C++5 // Path Management

Suppose I am stuck in a grid at (0,0). I want to go to point (A,B) to get out, and I can only move either 1 unit up for 1 unit to the right at any given point. There are, however, N points (0 <= N <= (A+1)*(B+1)), that have broken glass on them, and I'd prefer not to walk through those points. How many paths are there from (0,0) to (A,B)?

Input Specification:
The first line will contain the integers A (5<=A<=15), B (5<=B<=15), and N (0<=N<=(A+1)*(B+1)) space separated. On the next N lines, there will be an ordered pair (C,D), representing a point on the grid with broken glass on it.

Output Specification:
Output the number of paths from (0,0) to (A,B) with the restrictions.

Sample Input:

```
5 5 0
```

Sample Output:

```
252
```

Sample Input:

```
2 3 3
1 2
1 0
0 3
```

Sample Output:

```
1
```