

# Minions and War

Limits: 2s, 512 MB

In the land of Minion, there are **N** Minions. They have their own power to survive themselves from enemy.



The power of every Minion may not always be equal. But, their power must be equal as you don't want a war among themselves. **So, you need to make the every Minion's power equal.**

You can increase or decrease any Minion's power by 1 as many times as you want.

But nothing is free here! Increasing a Minion's power by 1 will cost **P** and decreasing a Minion's power by 1 will cost **Q**.

You need to find the minimum cost to make every Minion's power equal.

## Input

The input will be followed by an integer **T**, denoting the number of test case.

The first line of each test case will contain three integers **N**, **P** and **Q**. The second line will contain **N** integers denoting the power of Minions.

## Constraints

$1 \leq T \leq 10$

$1 \leq N, P, Q \leq 10^6$

$1 \leq \text{Minion's Power} \leq 10^6$

Sum of **N** over all the test cases  $\leq 8 * 10^6$

## Output

For each test case, the only line of the output will contain the minimum cost to make every Minion's power equal.

## Samples

Input	Output
1	
3 1 1	
1 2 3	