



UNIT TWO

RUBRIC



STUDENT NAME _____ SUBJECT _____

MP 8: Look for and express regularity in repeated reasoning. Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation $(y - 2)/(x - 1) = 3$. Noticing the regularity in the way terms cancel when expanding $(x - 1)(x + 1)$, $(x - 1)(x^2 + x + 1)$, and $(x - 1)(x^3 + x^2 + x + 1)$ might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

	4 - Advanced	3 – Competent	2 – Limited	1 - Emerging
Finds & Plans for Repeated Calculations	Student asks him/herself if a strategy will work in other situations and is able to generalize strategy or pattern to solve problems in greater contexts.	Student asks him/herself if a strategy will work in other situations and is able to generalize strategy or pattern to solve problems in greater contexts in most scenarios.	Student can identify a repeated calculation and can match it to a pattern found in another problem.	Student cannot identify repeated calculations in multiple problems.
Week 1				
Week 2				
Week 3				
Micro and Macro Thinking	Throughout problem solving, student maintains vision for the overall process, while attending to details. Student uses this information to continually assess the reasonableness of immediate results and easily adjusts thinking as needed.	Student sees the vision for the overall process, while attending to the important details. Student uses this information to assess the reasonableness of immediate results and attempts to make adjustments to thinking.	Student recognizes the overall vision of a problem, but struggles to ensure all details are attended to.	Student misses many details of the problem.
Week 1				
Week 2				
Week 3				
Explanation	Student can articulate orally and in writing, how they connected prior strategies and reasoning to new concepts or problems. Student generates own exploratory questions to push thinking and the thinking of others.	Student can articulate orally and in writing, how they connected prior strategies and reasoning to new concepts or problems. Student attempts to generate exploratory questions.	Student can explain either orally or in writing why they chose a strategy for problem solving.	Student cannot explain the rationale for the strategy chosen.
Week 1				
Week 2				
Week 3				

INSTRUCTIONAL NEXT STEPS: