

Maryland Comprehensive Assessment Program



Mathematics Assessment

Holistic Rubric for 3-Point Modeling Items

Points	Criteria
3 Points	<p>A three-point response provides full and complete evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• identifies the problem that needs to be solved; AND/OR• determines information that is needed to solve the problem; AND/OR• communicates an accurate, organized solution path that is aligned to the problem using appropriate, effective, and precise representations; AND/OR• evaluates or validates a partial or complete solution to the real-world situation and shows how to improve or refine the problem solution.
2 Points	<p>A two-point response provides partial evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• partially identifies the problem that needs to be solved; AND/OR• determines some of the information that is needed to solve the problem; AND/OR• includes a partial solution path that may be incomplete, or contains some errors in identifying the mathematics that is needed to solve the problem; AND/OR• evaluates or validates a partial or complete solution to the real-world situation and attempts to improve or refine the problem solution.
1 point	<p>A one-point response provides limited evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• partially or incorrectly identifies the problem that needs to be solved; AND/OR• determines a minimal amount of the information that is needed to solve the problem; AND/OR• includes an incomplete or unorganized solution path, or contains errors in identifying the mathematics that is needed to solve the problem; AND/OR• evaluates or validates a partial or complete solution to the real-world situation but does not show the ability to improve or refine the problem solution.
0 Point	<p>A zero-point response is completely incorrect, incoherent and/or irrelevant.</p>

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Mathematics Assessment

Holistic Rubric for 4-Point Modeling Items

Points	Criteria
4 Points	<p>A four-point response provides full and complete evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• identifies the problem that needs to be solved; AND/OR• determines information that is needed to solve the problem; AND/OR• communicates an accurate, organized solution path that is aligned to the problem using appropriate, effective, and precise representations; AND/OR• evaluates or validates a partial or complete solution to the real-world situation and shows how to improve or refine the problem solution.
3 Points	<p>A three-point response provides slightly flawed evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• identifies most of the problem that needs to be solved; AND/OR• determines most of the information that is needed to solve the problem; AND/OR• communicates an accurate, organized solution path that is aligned to the problem using appropriate, effective, and precise representations with minor flaws; AND/OR• evaluates or validates a partial or complete solution to the real-world situation and shows how to improve or refine the problem solution, but the improvement or refinement may include minor flaws.
2 Points	<p>A two-point response provides partial evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• partially identifies the problem that needs to be solved; AND/OR• determines some of the information that is needed to solve the problem; AND/OR• includes a partial solution path that may be incomplete, or contains some errors in identifying the mathematics that is needed to solve the problem; AND/OR• evaluates or validates a partial or complete solution to the real-world situation and attempts to improve or refine the problem solution.
1 point	<p>A one-point response provides limited evidence of the modeling process used to solve a real-world problem.</p> <p>The response:</p> <ul style="list-style-type: none">• partially or incorrectly identifies the problem that needs to be solved; AND/OR• determines a minimal amount of the information that is needed to solve the problem; AND/OR• includes an incomplete or unorganized solution path, or contains errors in identifying the mathematics that is needed to solve the problem; AND/OR• evaluates or validates a partial or complete solution to the real-world situation but does not show the ability to improve or refine the problem solution.
0 Point	<p>A zero-point response is completely incorrect, incoherent and/or irrelevant.</p>