

Meeting: 1003, Atlanta, Georgia, MAA CP X1, MAA General Contributed Paper Session, I

1003-X1-1315 **Robert Allan Peacock*** (rpeacock@yhc.edu), Young Harris, GA. *Unifying arithmetic (algebra) and function calculations in precalculus: A tedious but worthwhile goal.* Preliminary report.

At the “college algebra” or “function precalculus” level, it is worthwhile to unify *basic arithmetic skills* and *calculating with functions*. An effect is to provide a fundamental context (functions) for the set of basic arithmetic skills that students at this level should see reinforced. While students become acquainted with the notion of function (which they see as a formula, piecewise or non-piecewise), there is the potential to build in and reinforce many basic arithmetic concepts and skills, including but not limited to: numerical arithmetic, basic inequality arithmetic, difference of squares and sums/differences of cubes factorizations, absolute value inequality, absolute value equation, radical equation, factorization in the process of solving an equation, arithmetic manipulation (distribution, combining like terms, canceling, etc.), “rules” of exponents, use of the quadratic formula, and how to treat minus signs in the context of fractions and exponents. Additionally, logic can be worked in when calculating domains. (Received October 04, 2004)