

Reminder: in case of any technical issues, you can use the lightweight website [m1.codeforces.com](#), [m2.codeforces.com](#), [m3.codeforces.com](#).

D. The BOSS Can Count Pairs

time limit per test: 4 seconds
memory limit per test: 512 megabytes
input: standard input
output: standard output

You are given two arrays a and b , both of length n .

Your task is to count the number of pairs of integers (i, j) such that $1 \leq i < j \leq n$ and $a_i \cdot a_j = b_i + b_j$.

Input

Each test contains multiple test cases. The first line of input contains a single integer t ($1 \leq t \leq 10^4$) — the number of test cases. The description of test cases follows.

The first line of each test case contains a single integer n ($2 \leq n \leq 2 \cdot 10^5$) — the length of the arrays.

The second line of each test case contains n integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq n$) — the elements of array a .

The third line of each test case contains n integers b_1, b_2, \dots, b_n ($1 \leq b_i \leq n$) — the elements of array b .

It is guaranteed that the sum of n across all test cases does not exceed $2 \cdot 10^5$.

Output

For each test case, output the number of good pairs.

Example

input	Copy
3 3 2 3 2 3 3 1 8 4 2 8 2 1 2 7 5 3 5 8 8 1 1 6 5 8 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8	
output	Copy
2 7 1	

Note

In the first sample, there are 2 good pairs:

- (1, 2),
- (1, 3).

In the second sample, there are 7 good pairs:


- (1, 2),
- (1, 5),
- (2, 8),

Codeforces Round 875 (Div. 2)

Contest is running

00:22:32

Contestant



→ Submit?

Language: GNU G++17 7.3.0

Choose file: Choose File No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

Submit

→ Score table

	Score
Problem A	356
Problem B	534
Problem C	890
Problem D	1246
Problem E	1780
Problem F	2136
Successful hack	100
Unsuccessful hack	-50
Unsuccessful submission	-50
Resubmission	-50

* If you solve problem on 01:30 from the first attempt

- (3, 4),
- (4, 7),
- (5, 6),
- (5, 7).

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The only programming contests Web 2.0 platform
Server time: May/28/2023 21:35:50^{UTC+5.5} (11).
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