Problem L
Lucky Pair

A pair of positive integers (x, y) is considered a *lucky pair* iff there exists a positive integer k such that: $x^k + y^k$ is divisible by $x \cdot y$. For example:

- $(2, 4)$ is a lucky pair because $2^3 + 4^3 = 8 + 64 = 72$ is divisible by $2 \cdot 4 = 8$;
- $(3, 3)$ is a lucky pair because $3^2 + 3^2 = 9 + 9 = 18$ is divisible by $3 \cdot 3 = 9$;
- $(1, 2)$ is not a lucky pair because $1^k + 2^k$ is always odd for every $k > 0$ and can not be divisible by $1 \cdot 2 = 2$.

You are given an array a containing n positive integers, your task is to count the number of pairs (i, j) so that $i < j$ and (a_i, a_j) is a lucky pair.

Input

- The first line contains a single integer n — the length of the array ($2 \le n \le 3 \cdot 10^5$).
- The second line contains n integers $a_1, a_2, \ldots, a_n$ ($1 \le a_i \le 10^7$) — the elements of the array.

Output

Write a single integer denoting the number of lucky pairs in the array a.

Sample Input 1	Sample Output 1
6 1 2 3 4 5 6	1

Sample Input 2	Sample Output 2
4 7 7 7 7	6