



Continuing Education for Teachers: Motivation Using Everyday Problems

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Aktive Mathematik is an official project of the DFG Research Centers Matheon “Mathematics for Key Technologies” and is recognized by the Berliner Landesinstitut für Schule und Medien (LISUM) as a continuing education program for teachers of mathematics. Within the program, teachers and student teachers have the opportunity to model and solve everyday problems using mathematics. By providing a setting in which teachers not only gain a deeper understanding of fundamental and more advanced topics in mathematics, but also in which they see mathematics in action, it is the aim of this continuing education program to provide an impulse for teachers to integrate realistic examples into their classes. In this contribution, a sample project dealing with the security of online banking is presented. Its possible uses in motivating fundamental properties of the integers (such as equivalence classes) and number theory (e.g. discrete logarithms) for use in elementary and secondary level mathematics classes are explored.



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