***THE BEAUTY OF MATHEMATICS***

"God created natural numbers. The rest is man's work. "

 (Leopold Kronecker, German mathematician)

Mathematics, as you have already learned from your own experience, was created due to man's need to have control over the objects around him.

Our life is based on communication and interpersonal relationships, which we could more easily define in one word: friendship. Have you ever thought that numbers can be friends too?

Well, Pythagoras is said to have discovered the first pair of friendly numbers: 220 and 284.

But what does friendship mean in mathematics? Friendly numbers are those numbers that have the property that each is equal to the sum of the divisors of the other.

Let's see, was Pythagoras right?

The divisors of the number 220 are: 1,2,4,5,10,11,20,22,44,55,110, and of the number 284 are1,2,4,71,142. By summing the divisors of each number, we obtain:

1+2+4+71+142=**220** şi 1+2+4+5+10+11+20+22+44+55+110=**284**.

Can you find such numbers too?

We all strive for perfection and it is quite difficult to achieve it, but the numbers have gone before us, because there are perfect numbers.

What are they? I think you're wondering.

There is a perfect number for everyone, right? But does it have anything to do with what perfect numbers mean in math? See...

In mathematics, the perfect number is the number that can be written as the sum of its divisors without themselves, for example: the divisors of the number 6 are: 1, 2, 3 and 6. Adding 1 + 2 + 3 we get 6, which means that 6 is a perfect.

We all like magic. Many times we would like to be invisible or simply do something magical.

Example:

1. “Think of any number you want. Then, add 4 to the chosen number. Multiply the result by 2. Subtract 6 from the new result, then divide the resulting number by 2. At the end, subtract from the result the number you initially thought of. You got 1. ”

PHENOMENAL! MAGIC!

2. “Think of a number. Add this number by 3, multiply the result by 7, subtract the number you thought of, subtract 9 and divide the remainder by 6. How much did you get? ” "I got 10." "It means you thought about number 8."

"Impossible! Let's try again! ”

Repeat the game one more time, then again and again, 10 times in a row, each time with a different number and each time, you will guess your friend's number. Magic or arithmetic trick? Of course it's a math trick!

The solution: If a is the number your friend is thinking of, then

[(a + 3) x7-a-9]: 6 = a + 2

and that, therefore, you only have to subtract 2 from the result obtained by your friend, in order to find out the number he thought of.

Do you want me to teach you a trick so you can see the "beauty of math"?

We all believe at some point that mathematics is the hardest object because there are many calculations, many things to prove and all kinds of theorems that we have to apply in geometry problems.

Why do children find math so difficult?

I think the first reason is the children's lack of courage to ask questions to the teacher when they do not understand the exercises or lessons taught.

The second reason is that when students return from school, they do not learn enough the lessons taught in class or do not do it at all, the reason being the fact that they did not understand the lesson in class, and there is no point in wasting time reading it. the home.

The third reason I think is quite common among students, because it happened to me, that is the loss of confidence in their own strength when they notice that after a lot of work the result of the exercise is incorrect.

In my opinion, the best solution is to discover the courage to address teachers when we have a problem with the lesson, because I have noticed that all teachers are very happy when they see that we are trying to understand and that we want to we learn. It is not a shame to ask questions, it is a shame not to do our best and not to respect the work done by our teachers.

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