What are the 4 basic arithmetic operations?

The basic arithmetic operations are among the most important fundamentals of maths. You will need the basic arithmetic operations for everything you learn later in maths. So take the time to understand and practise the basic arithmetic operations. Our examples will make it easier!

The four basic arithmetic operations are:

Addition: ‘Adding plus’ - you add numbers together (+)
Subtraction: ‘Calculating minus’ - you subtract one or more numbers from each other (-)
Multiplication: ‘multiply’ - you calculate the multiple of a number (- or x)
Division: ‘Calculate divided’ - you divide a number by another number (: or ÷)
First basic arithmetic operation: addition (‘plus calculation’)

The first basic arithmetic operation you learn at school is addition (plus calculation). This is what the plus sign looks like: +

In addition, you add two or more numbers together. You say ‘add’ to this. The numbers that you add together are called summands. The result that you calculate is called the sum.

That's why we say:

Summand plus summand equals sum

Examples of addition:

7 + 2 = 9

25 + 13 = 38

172 + 353 = 525

The colours tell you which numbers are addends and which number is the sum.

As you can see, you can still calculate small sums in your head. However, if the value of the sum is greater, it makes sense to add in writing. Written addition allows you to add very large numbers together.

Second basic arithmetic operation: subtraction (‘minus calculation’)

The second important basic arithmetic operation is subtraction (minus calculation). Here the minus sign :\(-\)

You subtract one or more numbers from another number (or several numbers). This is called ‘subtracting’ in technical jargon. Unlike addition, there are not just two, but three technical terms to learn here:

The number from which you subtract another number is called the minuend.
The number you are subtracting is called the subtrahend.
The result is called the difference.
That's why we say:

Minuend minus subtrahend equals difference

Examples of subtraction

7 - 2 = 5

25 - 13 = 12

353 - 172 = 181

Pay attention to the colours here too. They show you the minuend, subtrahend and difference.

Again, mental arithmetic is great, but if the numbers get too big, written subtraction is a good idea.

Third basic arithmetic operation: multiplication (‘multiplication by multiples’)

Let's continue with multiplication. The technical term for this is multiplication. This is what the multiplication sign looks like: \(- \)

Because you can't always see this little dot so well, you will sometimes find this sign instead of a dot: \(x\)

When multiplying, you form the multiple of a number. For example, if you multiply a number by two, the result is twice the number. If you multiply by five, you get five times the number. The numbers that you multiply are technically called factors. The result is the product.

That's why they say:

Factor times factor equals product

Examples for multiplication

7 - 5 = 35

20 - 5 = 100

123 - 632 = 77.736

The colours show you the factors and the product.

You can see that the results quickly become very large when multiplying. You won't get that far with multiplication tables. Written multiplication is therefore very important. If you are travelling and can't multiply in writing, you can also use the rollover method.

Fourth basic arithmetic operation: division (‘divided arithmetic’)

Almost there! We have arrived at division - ‘divided arithmetic’. The division sign looks like this: \(÷\)

You will also often see a kind of colon \(: \).

From the description ‘divided maths’ you can already see very clearly what this is all about: you divide a quantity (for example of biscuits) into a number (for example of people). To do this, you divide one number by another. The number that you divide - i.e. the total quantity - is called the dividend. The number you divide by is called the divisor. And the result is called the quotient.

So it is called:

Dividend divided by divisor equals quotient

Examples of division

35 ÷ 5 = 7

100 ÷ 5 = 20

77.736 ÷ 123 = 632

The colours show you the dividend, the divisor and the quotient.

You can easily divide small numbers in your head, especially if you have a good command of multiplication tables. For larger numbers, written division will help you. This is all the more true if your result is no longer a natural number. You'll find out more about this in a moment when we take a closer look at number sets.