Last week Andrea explained to her little students the divisibility rule for 3. "A number is divisible by 3 — she told them — if the sum of the digits is divisible by 3".

In order for them to practise it, she decided to give them homework. But she was in a hurry and, instead of giving them many different numbers, she decided to give them just a few. Each exercise was composed of a number n that should be used to build a big number concatenating all the numbers between 1 and n. For example, for n = 2, the number would be 12, when n = 6 would be 123,456, and for n = 13 it would be the long 12,345,678,910,111,213. Andrea asked them whether those created numbers were or not divisible by 3. 123456789101112131415 161718192021222324252 627282930313233343536 373839404142434445464 748495051525354555657 5859606162636465666676 869707172737475767778 798081828384858687888 990919293949596979899

This trick let her give them exercises with a small formulation but with a long solution. Now it is time to check the students responses, and the idea has backfired on her.

Input

The input begins with a single positive integer on a line by itself indicating the number of the cases following. Each test case contains the number $1 \le n \le 10^9$.

Output

For each test case, print 'YES' if the created number is multiple of 3, and 'NO' otherwise.

Sample Input

3 2 6 130000000

Sample Output

YES YES NO