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Donovan H Van Osdol* (dv@math.unh.edu), Department of Mathematics Kingsbury Hall, U. of New Hampshire, Durham, NH 03824. *College Algebra it within Calculus!*

By using a modification of Weierstrass' definition of derivative (restricted to polynomial, rational, and power series functions) based upon an idea from synthetic differential geometry, one can develop a mathematically sound calculus course. Because limits are not needed, this approach makes it feasible to develop simultaneously "college algebra" and the calculus of most functions of interest. I will describe something of how this works out in practice. (Received August 08, 2000)