Adopted – 5/7/2020 Revised-- 11/2019 add 0 pts. Col.

## Marion Technical College

## College Graduate Competency – GRAD-MATH-3 MATHEMATICS RUBRIC

Used in assessment courses with a mathematics project or assignment.

Student	Course/Section		Date/Sem		Overall	
Name					Score	
Component	4	3	2	1	0	
1. Create and use a linear or exponential model to make predictions.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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,</li> </ul>	Substantially Accomplishes the Purpose of the Task • Student work shows essential grasp of the central mathematical idea(s). • Recorded work in large part communicates the thinking.	<ul> <li>Partially</li> <li>Accomplishes the Purpose of the Task</li> <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</li> </ul>	<ul> <li>Makes Little <ul> <li>Toward</li> <li>Accomplishing the</li> <li>Task</li> </ul> </li> <li>Student work <ul> <li>shows little</li> <li>progress toward</li> <li>accomplishing</li> <li>the task.</li> </ul> </li> <li>Shows little grasp <ul> <li>of the central</li> <li>mathematical</li> <li>idea(s).</li> </ul> </li> <li>Recorded work is <ul> <li>barely</li> <li>comprehensible.</li> </ul> </li> </ul>	<ul> <li>Makes No</li> <li>Progress Toward</li> <li>Accomplishing the</li> <li>Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts
<b>O</b>	or visual means.		presented.		•	
Component	4	3 Outratantially	Z	1 Malaa Littla an Na	U Malaa Na	
2. Read and interpret graphs and charts.	<ul> <li>Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Progress Toward Accomplishing the Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts

Component	4	3	2	1	0	]
3. Select and construct an appropriate graph or visual aid to display information.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Makes Little Progress Toward Accomplishing the Task <ul> <li>Student work</li> <li>shows little</li> <li>progress toward</li> <li>accomplishing the</li> <li>task.</li> </ul> </li> <li>Shows little grasp <ul> <li>of the central</li> <li>mathematical</li> <li>idea(s).</li> </ul> </li> <li>Recorded work is <ul> <li>barely</li> <li>comprehensible.</li> </ul> </li> </ul>	<ul> <li>Makes No Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts
Component	4	3	2	1	0-	
4. Create, solve, and interpret appropriate equations in the curriculum.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially</li> <li>Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Makes Little</li> <li>Progress Toward</li> <li>Accomplishing the</li> <li>Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Makes No</li> <li>Progress Toward</li> <li>Accomplishing</li> <li>the Task</li> <li>Student work</li> <li>shows no</li> <li>progress toward</li> <li>accomplishing</li> <li>the task.</li> <li>Shows no grasp</li> <li>of the central</li> <li>mathematical</li> <li>idea(s).</li> <li>Recorded work</li> <li>is not</li> <li>comprehensible.</li> </ul>	Pts

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Component	4	3	2	1	0	
5. Able to work with and interpret given data.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially <ul> <li>Accomplishes the</li> <li>Purpose of the Task</li> <li>Student work <ul> <li>shows partial but</li> <li>limited grasp of</li> <li>the central</li> <li>mathematical</li> <li>idea(s).</li> </ul> </li> <li>Recorded work <ul> <li>may be</li> <li>incomplete,</li> <li>somewhat</li> <li>misdirected, or</li> <li>not clearly</li> <li>presented.</li> </ul> </li> </ul></li></ul>	<ul> <li>Makes Little Progress Toward Accomplishing the Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Makes No Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts
Component	4	3	2	1	0	
6. Make connections from mathematics to real-world applications through the use of case studies, articles, etc. from various disciplines.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially</li> <li>Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Makes Little Progress Toward Accomplishing the Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Makes No Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts

Component	4	3	2	1	0	
7. Use appropriate technology to aid in mathematical thinking.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Makes Little Progress Toward Accomplishing the Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Makes No Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts
Component	4	3	2	1	0	
8. Communicate mathematics orally and/or in written form.	<ul> <li>Fully Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Substantially Accomplishes the Purpose of the Task</li> <li>Student work shows essential grasp of the central mathematical idea(s).</li> <li>Recorded work in large part communicates the thinking.</li> </ul>	<ul> <li>Partially Accomplishes the Purpose of the Task</li> <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>	<ul> <li>Makes Little Progress Toward Accomplishing the Task</li> <li>Student work shows little progress toward accomplishing the task.</li> <li>Shows little grasp of the central mathematical idea(s).</li> <li>Recorded work is barely comprehensible.</li> </ul>	<ul> <li>Makes No Progress Toward Accomplishing the Task</li> <li>Student work shows no progress toward accomplishing the task.</li> <li>Shows no grasp of the central mathematical idea(s).</li> <li>Recorded work is not comprehensible.</li> </ul>	Pts
	1	Evaluator Notes/Com	iments:	Total Score:	1	