Save Kumandra

Difficulty: Medium

Problem Statement:

Long ago, in the fantasy world of Kumandra, humans and dragons lived together in harmony. However, when sinister monsters known as the Druun threatened the land, the dragons sacrificed themselves to save humanity. Now, 500 years later, those same monsters have returned, and it's up to the warrior princess Raya and the last surviving dragon Sisu to stop the Druun for good.

As a water dragon Sisu is a fast swimmer and has water related abilities, like being able to use the falling rain water to "fly" in the air and to breath out a Fog Generation, along with being able to perform Hydrokinesis, Shapeshifting and even Illumination through the Dragon Gem containing the magic of her siblings.

Together with Raya, Sisu can defeat the Druun by conjuring powerful, magical spells. They can use either units of fog or fire to cast these spells. Each of the i^{th} Druun has a strength of si, and Raya and Sisu must cast a fog or fire spell of at least the same strength to defeat that Druun.

Raya and Sisu can cast an unlimited number of spells every second, as long as they have enough fog or fire units. The spell casting can be done instantly. Initially, Sisu have 0 units of fog and 0 units of fire.

If Sisu can generate p number of fog units and q number of fire units every second, help Raya and Sisu to calculate the minimum time needed to defeat all the Druuns and save Kumandra as quickly as possible.

Input format:

- The first line of each test contains a single integer t (1≤t≤100) — the number of test cases. This is followed by a description of the test cases.
- The first line of each test case contains two integers p, q (1≤p,q≤10^9) — the amount of fog and fire Sisu can generate per second.
- The second line of each test case contains a single integer n (1≤n≤100) — the number of Druuns.
- The third line of each test case contains n integers s1,s2,s3,…,sn(1≤si≤10^4) — the strengths of the Druun.
- It is guaranteed that the sum of n over all test cases does not exceed 100.

Output format:

- For each test case, output a single integer — the minimum time in seconds that Raya and Sisu will need to defeat all the monsters.