

Povzetek

Razvoj informacijske tehnologije in še posebej programov oziroma sistemov za simbolno računanje (SSR) ponuja nove možnosti in s tem neizogibno vpliva na metode in cilje matematičnega izobraževanja. Te spremembe je potrebno ustrezno vključiti tudi v matematični izobraževalni sistem. V zvezi s tem se poraja veliko vprašanj. Eno ključnih je vpliv vpeljave različnih tehnoloških pripomočkov na preverjanje znanja. Trenutno so na maturitetnem pisnem izpitu iz matematike dovoljena le standardna (znanstvena) računala. V luči naraščajoče uporabe SSR sem preučila izbrane maturitetne naloge in jih uvrstila v razrede glede na pet različnih razvrstitev, ki merijo vpliv sistemov za simbolno računanje na izpitna vprašanja. Izdelala sem sistem spletnih strani, zasnovan kot wiki, kjer se zbirajo pričujoče analize, ki bodo v pomoč pri uvajanju tehnologije v učni proces.

Abstract

The development of information technology and, especially, programs or computer algebra systems (CAS) offers new possibilities and inevitably influences the methods and goals of mathematical teaching and learning. The mathematical education system should reflect these changes. Many questions arise concerning this fact. One of the key questions is the influence of introduction of various technological tools on assessment. At the moment only standard (scientific) calculators are allowed during the Matura examination. In the view of emerging usage of CAS, I investigated a couple of exam questions and classified them according to five different schemes which measure the usefulness and the impact of computer algebra systems on exam questions. I built wiki based pages, where analyses such as this one accumulate and shall serve as a helpful tool in introducing technology into the teaching process.

Ključne besede:

Matura, tehnologija, preverjanje znanja, sistemi za simbolno računanje, SSR

Keywords:

Matura, external examination, technology, assessment, Computer Algebra Systems, CAS

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