Mr Toothless and His Task

Mr. Toothless is very good at math. But this time he feels bored at Hiccup. Because he has given a boring task to Toothless. The task is:

Given m. Is it possible to write m as multiplication of three consecutive numbers? i.e. is it possible to write m=n(n+1)(n+2) where n>0. As for example 504=7*8*9. Help Toothless.

Input

Input starts with an integer **T (≤ 100)**, denoting the number of test cases.

Each case contains one integer m ($1<=m<=10^{18}$)

Output

For each case, print the case number and "Yes" if it is possible, print "No" otherwise.

Sample Input	Output for Sample Input
2	Case 1: Yes
504	Case 2: No
505	

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