





MP 1: Make sense of problems and persevere in solving them Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

	4 - Advanced	3 - Competent	2 – Limited	1 - Emerging
Entry Point	Student takes time to analyze a problem, looking for what the problem is asking them and how to best approach it. Student decides their entry point independently, based on their thorough analysis.	Student analyzes a problem and finds an appropriate entry point to approach it.	Student takes little time to analyze a problem and instead chooses the most obvious entry point.	Student does not actively choose an entry point.
Week 1				
Week 2				
Week 3				
Solution Planning	Based on analysis of the problem, the student plans a clear pathway to solving their problem rather than jumping right in. Pathway is continuously referred back to and planning is adjusted as needed.	Based on analysis of the problem, the student plans a clear pathway to solving their problem rather than jumping right in. Pathway is mostly adhered to throughout the solving process.	Student vaguely outlines a pathway to solving their problem, but plan does not support the solving process.	Student does not create a plan, but jumps right in.
Week 1				
Week 2				
Week 3				
Perseverance	Student recognizes that solutions to complex problems often require reevaluation of strategy and multiple cycles of problem solving. Student sees this as part of the learning process, embracing the practice, rather than a failed attempt.	Student recognizes that solutions to complex problems often require reevaluation of strategy and multiple cycles of problem solving. Student is mostly comfortable with this learning process and is successful in persevering most of the time.	Student can rework problems a few times successfully, but struggles to maintain focus when complex problems require multiple cycles of problem solving and reasoning.	Student cannot persevere through problems that cannot be solved quickly.
Week 1				
Week 2				
Week 3				

INSTRUCTIONAL NEXT STEPS:		