



## College Graduate Competency – GRAD-MATH-1 MATHEMATICS RUBRIC

Used in assessment courses with a mathematics project or assignment.

*Student Name* \_\_\_\_\_ *Course/Section* \_\_\_\_\_ *Date/Sem* \_\_\_\_\_ *Overall Score* \_\_\_\_\_

Component	4	3	2	1	
1. Create and use a linear or exponential model to make predictions.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows full grasp and use of the central mathematical idea(s).</li> <li>• Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows essential grasp of the central mathematical idea(s).</li> <li>• Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>• Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>• Student work shows little or no progress toward accomplishing the task.</li> <li>• Shows little or no grasp of the central mathematical idea(s).</li> <li>• Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____
2. Read and interpret graphs and charts.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows full grasp and use of the central mathematical idea(s).</li> <li>• Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows essential grasp of the central mathematical idea(s).</li> <li>• Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>• Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>• Student work shows little or no progress toward accomplishing the task.</li> <li>• Shows little or no grasp of the central mathematical idea(s).</li> <li>• Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____
3. Select and construct an appropriate graph or visual aid to display information.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows full grasp and use of the central mathematical idea(s).</li> <li>• Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows essential grasp of the central mathematical idea(s).</li> <li>• Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>• Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>• Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>• Student work shows little or no progress toward accomplishing the task.</li> <li>• Shows little or no grasp of the central mathematical idea(s).</li> <li>• Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____

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Component	4	3	2	1	
4. Create, solve, and interpret appropriate equations in the curriculum.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows full grasp and use of the central mathematical idea(s).</li> <li>Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>Student work shows little or no progress toward accomplishing the task.</li> <li>Shows little or no grasp of the central mathematical idea(s).</li> <li>Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____
Component	4	3	2	1	
5. Able to work with and interpret given data.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows full grasp and use of the central mathematical idea(s).</li> <li>Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>Student work shows little or no progress toward accomplishing the task.</li> <li>Shows little or no grasp of the central mathematical idea(s).</li> <li>Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____
Component	4	3	2	1	
6. Make connections from mathematics to real-world applications through the use of case studies, articles, etc. from various disciplines.	<b>Fully Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows full grasp and use of the central mathematical idea(s).</li> <li>Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<b>Substantially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<b>Partially Accomplishes the Purpose of the Task</b> <ul style="list-style-type: none"> <li>Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<b>Makes Little or No Progress Toward Accomplishing the Task</b> <ul style="list-style-type: none"> <li>Student work shows little or no progress toward accomplishing the task.</li> <li>Shows little or no grasp of the central mathematical idea(s).</li> <li>Recorded work is barely (if at all) comprehensible.</li> </ul>	Pts. _____

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<p>7. Use appropriate technology to aid in mathematical thinking.</p>	<p><b>Fully Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows full grasp and use of the central mathematical idea(s).</li> <li>Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<p><b>Substantially Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<p><b>Partially Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<p><b>Makes Little or No Progress Toward Accomplishing the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows little or no progress toward accomplishing the task.</li> <li>Shows little or no grasp of the central mathematical idea(s).</li> <li>Recorded work is barely (if at all) comprehensible.</li> </ul>	<p>Pts. _____</p>
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<p>8. Communicate mathematics orally and/or in written form.</p>	<p><b>Fully Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows full grasp and use of the central mathematical idea(s).</li> <li>Recorded work communicates thinking clearly using some combination of written, symbolic, or visual means.</li> </ul>	<p><b>Substantially Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<p><b>Partially Accomplishes the Purpose of the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows partial but limited grasp of the central mathematical idea(s).</li> <li>Recorded work may be incomplete, somewhat misdirected, or not clearly presented.</li> </ul>	<p><b>Makes Little or No Progress Toward Accomplishing the Task</b></p> <ul style="list-style-type: none"> <li>Student work shows little or no progress toward accomplishing the task.</li> <li>Shows little or no grasp of the central mathematical idea(s).</li> <li>Recorded work is barely (if at all) comprehensible.</li> </ul>	<p>Pts. _____</p>
<p><b>Evaluator Notes/Comments:</b></p>					<p><b>Total Score:</b></p>