

Office software as a mathematical tool

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Mathematics is a theoretical science and thus it is very difficult to learn and to teach. The greatest problem is the motivation to the learning. During the lesson of chemistry, biology or physics students can do experiments themselves which encourages them to the further study of the subject. Lessons can be attractive and pupils hypothesising and verifying hypotheses by means of experiments could work as scientists. What about mathematics lessons?

A computer used at maths lesson makes possible carrying out of mathematical experiments. A student is then able to investigate the behaviour of mathematical objects, to hypothesise and to verify hypotheses. This statement seems obvious when we think about the special mathematical software. However, the usage of such software demands large outlays: both material on the purchase and mental because it is necessary to put quite a lot of effort to master the use of such software.

In the talk I want to show how to use the typical office software: a word processor, a spreadsheet and a simple graphic program to make mathematical experiments. Such software students frequently use for many purposes in different subjects, so they can use it also during mathematics lessons. Equipped with computers and office suite they can become explorers of mathematical objects learning more and better than from theoretical lectures.