. The response<br>• contains errors in the execution of algorithms, computations, and/or other content related work. |
| 0 | A score of zero indicates **limited or no understanding** of the mathematical concepts embodied in the task. |
| **Problem-Solving Rubric** | |
| 2 | A score of two indicates a **thorough understanding** of the problem-solving concepts embodied in the task. The response<br>• shows an appropriate strategy to solve the problem, and the strategy is executed correctly and completely.<br>• identifies all important elements of the problem and shows a complete understanding of the relationships among them.<br>• provides clear and complete explanations and/or interpretations when required. |
| 1 | A score of one indicates a **partial understanding** of the problem-solving concepts embodied in the task. The response contains one or more of the following errors. The response<br>• shows an appropriate strategy to solve the problem. However, the execution of the strategy contains errors and/or is incomplete.<br>• identifies some of the important elements of the problem and shows a general understanding of the relationships among them.<br>• provides incomplete, partial, or unclear explanations and/or interpretations when required. |
| 0 | A score of zero indicates **limited or no understanding** of the problem-solving concepts embodied in the task. |

**Clarification and Implementation Guidance**

- Correct answers ONLY, on all parts of the problem with no work shown, will receive a maximum of 1 point in content and a maximum of 1 point in Problem Solving.
- A student can receive the top score point in Problem Solving if the strategy used would result in a correct answer even though the response contains computation errors.
- A student can receive the top score point in Problem Solving if an error made in the "content" portion is used with an appropriate strategy to solve the problem.

# Extended Response Rubric

| Content Rubric | |
|---|---|
| 3 | A score of three indicates a **thorough understanding** of the mathematical concepts embodied in the task. The response<br>• shows algorithms, computations, and other content related work executed correctly and completely. |
| 2 | A score of two indicates a **partial understanding** of the mathematical concepts embodied in the task. The response<br>• shows an attempt to execute algorithms, computations, and other content related work correctly and completely; computation errors or other minor errors in the content related work may be present. |
| 1 | A score of one indicates a **limited understanding** of the mathematical concepts embodied in the task. The response<br>• contains major errors, or only a partial process.<br>• contains algorithms, computations, and other content related work which may only be partially correct. |
| 0 | A score of zero indicates **no understanding** of the mathematical concepts embodied in the task. |
| **Problem-Solving Rubric** | |
| 3 | A score of three indicates a **thorough understanding** of the problem-solving concepts embodied in the task. The response<br>• shows an appropriate strategy to solve the problem, and the strategy is executed correctly and completely.<br>• identifies all important elements of the problem and shows a complete understanding of the relationships among them.<br>• provides clear and complete explanations and/or interpretations when required. |
| 2 | A score of two indicates a **partial understanding** of the problem-solving concepts embodied in the task. The response contains one or more of the following errors. The response<br>• shows an appropriate strategy to solve the problem. However, the execution of the strategy lacks an essential element.<br>• identifies some of the important elements of the problem and shows a general understanding of the relationships among them.<br>• provides incomplete or unclear explanations and/or interpretations when required. |
| 1 | A score of one indicates a **limited understanding** of the problem-solving concepts embodied in the task. The response contains one or more of the following errors. The response<br>• shows an appropriate strategy to solve the problem. However, the execution of the strategy is applied incorrectly and/or is incomplete.<br>• shows a limited understanding of the relationships among the elements of the problem.<br>• provides incomplete, unclear, or omitted explanations and/or interpretations when required. |
| 0 | A score of zero indicates **no understanding** of the problem-solving concepts embodied in the task. |

**Clarification and Implementation Guidance**

- Correct answers ONLY, on all parts of the problem with no work shown, will receive a maximum of 2 points in content and a maximum of 2 points in Problem Solving.

- A student can receive the top score point in Problem Solving if the strategy used would result in a correct answer even though the response contains computation errors.

- A student can receive the top score point in Problem Solving if an error made in the "content" portion is used with an appropriate strategy to solve the problem.