

## G - Sum of Three Primes

Given an integer  $N$ , find out if it can be written as the summation of exactly three prime numbers [not necessarily different]. We call a number prime, if it is only divisible by 1 and the number itself. The first few prime numbers are: 2,3,5,7,11,13,17...

For example,

11 can be written as sum of three primes (2+2+7 or 3+3+5)

5 can't be written as sum of any three primes.

### Input

There will be  $T$  test cases,  $T \leq 100$

Each case contains an integer  $N$  (where  $N \leq 10^5$ ).

### Output

For each test case, print "Case x:" where  $x$  is the case number. Then print a single space. Then print "YES" or "NO" depending on your answer. Put a new line ('\n') after the output of each case.

Sample Input	Sample Output
2	Case 1: YES
11	Case 2: NO
5	