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On the integration of computer algebra systems (CAS) by Canadian mathematicians: results of a national survey.

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Summary: In this article, we outline the findings of a Canadian survey study ($N = 302$) that focused on the extent of computer algebra systems (CAS)-based technology use in postsecondary mathematics instruction. Results suggest that a considerable number of Canadian mathematicians use CAS in research and teaching. CAS use in research was found to be the strongest factor affecting CAS integration in teaching. Mathematicians believe that CAS is becoming an integral part of contemporary mathematics knowledge. Two main factors impeding CAS integration are the departmental culture and the time required for designing CAS-based resources. Mathematicians mostly incorporate CAS use into assignments and much less for in-class tests and final examinations. CAS integration in teaching appears to remain a predominantly individual initiative.

Classification: U70

Keywords: computer algebra system; use of technology

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