

Ideas for Teaching Using CAS

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Differential equations courses are among those where use of CAS is the most justified. Namely in engineering mathematics where heavy computations are difficult to perform by hand and many problems are dealing with applications. Unfortunately, the use of CAS is rarely applied to theoretical concepts students need to learn. In this talk, we will use TI-Nspire CAS technology and present differential equations examples where both applications and mathematical theory can be addressed together. Moreover, this approach will allow us to tackle some problems using two different methods, creating an opportunity to validate answers.

Keywords

Engineering mathematics, computer algebra systems.