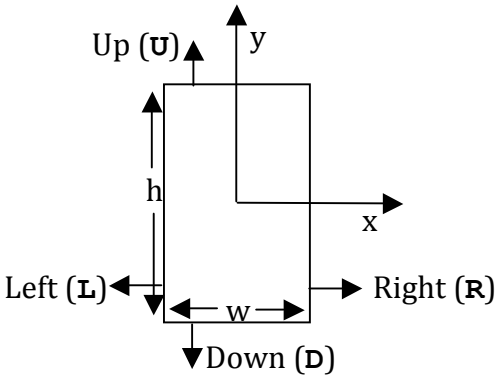
6- Dart Evader
Input File: DartEavderIn.txt

Breanne and her friend, Luke Flystalker, like to play the game Dart Evader. In this game Breanne stands behind a rectangular target that she is holding, which faces Luke, and remains perfectly still until Flystalker throws a dart at the target. Then she can move the target vertically up or down, or horizontally to Skywalker's left or right, in attempt to prevent the dart from striking the target. If the dart hits the target or its edge, Flystalker receives a point. Otherwise, Breanne receive a point.

As shown below, a two-dimensional Cartesian coordinate system is associated with the target, whose origin is at the center of the target, and whose positive x and y directions are to Luke's right and upward respectively. The target's width is **`w`** inches and its height is **`h`** inches.



Your task is to determine the score of the game, given the number of darts thrown by Flystalker, the (`x`, `y`) coordinates of each dart's aiming point, the width and height of the target, and the maximum distance Breanne can move the target up (**`U`**), down (**`D`**), left (**`L`**) and right (**`R`**). The units of all coordinates and distances are inches.

Inputs:
The first line of input will be the number of games played, **`n`**, followed by one group of inputs for each game. The first line in a grouping will contain six integers: the target's width (**`w`**), followed by its height (**`h`**), followed by the maximum distance the target can be moved in the upward (**`U`**), downward (**`D`**), left (**`L`**) and right (**`R`**) directions. The second line of input in the grouping will contain one integer, which is the number of darts (**`d`**) thrown in this game. This will be follow by **`d`** lines (one per dart) that contain two *real numbers* per line that represent the x and y coordinates of a dart's aiming point. All inputs on a line will be separated by a space, and the units of the aiming point coordinates, the target's dimensions, and the maximum distances the target can be moved is inches.

Outputs:

There will be one line of output per game that contains two integers separated by a space. The first integer will be Breanne's score, and the second integer will be Luke's Flystalker's score.

(Sample inputs and outputs on next page)

Sample Inputs

```
1
5 10 3 4 1 2
10
0.0 0.0
0.0 -2.01
0.0 -2.00
-3.0 0.0
5.0 0.0
0.0 5.0
0.0 -4.0
-0.51 0.0
1.50 0.0
0.0 1.01
```

Sample Outputs:

```
7 3
```