

18. WONDEROUSLY NUMBER 1089

Select a three-digit number, but the figures of hundreds and units are different. Turn the order of digits in the number and subtract smaller from the bigger. In the number that you get turn the order of numbers again and gather that number with it (not with the first one). If you know well to calculate you already now which number you should get ...

Example:

Selected number is 712. When you turn the figures, you get 217. Deduct these two: $712 - 217 = 495$. Turn digits of the number: 594 and gather it from 495: $594 + 495 = 1089$. Can you conclude why is this happening and is it always "working"?