METHODOLOGY OF TEACHING ARITHMETIC OPERATIONS IN MULTI-DIGIT NUMBERS

Zayniddinova is Khurshida Dilmurod's daughter
Student of Andijan State Pedagogical Institute

Abstract: *This article talks about the methodology of teaching elementary school students arithmetic operations (addition, subtraction) over large numbers.*

Key words: *math, addition, subtraction, division, multiplication, arithmetic, column, tens, hundreds, thousands.*

Абстрактный: *В данной статье рассказывается о методике обучения учащихся младших классов арифметическим действиям (сложение, вычитание) над большими числами.*

Ключевые слова: *математика, сложение, вычитание, деление, умножение, арифметика, столбец, десятки, сотни, тысячи.*

Based on the requirements of the Law of the Republic of Uzbekistan "On Education" and the "National Program of Personnel Training", the selection of the purpose, tasks, content, form, means and principles of education has become a primary need. Based on the five principles of our country's Law "On Education", "National Program for Personnel Training", "National Program for the Development of the School System", we aim to educate students, create skills, improve their knowledge, and introduce the Uzbek name to the world, just like our great ancestors. is to bring them to maturity as girls.

These documents show that primary education is the most important resource in the education system. Special attention is being paid to the preparation of textbooks in the primary school curriculum, retraining of primary school students, and improvement of the quality of teaching. "New generation textbooks" can be an example of this. Based on the above, I decided to write on the topic "Methodology of teaching arithmetic operations in multi-digit numbers in primary grades".

The main task of the teacher in learning this topic is to generalize the interconnections between arithmetic operations, to form conscious and thorough skills of written calculations. So, what are arithmetic operations?

Arithmetic operations are basic calculation operations performed on numbers in mathematics. They can be used to perform operations such as addition, subtraction, multiplication and division of all numbers. These operations are widely used in our daily life and in all complex mathematical calculations.

The following basic operations are included in arithmetic:

1. Addition (+): Finding the sum of two or more numbers.

Example: 5 + 3 = 8

2. Subtraction (−): Subtracting another number from one number.

Example: 10 − 4 = 6

3. Multiplication (×): Multiplying one number by the amount of other numbers.

Example: 6 × 3 = 18

4. Division (÷): Dividing a number by other numbers to determine how many smaller parts they can be divided into.

Example: 20 ÷ 4 = 5

Addition and subtraction of multi-digit numbers are studied simultaneously, including theoretical foundations, rules for adding a sum to a sum and subtracting a sum from a sum. In textbooks, cases of addition and subtraction are introduced in order of increasing difficulty, the number of transitions from room units gradually increases, and numbers containing zeros are introduced. Addition and subtraction of numbers expressed in length, mass, time, and other units are considered. The sum-to-sum rule is the basis for written addition or column addition. Therefore, students are explained how three-digit numbers are added based on the addition rule:

782+211=(700+80+2)+(200+10+1)=900+90+3=993.

Then adding this example as a column will not confuse the reader. Because we use the same rule: +782

211

a) add 1 unit to 2 units;

b) add 1 decimal to 8 decimals;

c) Add 2 hundreds to 7 hundreds.

In subtraction, we will work based on the rule we used for addition: the rule of subtracting the sum from the sum: 562-320=(500+60+2)-(300+20+0)=(500-300)+(60-20)+(2-0)=300+40+2=342.

After that, students learn that if the denominator is written as a column under the decrement, it will be easier to subtract or add multi-digit numbers, first subtract units, then tens, hundreds, thousands: -562 320

In the beginning, subtraction is solved with perfect explanations, and then short explanations are enough.

When 0, subtraction cases are considered. For example, a perfect explanation of the solution to 250-136 would be: 0 cannot be subtracted from 6, so we get 1 decimal out of 5 decimals and put a dot over the 5 to remember it. There are 10 units in a decimal, you divide 6 units from 10 units, you get 4 units, we write the answer under the units: -250

136 4

The dot means that we got 1 decimal, and after dividing 3 tens from 4 tens, we write the answer under the decimals:-250

136

14

and now we subtract one hundredth from 2 hundredths and write under hundreds:

-250

136

114.

Through these simple rules and practices, we can easily teach and develop students' skills in mathematical arithmetic, mainly the properties of addition and subtraction.

In order for students to successfully master the methods of oral and written calculations in elementary school mathematics classes, teaching arithmetic operations should be a systematic process, in which the teacher uses various methods.

requires the ability to use opportunities, to be able to use preparatory questions and tasks appropriately. This is based on the fact that the use of analytical and synthetic methods in the logical justification of concepts, results and rules is important for their justification and verification, and the use of critical thinking methods.

In order to use the possibilities of oral and written calculation methods in elementary school mathematics classes, the essence, content and its basis on the students' practical experience, as well as the widespread introduction of demonstration, comparison, conclusion and concretization along with the study of calculation methods, it should be taught based on the comparison of similar laws in other actions and based on the analysis of solving exercises and examples, working on mistakes and using all this effectively forms the basis.

When studying the properties and methods of arithmetic operations, it is necessary to study their specific laws in accordance with the operation of multiplication, on the other hand, in the analysis of special cases, the comparison with the characteristics of the operations becomes important. This has a positive effect on the formation of students' oral and written calculation skills and on the development of their thinking.

The use of exercises on the concept of arithmetic operations, problems and cards, visualization, objects, and theoretical logical questions in elementary school mathematics lessons not only help students to deeply study the methods of oral and written calculations, but also to develop their logical thinking skills. provides development and mastery of basic elementary mathematical concepts in speech and serves them to understand the essence of step-by-step thinking methods.

FOYDALANILGAN ADABIYOTLAR:

1.Sh.M.Miromonovich.-Toshkent: O‘zbekiston. NMIU, 2016.

2.Sh.M.Miromonovich.-Toshkent: O‘zbekiston. NMIU, 2017.

3. Bikboeva N.U, Yangiboyeva E.Ya, 2-sinf matematika darsligi Toshkent. "O‘qituvchi" 2011-yil.

4.Bikboeva N.U, Yangiboyeva E.Ya, 3-sinf matematika darsligi Toshkent. "O‘qituvchi" 2011-yil.

5. www.pedagog.uz