Good

The problem is very easy.

You are given n terms (the terms can be integer as well as floating). Let S = sum of all the n terms. A number k (x<=k<=y) is said to be good if S is divisible by it.

Input

Input begins with an integer t.

Then t test cases follow.

For each test case, three numbers n,x,y are given. Then n terms of the sequence follow.

(REMEMBER: all the input is on a single line)

Output

For each test case,

You have to output a single integer m.

where, m = (sum of all even good numbers) - (number of all odd good numbers)

(REMEMBER: all the output should be on a single line)

The numbers should be separated by spaces.

Example

Input:

2 3 1 2 1 2 3 4 1 10.5 -1 4.5 4.5 4

Output:

1 10

Scoring:

Your task is to minimise the source code length.

The less your fingers work, more you gain.

Remember:

Only python 2.7 is permitted. Sorry in advance, I will not allow any other language.

Source limit is tight. So be careful.

Constraints:

-100<=any term of sequence<=100