962-D1-449 Michael J. Bosse' (mbosse@dsc.edu), Dept. of Mathematics, Delaware State University, 1200 N. DuPont Hwy, Dover, DE 19901, and N. R. Nandakumar* (nnandaku@dsc.edu), Dept. of Mathematics, Delaware State University, 1200 N. DuPont Hwy, Dover, DE 19901. Computer Algebra Systems and Pedagogically Unsound Automated Procedures. Preliminary report.

Many calculators and computer software are now programmed with computer algebra systems. While these systems may greatly enhance student learning and the manipulation of algebraic expressions, they are also intrinsically fraught with pedagogically unsound automated functions which may lead to misunderstandings. For instance, when arithmetic expressions in which the denominators contain radicals are entered into the calculator/computer, automatic algorithms take hold and rewrite the expression by rationalizing the denominator. In default settings, these automated processes operate without being requested by the user. Thus the pedagogical implication arises which suggests to the student that expressions with radicals in the denominators are inappropriate and/or mathematically unsound. This paper begins to investigate this phenomenon and suggest programming alternatives. (Received September 14, 2000)