

Teacher Problem to solve		Student Problem		System Problem Other
		Word problem	Suppose a ladder 60 feet long is placed in a Street so as to reach a window on one Side 37 feet high, and without moving it at bottom, will reach another window on the other side of the Street which is 23 feet high, how far across is the street?	

Criteria	Basic	Proficient	Exemplary
Logical Reasoning Ability	Does not demonstrate logical reasoning	Can reason through simple logical problems	Applies complex logical reasoning
Quantitative Analysis	Minimal ability to analyze quantitative data	Can interpret and analyze basic data sets	Advanced quantitative analysis skills
Problem Decomposition	Struggles to break down complex problems	Can break problems into simpler steps/tasks	Expertly decomposes problems into logical components
Creativity	No demonstration of original thought	Shows some creative thinking	Generate novel and creative ideas
Correctness	Results and solutions contain major errors	Occasional minor errors but mostly accurate	Consistently produces correct solutions and results
Explanation Ability	Does not explain reasoning or solutions	Explains reasoning at a basic level	Provides clear and detailed explanations
Information Retrieval	Unable to find or summarize requested information	Can find basic information	Capable of retrieving complex information from various sources
Communication Clarity	Communication is unclear or incorrect	Mostly clear and correct communication	Articulates responses clearly and precisely
Knowledge Breadth	Minimal knowledge demonstrated	Moderate grasp of common knowledge	Displays extensive knowledge across disciplines
Adaptability	Cannot adapt reasoning for new situations/tasks	Some ability to adapt to new tasks	Quickly adapts reasoning and approach to new problems
Bias Detection	No ability to detect biases or limitations	Can identify some simple biases	Actively detects and mitigates biases
Impact on roles	Replaces teacher roles	Mostly enhances teacher roles	Clear enhancement of teacher roles

