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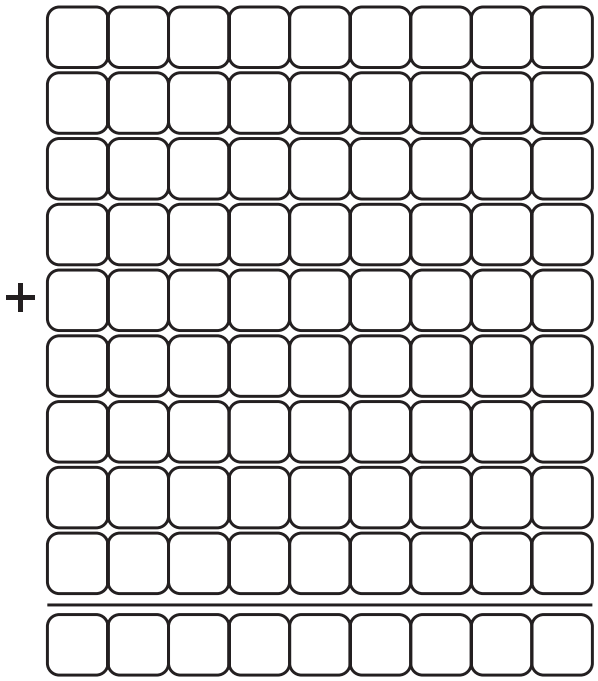
SELF-REFERENTIAL 9 DIGITS REPDIGIT NUMBER

Let us define ***repdigits*** *to be numbers with all-equal digits—666,666, 777, 4, 99,999, etc.*

Let us define ***repdigit summation*** *as follows: for numbers with nine or fewer digits, go through each digit (from left to right). For each nth digit with value x, add the x-digit repdigit whose digit values are n.*
For example, the repdigit summation of 15 is: 1 + 22,222 = 22,223

Finally, let us call a number ***self-referential*** *if it is equal to its repdigit summation.*
For example: the repdigit summation of 743,519,866 is:
1,111,111 + 2,222 + 333 + 44,444 + 5 + 666,666,666 + 77,777,777 + 888,888 + 999,999 = 747,491,445. This is close, but not quite equal, so 743,519,866 is not self-referential.

Find the only self-referential 9-digit number.



Bibliography:
[1] Ediciones ΚΠQA future book “Nuevos Acertijos con Numeros” by **Rodolfo Kurchan** and **Jaime Poniachik**
[2] Computer solutions found by **Ariel Futoransky**, January 6, 2014