Problem A
Totally Monotone Matrix
Max no. of test cases: 15
Time limit: 1 second

An *nxn* matrix M is called *totally monotone* if elements in each row and each column are all non-decreasing. In this problem, all elements of matrix M have distinct values. The example below shows a 5x5 totally monotone matrix, where $M[1,1] = 2$, $M[1,5] = 19$ and $M[5,5] = 72$.

```
 2  5 10 13 19
 3  7 11 15 22
 4  9 16 20 43
 8 14 17 31 66
12 21 26 40 72
```

Give a totally monotone matrix M and two elements at $M[r_1, c_1]$ and $M[r_2, c_2]$, where $1 \leq r_1 < r_2 \leq n$ and $1 \leq c_1 < c_2 \leq n$. Please determine the number of elements in M that has value greater than $M[r_1, c_1]$ and smaller than $M[r_2, c_2]$. In the above totally monotone matrix M, there are 11 elements with values greater than $M[2,2]$ (which is 7) and less than $M[3,4]$ (which is 20), namely 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19.

Input File Format

First line of input has one integer, indicating the number of test cases. For each test case, the first line contains an integer n, $3 \leq n \leq 1000$, which is the size of the totally monotone matrix M to follow. The next n lines each has n integers, representing the n rows of n columns of M. The last line contains 4 integers, r_1, c_1, r_2, and c_2, indicating the indices of elements $M[r_1, c_1]$ and $M[r_2, c_2]$.

Output Format

For each test case, output an integer on a single line, indicating the number of elements in M that are larger than $M[r_1, c_1]$ and smaller than $M[r_2, c_2]$.

Sample Input

```
2
5
2 5 10 13 19
3 7 11 15 22
4 9 16 20 43
8 14 17 31 66
12 21 26 40 72
2 2 3 4
3
1 2 5
3 7 13
9 11 15
1 1 1 2
```

Output for the Sample Input

```
11
0
```