Problem H. Gift

Time limit 1000 ms

Code length Limit 50000 B

OS Linux

Elnur, Nijat and Amin are playing a game to win a prize using an array A of length N.

Elnur can choose any pair (i, j) such that $(1 \le i < j \le N)$.

Let the scores of Elnur, Nijat, and Amin be denoted by $a,\,b,\,$ and c respectively, where:

- $a = A_i A_i$
- $b = A_i + A_i$
- $c = A_i \times A_j$

If the numbers a, b, and c form an <u>arithmetic progression</u>, then Elnur, Nicat, and Amin will win the prize.

Task: Find how many pairs (i, j) Elnur can choose so that they can win the prize.

Input

- The first line contains an integer T the number of test cases.
- For each test case, two lines of input are given:
 - $\circ~$ The first line contains an integer N the number of elements in the array.
 - \circ The second line contains N integers separated by spaces A_1, A_2, \ldots, A_N the elements of the array.

Output

For each test case, output on a new line the number of pairs (i,j) such that Elnur, Nijat, and Amin win the prize as a result.

Constraints

- $1 \le T \le 10^3$
- $1 \le N \le 10^5$

- $1 \le A_i \le 10^9$
- The sum of all N across test cases does not exceed $5\cdot 10^5$.

Example

Input	Output
2 3 1 3 9 5 2 1 8 6 2	0 1

Explanation

Test case 1: There are no pairs satisfying the condition.

Test case 2: There is one possible pair:

• (4,5) : $a=(6-2)=4, b=(6+2)=8, c=(6\times 2)=12.$ We can see that a,b,c form an arithmetic progression.