

Abstract

In teaching mathematics the concept/concepts of function are very important, but also difficult. Thus, they are gradually introduced in the teaching process depending on the age of students. The development of mathematics and education technologies allows different approaches to introducing students to these concepts as well as testing of their adoption by students. The paper outlines the possibility of acquiring the concepts of function through programmed instruction using the Cartesian method, in which the educational space is represented by "a point" with six components. One of the specified components is media, which are used for acquiring new contents, and also for testing what have students acquired, for example, in the field of function. This approach ensures the presence of the direct and feedback loop, and the teaching mathematics is organized as a manageable process.

The above is effectively implemented in a computer classroom through programmed teaching using appropriate tools and Educational Computer Software (ECS).

Key words: *Cartesian method, direct and feedback loop, Educational Computer Software (ECS), media.*