The prime factors of 13195 are 5,7,13 and 29.

What is the largest prime factor of a given number N?

**Input Format**

First line contains T, the number of test cases. This is followed by T lines each containing an integer N.

**Constraints**

* T 🡪 1 to 10
* N 🡪 1 to 10^12

**Output Format**

For each test case, display the largest prime factor of N.

**Sample Input 0**

2

10

17

**Sample Output 0**

5

17