

PROBLEM C**CRIME SCENES****3 POINTS**

People hunting for clues at an outdoor crime scene typically divide up the area they are examining into a grid and will record in which grid cell each item is found. It is thus quite easy to tell how many items were found in a given cell.

**Input**

In this problem you will be given a crime scene scenario. It begins with a line containing two integers X and Y (separated by a space) representing the length and width of the search grid. Both X and Y are positive integers not greater than 100.

The second line of the scenario is a single integer M which gives the number of items located by the search team. M is a positive integer not greater than 250.

This is followed by M lines each containing the X and Y coordinates of the grid cell in which an item was found. Note that the grid coordinate system starts at 0, 0 and that several items may be found in a particular cell, so cell coordinates may be repeated.

Following the M lines of item locations there is a list of cell references for which the total number of found items is required. The first line of this section is a single integer, N , which gives the number of cell references. N is between 1 and the number of cells in the grid (X times Y).

There follows N lines each containing the X and Y coordinates of a cell.

Output

Output consists of a single line for the scenario. It contains the total number of items found in the N cells listed.

Sample Input

```
10 10
8
4 5
3 4
0 0
1 5
9 9
5 6
3 4
9 9
3
9 9
4 5
6 3
```

Explanation

Cell 9,9 contains 2 items (it appears twice in the input list),

Cell 4,5 contains 1 item,

Cell 6,3 contains no items (it did not occur in the input list).

Total 3 items.

Output for Sample Input

```
3
```