

Mock CCC '20 Contest 2 S5 - Sticks

Time limit: 0.5s **Memory limit:** 128M

You have A sticks each of length a metres and B sticks each of length b metres which you are trying to place into one of M tubes. Tube i has a length of l_i metres. Each tube can fit some number of sticks such that the sum of the length of the sticks does not exceed l_i . Each stick can also only go in at most one tube. What is the maximum number of sticks that can be put into the tubes?

Input Specification

The first line will contain two integers, a, A ($1 \leq a \leq 10^9, 0 \leq A$).

The second line will contain two integers, b, B ($1 \leq b \leq 10^9, 0 \leq B$).

We will guarantee $a \leq b$ and $0 \leq A + B \leq 10^5$.

The third line will contain the integer M ($1 \leq M \leq 10^5$).

The fourth line will contain M integers, l_i ($1 \leq l_i \leq 10^9$).

Output Specification

Output the maximum number of sticks that can be put into the tubes.

Subtasks

For 2/15 of the points, $M, A + B \leq 10, a, b, l_i \leq 1000$.

For an additional 7/15 of the points, $M, A + B, a, b, l_i \leq 1000$.

Sample Input

```
3 2
4 2
2
6 5
```

Sample Output

```
3
```