Johnny The Gambler

Johnny is a gambling addict. He entered a casino and started playing a game with the dealer. The game is as follows: the dealer deals a sequence of N cards, each card containing a number $C[i]$ and asks Johnny how many pairs (j, k) such that $j < k$ and $C[j] + C[k] = X$. If Johnny answers correctly he wins, otherwise the dealer wins.

Input Format

The first line of input contains an integer T, the number of test cases. T test cases follow, Each test case start with the value of $0 \leq X \leq 2*10^3$ followed by the number of cards $0 < N \leq 10^5$ followed by N numbers representing the numbers on the cards $0 \leq C[i] \leq 10^3$.

Output Format

There should be T lines, containing the following format.

k. S

Where k is the test case number (starting at 1), a single period, a single space and S representing the number of valid pairs (j, k) as described above.

Sample Input	Sample Input
1 10 3 1 5 9	1. 1