Problem K
Squid Game
Time limit: **2 seconds**
Mem limit: **256 Megabytes**

There are n players attending the "Squid Game" version in a secret facility.

Each player is placed in a one-dimension space. There is one assassin player in the game. The players and the assassin can move at a speed of 1 meter per second, but only one player can move at a time. If the assassin and any players are at the same point at the same time, those players will be eliminated.

There is a shelter that can accommodate any number of players, but the assassin will not pass. If any player gets to the shelter and there is no assassin there, then he is saved.

You are the one that knows the map and all players' positions as well as the position of the assassin. You need to find the maximum number of players that you can be guaranteed to save. Every second, you can give a movement order to only one player.

Input

The first line contains a number n ($1 \leq n \leq 10^5$) – the number of players.

The second line contains n integers $x_1, x_2, \ldots x_n$ ($|x_i| \leq 10^9$) – the coordinates of players.

The third line contains a single integer y ($|y| \leq 10^9$) – the coordinate of the assassin in meters.

The last line contains a single integer z ($|z| \leq 10^9$) – the coordinate of the shelter.

Output

Print a single number - the maximum number of players that you are guaranteed to save.

Sample input

Sample input	Sample output
3 -1 1 3 2 0	1
3 0 0 9 10 1	2