Derive

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Derive[1] is a "mathematical assistant" for a PC environment and can be run in Windows, but is not a Windows-environment application. It is a powerful collection of subroutines with both 2D and 3D graphics capability and a choice of display modes and resolution that conforms (manually) to the user's machine. It is more of a math learning tool than a "math doing" tool in the sense that other products are.

The user enters an "algebra window" where one "authors" an algebraic expression like $y = x^2 + y^2 + 9$. Then one can perform a number of options. The simplest is plot. Derive will autoscale or allow manual exploration. One can create derivatives and solve differential equations by a number of methods. The program works.

The interface is a classic early Lotus 1–2–3 type with keyword displays and the ability to move in the choices by typing key letters (or sometimes after five beeps one tries the Tab key successfully). For the modern mouser in a mostly Windows environment, it will be quite a challenge to leave the mouse alone and use the keyboard for entering everything. HELP support is there but is primitive with constant reference to sections of a well-written manual which should be kept PC-side for quite a while.

This program would certainly be of help in late high-school and early college training, where tools like Matematica are absent. It would serve for classroom display and use. The graphics are well executed. The vectors and matrices demo and the available tools are certainly sufficient for an introduction to linear algebra. Just as this product is not Matematica, it is not MATLAB, however.

REFERENCES AND NOTES

(1) Derive, Version 2, is available from Soft Warehouse, Inc., 3660 Waialae Ave., Suite 304, Honolulu, HI 96816-3236 (Phone: 808–734–5801). The price is $200.