double product

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

While mahdi was studying math as always , he found a math problem and he solved it very fast .

The statements of the problem are as follow : You are given three integers a , b and n and you need to find the number of pairs (x, y) $(1 \leq x \leq n$, $1 \leq y \leq n)$ such that $a \cdot x = b \cdot y$.

Let's see if you can beat mahdi and answer the question faster than him .

Input

First line contains only one integer q ($1 \leq q \leq 10^5$) — the number of the queries .

The next q lines each contains 3 space-seperated integers a , b , n ($1 \leq a$, b , $n \leq 10^9$) — the numbers described in the problem statements .

Output

Print q lines , the ith line contains one integer — the answer of the ith query .

Example

standard input	standard output
5 2 3 9 3 3 9 1 5 10 5 4 2 1 1 20	3 9 2 0 20

Note

In the first example the possible pairs are (3 , 2) , (6 , 4) and (9 , 6) .

It is preferred to use %I64d specifier to read the integers in the queries .