B. Watering System

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Arkady wants to water his only flower. Unfortunately, he has a very poor watering system that was designed for n flowers and so it looks like a pipe with n holes. Arkady can only use the water that flows from the first hole.

Arkady can block some of the holes, and then pour A liters of water into the pipe. After that, the water will flow out from the non-blocked holes proportionally to their sizes $s_1, s_2, \ldots, s_n$. In other words, if the sum of sizes of non-blocked holes is S, and the i-th hole is not blocked, $s_i \cdot \frac{A}{S}$ liters of water will flow out of it.

What is the minimum number of holes Arkady should block to make at least B liters of water flow out of the first hole?

Input

The first line contains three integers n, A, B ($1 \le n \le 100000$, $1 \le B \le A \le 10^4$) — the number of holes, the volume of water Arkady will pour into the system, and the volume he wants to get out of the first hole.

The second line contains n integers $s_1, s_2, \ldots, s_n$ ($1 \le s_i \le 10^4$) — the sizes of the holes.

Output

Print a single integer — the number of holes Arkady should block.

Examples

input
4 10 3 2 2 2 2

output
1

input
4 80 20 3 2 1 4

output
0

input
5 10 10 1000 1 1 1 1

output
4

Note

In the first example Arkady should block at least one hole. After that, $\frac{10 \cdot 2}{6} \approx 3.333$ liters of water will flow out of the first hole, and that suits Arkady.

In the second example even without blocking any hole, $\frac{80 \cdot 3}{10} = 24$ liters will flow out of the first hole, that is not less than 20.

In the third example Arkady has to block all holes except the first to make all water flow out of the first hole.