## Cartesian Shortest Path

The task is simple, on the 2D cartesian coordinate system, how many different shortest path from point $O(0,0)$ to point $A(x, y)$, but not through point $B(x 1, y 1)$ and $C(x 2, y 2)$.


Score is the length of your source.

## Input

The first line is an integer $\mathbf{T}(1 \leq \mathbf{T} \leq 10000)$, denoting the number of test cases. Then, $\mathbf{T}$ test cases follow.

## Each test case consist of 3 lines:

-first line contains two integer $\mathbf{x}$ and $\mathbf{y}(1 \leq \mathbf{x}, \mathbf{y} \leq 10)$ location of point $A$
-second line contains two integer $\mathbf{x 1}(0 \leq x 1<x)$ and $\mathbf{y} \mathbf{1}(1 \leq y 1 \leq y)$ location of point $B$
-third line contains two integer $\mathbf{x 2}(1 \leq x \mathbf{2} \leq x)$ and $\mathbf{y 2}(0 \leq y 2<y)$ location of point $C$

## Output

For each test case, output number of different shortest path from $(0,0)$ to point $A$ but not through point $B$ and $C$.

## Example

## Input:

2
45
34
22

Output:
32
2

See also: Another problem added by Tjandra Satria Gunawan

