Problem G. An Easy Math Problem

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	128 megabytes

You are given an integer n. For each $p \leq q$, where $pq \mid n$, denote $r = \frac{p}{q}$. Find the number of different values of r.

Input

The first line of the input contains one integer q ($1 \leq q \leq 2000$), denoting the number of test cases. The next q lines each contain one integer n ($1 \leq n \leq 10^{10}$).

Output

For each test case, print one line: an integer, the number of different values of r.

Example

standard input	standard output
10 1 2 3 4 5 6 7 8 9 10	1 2 2 3 2 5 2 4 3 5