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University of Keele, ST5 5BG Keele, Staffs, England. *Calculus Math Expert Agent - A Computer  
Algebra System for TEACHING mathematics*. Preliminary report.

Full Abstract - Calculus Expert Math Agents Many Computer Algebra Systems are excellent at "Doing" mathematics but leave something to be desired when it comes to teaching mathematics as the intermediate steps are not revealed. This presentation will describe an alternative approach, called an Expert Math Agent, which is capable of solving almost all the problems which arise in the standard calculus sequence and disclose the steps and processes by which the result is obtained. The Expert Math Agent can also function in tutorial mode where it can look over the shoulder of a student as the steps in a calculation are performed, checking each step, and offer help when required. (Received March 22, 2000)