

HOW TO COMPUTE THE SUM (ALGORITHM BASED ON NUMBERS – ABN) OF TWO ADDENDS

The sum consists of passing complete quantities from a number to the other one. It is done from left to right: we begin with the tens and later we follow the procedure with the tens and the units.

We can move any quantity: it is not necessary to move all the cents, all the tens or all the units, so we can move a smaller quantity or even we can combine them (hundreds and tens together, tens and units together and so on).

1º

263+156		
100		

I take 100 from 156 and I indicate it in the first column. Instead of 100 I could have taken other different quantity from 156.

2º

263+156		
100	363	56

I pass 100 to 263, so now I have 363. I take 100 from 156, so now I have 56.

3º

263+156		
100	363	56
40		

I take 40 from 56 and I indicate it in the first column. Instead of 40 I could have taken a different quantity (as, for instance, 50, 10 or 20), that is, a quantity which I am able to add to 363.

4º

263+156		
100	363	56
40	403	16

I pass 40 to 363, so now I have a new hundred in 403. I take 40 from 56, so now I have 16.

5º

263+156		
100	363	56
40	403	16
10		

I take 10 from 16 and I indicate it in the first column. Instead of 10 I could have taken a different quantity (as, for instance, 16, 7,...), that is, a quantity I am able to add to 403.

6º

263+156		
100	363	56
40	403	16
10	413	6

I pass 10 to 403, so now I have 413. In addition, I take 10 from 16, so now I have 6.

7º

263+156		
100	363	56
40	403	16
10	413	6
6	419	0

I pass the 6 remaining units and the operation is finished.

Just as the student feel confident in the computation of the algorithm the number of steps will decrease until he/she is able to do it by heart. Until then it is important to allow the student to follow so many steps as he/she needs.