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Sheldon P. Gordon* (gordonsp@farmingdale.edu), Department of Applied Mathematics, Farmingdale State College, Farmingdale, NY 11731. *Getting Students to DIGMath: Dynamic Interactive Graphics in College Algebra.*

The presenter has developed a comprehensive set of DIGMath modules in Excel that allow faculty and students to investigate virtually every topic in College Algebra and related courses in an exploratory way. Topics include linear functions, behavior of exponential functions, doubling time and half-life, power functions, fitting functions to data, quadratic functions, cubic functions, polynomial functions, shifting and stretching functions, discovering sinusoidal functions, fitting sinusoidal functions to data, approximating sinusoidals with polynomials, systems of linear equations, and matrix models. In each case, the explorations allow the students to see in real time the effects of changing any of the associated parameters (using sliders) to gain a much deeper understanding of the underlying concepts than can be achieved with paper and pencil or even a graphing calculator. The use of these modules helps change the focus in the course to an emphasis on conceptual understanding and math modeling rather than on algebraic manipulation, as called for in all the reports and recommendations for a modern course in College Algebra that serves the needs of today's students. All of these modules can be downloaded from the presenter's website, farmingdale.edu/gordonsp. (Received August 12, 2008)