Kennedy High School: Critical Thinking and Problem Solving						
Goal: 9/12	**Exemplary (4)**	**Goal: Proficient (3)**	**Developing (2)**	**Emerging (1)**	Student Score	Teacher Score
Problem Solving	Creates a model to simplify a complicated situation and identifies limitations of model Analyzes all given constraints, goals and definitions and implied assumptions Uses novel problem solving strategies and tools and/or extends previous knowledge correctly to a given problem.	Creates a model to simplify complicated situation. Analyzes all given constraints, goals and definitions Uses appropriate problem solving strategies and tools	Creates a limited model to simplify a complicated situation Attends to some of the given constraints Uses inappropriate or inefficient problem solving strategies and tools	Does not provide a model Ignores given constraints Uses few, if any, problem solving strategies and tools		
Reasoning and Proof	Constructs logical, correct, complete solution with justifications and identifies any sources of error. Results are interpreted correctly in terms of context, including addressing reasonableness of final answer, and makes connections to similar math content in different contexts.	Constructs logical, correct, complete solution with justifications Results are interpreted correctly in terms of context, including addressing reasonableness of final answer	Provides partially correct solutions with justification or correct solutions without logic or justification Results are interpreted partially or incorrectly in terms of context	Provides partially correct or incorrect solutions without justifications Results are not interpreted in terms of context		
Communication and Representation	Uses multiple representations (diagrams, tables, graphs, formulas) and key explanations to enhance the audience's understanding of the solution; only relevant representations are included Uses precise definitions and accurate formal mathematical notation (units of measure, labeled, axes, equation formats, etc.)	Uses multiple representations (diagrams, tables, graphs, formulas) to help the audience follow the chain of reasoning; only relevant representations are included With few exceptions, uses precise definitions and accurate mathematical notation (units of measure, labeled axes, equation formats, etc)	Uses representations (diagrams, tables, graphs, formulas) that provide help to the audience follow to the chain of reasoning in a limited way; extraneous representations may be included Uses imprecise definitions or incomplete mathematical notation (units of measure, labeled axes, equation formats, etc)	Does not use representations (diagrams, tables, graphs, formulas) or uses few representations in way that confuse the audience Uses incorrect definitions or mathematical notation (units of measure, labeled axes, equation formats, etc)		
				Total Score (out of 12):		