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Ricardo E. Rojas* (ricardo.rojas@northern.edu), 1200 South Jay Street, Aberdeen, SD 57401. *College Algebra Suffices: No Calculator, No Calculus.*

Northern State University's Math 102 (College Algebra) students encounter questions that appear to be unsolvable without either a graphing calculator or a higher form of mathematics (i.e., calculus). Presumably, Math 102 students do not know calculus; thus, they must use a graphing calculator to obtain a decimal approximation of the solution. Sometimes, this decimal approximation does not communicate the complete significance of the solution. In this presentation, I examine three such Math 102 questions. At first glance, they appear to only be solvable with either a calculator or calculus. Nevertheless, I answer all three questions using only the methods of College Algebra. I thus show that a Math 102 student with no knowledge of calculus can answer these questions without a calculator. My research involving the nonstandard yet effective uses of these methods has revealed two insights. First, these methods will sometimes reveal important information about the solution that a calculator will not. Second, these methods will sometimes appeal to students who would prefer to attack these problems without a calculator. (Received September 04, 2014)