

# **Methods of elementary teaching mathematics**

The teaching method is an ordered set of didactic techniques and means by which the goals of teaching and upbringing are realized.

Teaching methods include interrelated, consistently alternating ways of purposeful activity of the teacher and students.

A methodological technique is an element of a method, a component part of it, a separate step in the implementation of a particular method.



General methods are developed by didactics and are adapted to the teaching of mathematics.

Special methods are developed by the methodology of teaching mathematics.

As a rule, non-traditional methods arise in the practice of teaching.

The classification of  
teaching methods is carried  
out on various grounds

## **1. By the nature of cognitive activity:**

- \* explanatory and illustrative (story, lecture, conversation, demonstration, etc.);
- \* reproductive (solving problems, performing tasks according to the model, retelling educational material, repeating experiments, exercises, etc.);



\* problematic (problematic tasks, cognitive tasks, problem situations, etc.);

\* partial search (heuristic conversation, educational discussion, organizational activity game);

\* research (variable exercises, experiments, business games, etc.).

## **2. By activity components:**

- \* organizational and effective (methods of organizing and implementing educational and cognitive activities);
- \* stimulating (methods of influencing the motivation of educational and cognitive activity);
- \* control and evaluation (methods that determine the effectiveness of educational and cognitive activity).



### **3. For didactic purposes:**

- \* methods of learning new knowledge;
- \* methods of consolidating knowledge;
- \* control methods.

#### **4. By methods of presentation of educational material:**

- \* monologic (story, lecture, explanation);
- \* dialogical (problem statement, conversation, dispute).

## **5. By the forms of organization of educational activities:**

- collective;
- group;
- individual.



## **6. By sources of knowledge transfer:**

- \* verbal (story, lecture, conversation, instruction, discussion);
- \* visual (demonstration, observation);
- \* practical (exercise, laboratory work, experiments, workshop).

A single teaching method is used in its pure form only for specially planned teaching purposes. Usually the teacher combines different teaching methods.

**Thanks for your attention!**