

## C. Product of Three Numbers

time limit per test: 2 seconds

memory limit per test: 256 megabytes

You are given one integer number  $n$ . Find three **distinct integers**  $a, b, c$  such that  $2 \leq a, b, c$  and  $a \cdot b \cdot c = n$  or say that it is impossible to do it.

If there are several answers, you can print any.

You have to answer  $t$  independent test cases.

### Input

The first line of the input contains one integer  $t$  ( $1 \leq t \leq 100$ ) — the number of test cases.

The next  $n$  lines describe test cases. The  $i$ -th test case is given on a new line as one integer  $n$  ( $2 \leq n \leq 10^9$ ).

### Output

For each test case, print the answer on it. Print "NO" if it is impossible to represent  $n$  as  $a \cdot b \cdot c$  for some **distinct integers**  $a, b, c$  such that  $2 \leq a, b, c$ .

Otherwise, print "YES" and **any** possible such representation.

### Example

input	Copy
5 64 32 97 2 12345	
output	Copy
YES 2 4 8 NO NO NO YES 3 5 823	

### Codeforces Round 615 (Div. 3)

**Contest is running**

02:08:01

Virtual Participation



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Language: GNU GCC C11 5.1.0

Choose file: Choose File No file chosen

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