

Teaching web application for secondary school mathematical logic

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Abstract:

The head part of this work is a website intended especially for secondary school students which teaches mathematical logic. The website is divided into two parts - a teaching text and tests. The teaching text, which is divided into seven chapters, explains the idea of propositions and their negations, basic logic connectives (conjunction, disjunction, implication, equivalence), a problem of finding truth value of composite propositions and their negations, work with quantifiers, set operations, Venn's diagrams and proof techniques. Except the teaching chapters there are also tests for verifying new knowledge. The questions in tests are randomly selected from a group of similar questions, so a repeated test has new questions. This text contains an user guide, a programmer documentation and a printed version of teaching chapters.