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Steven R Benson* (sbenson@lesley.edu), Division of Natural Science and Mathematics, Lesley University, 29 Everett Street, Cambridge, MA 02138. *Could they have known it generalized?*

Giving credit where credit is (probably) due. Preliminary report.

There is not much written evidence of ancient Babylonian mathematics, but what has been found provides fascinating examples of intricate algorithms used to solve specific numerical problems (which we would now classify as quadratic equations). Some historians have claimed these ancient mathematicians could not have possibly understood whether their algorithms generalized to other problems since these generalizations would require more sophisticated mathematical understanding. I will provide arguments, developed with students in an undergraduate history of mathematics course, that show a feasible scenario for justifying the generality of these algorithms using mathematical tools available to mathematicians of the time. (Received September 22, 2011)