	Problem Solving Strategy	Reasoning and Proof of the Results	Communication and Clarity of the Writing
Basic (4pts)	No strategy is chosen, or a strategy is chosen that will not lead to a solution. Little or no evidence of engagement in the task present.	Arguments are made with no mathematical basis. Neither correct reasoning nor justification for reasoning is present.	No clear problem or purpose is communicated.
Apprentice (8pts)	A partially correct strategy is chosen, or a correct strategy for only solving part of the task is chosen. Evidence of drawing on some previous knowledge is present, showing some relevant engagement in the task.	Arguments are made with some mathematical basis. Some correct reasoning or justification for reasoning is present with trial and error, or unsystematic trying of several cases.	Some communication of an approach is evident through verbal/written accounts and explanations, use of diagrams or objects, writing, and using mathematical symbols. or relating
Practioner (12pts)	A correct strategy is chosen based on mathematical situation in the task. Planning or monitoring of strategy is evident. Evidence of solidifying prior knowledge and applying it to the problem-solving situation is present.	Arguments are constructed with adequate mathematical basis. A systematic approach and/or justification of correct reasoning are present noting patterns, structures and regularities.	Communication of an approach is evident through a methodical, organized, coherent sequenced and labeled response. Formal math language is used throughout the solution to share and clarify ideas
Expert (16pts)	An efficient strategy is chosen. Evidence of analyzing the situation in mathematical terms, and extending prior knowledge is present. Note: The expert must achieve a correct answer.	Deductive arguments are used to justify decisions and solution. Evidence is used to justify and support decisions made and conclusions reached.	Precise math language and symbolic notation are used to consolidate math thinking and to communicate ideas.
Total			

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Based upon NCTM 2000 and Exemplars.com retrieved at: <u>http://www.exemplars.com/resources/rubrics/nctm.html</u> April 22, 2008.