## 1116-G1-1040 **Suzanne Sumner\*** (ssumner@umw.edu), 1301 College Avenue, Fredericksburg, VA 22401. Why we shouldn't think we're smarter than ancient mathematicians! Preliminary report.

Throughout history, techniques used by ancient mathematicians can be more insightful or more efficient than techniques taught today. For example, the Babylonians and Greeks used a form of geometric algebra that demonstrates common algebraic identities. The Babylonians also derived an efficient process for converting quadratic equations into a known form. And the Pythagorean use of figurate numbers is an intuitive way of confirming identities found useful for calculus. In addition, the Arabs introduced a compelling (and literal) method of completing the square in the middle ages. Given these and other examples, modern students would benefit from seeing how these ancient techniques aid in comprehending seemingly incomprehensible mathematics. (Received September 16, 2015)