Name_____

Mathematical Practices Rubric

Element	4	3	2	1	Rating
MP.1 Make sense of Problems	Discuss, explain, and demonstrates solving a problem with multiple representations	Explains their through processes in solving a problem and representing it in several ways	Explains their thought processes in solving a problem in a couple ways	Explains their thought processes in solving a problem in one way.	
MP.1 Persevere in Problem Solving	Struggle with various attempts over time, and learn from previous solution attempts	Try several approaches in finding a solution, and only seek hints if stuck	Stay with a challenging problem for more than one attempt	Do not stay with a problem through struggles	
MP.2 Reason Abstractly and Quantitatively	Convert situations into symbols to appropriately solve problems as well as convert symbols into meaningful situations	Are able to translate situations into symbols for solving problems	Reason with models or pictorial representations to solve problems	Do not reason to solve problems. Just writes down the information.	
MP.3 Construct viable arguments	Justify and explain, with accurate language and vocabulary, why their solution is correct	Explain their own thinking and thinking of others with accurate vocabulary	Explain their thinking for the solution they found. Does not consider thinking of others.	Do not explain their thinking. Do not consider thinking of others.	
MP.3 Critique the reasoning of others	Compare and contract various solution strategies and explain the reasoning of others	Explain other students' solutions and identify strengths and weaknesses of the solution.	Understand and discuss other ideas and approaches.	Does not consider the ideas and approaches of others.	
MP. 4 Model with Mathematics	Use a variety of models, symbolic representations, and technology tools to demonstrate a solution to a problem.	Use models and symbols to represent and solve a problem, and accurately explain the solution representation.	Use models to represent and solve a problem, and translate the solution to mathematical symbols.	Does not use models to represent and solve a problem, just provides a solution.	

MP.5 Use Appropriate Tools Strategically	Combine various tools, including technology, explore and solve a problem as well as justify their tool selection and problem solving.	Select from a variety of tools the ones that can be used to solve a problem, and explain their reasoning for the selection.	Use the appropriate tool to find a solution.	Does not use an appropriate tool, or does not use a tool at all.	
MP. 6 Attend to Precision	Use appropriate symbols, vocabulary, and labeling to effectively communicate and exchange ideas.	Incorporate appropriate vocabulary and symbols when communicating with others.	Communicate their reasoning and solution to others. Uses some appropriate vocabulary.	Does not communicate their solution or reasoning. Does not use appropriate vocabulary.	
MP.7 Look for and make use of structure	See complex and complicated mathematical expressions as component parts.	Compose and decompose number situations and relationships through observed patterns in order to simplify solutions.	Look for structure within mathematics to help them solve problems efficiently.	Does not look for structure within mathematics. Does not solve them efficiently.	
MP.8 Look for and express regularity in repeated reasoning	Discover deep, underlying relationships (uncover a model or equation that brings together various aspects of a problem)	Find and explain subtle patterns.	Look for obvious patterns, and use if/then reasoning strategies for obvious patterns.	Does not use patterns at all.	

Received _____ of 40 points

Overall Grade:

Comments: