Problem G: Corner-Shared Cells

Time limit: 1s; Memory limit: 512 MB

Consider a squared-cell grid with **M** horizontal rows and **N** vertical columns. We denote **(i, j)** as the cell on the intersection of **i**-th row and **j**-th column. Given integers **p** and **q**, Gia Han is wondering how many cells share at least one corner with the cell **(p, q)**. Two cells **(i, j)** and **(k, l)** are said to share a corner if $|\mathbf{i} - \mathbf{k}| \leq \mathbf{1}$ and $|\mathbf{j} - \mathbf{l}| \leq \mathbf{1}$. Let's program to help her calculate the answer!.

Input

The first line contains two integers **M**, **N** ($1 \leq \mathbf{M}, \mathbf{N} \leq 200$)
The second line contains two integers **p**, **q** ($1 \leq \mathbf{p} \leq \mathbf{M}$, $1 \leq \mathbf{q} \leq \mathbf{N}$).

Output

Print the number of cells in the grid which share at least one corner with the cell (**p**, **q**).

Sample

Input	Output
4 3 4 2	5
4 3 3 2	8

Explanation of the first case:

(1,1)	(1,2)	(1,3)
(2,1)	(2,2)	(2,3)
(3,1)	(3,2)	(3,3)
(4,1)	**(4,2)**	(4,3)

The cell **(4,2)** shares at least one corner with the cells **(3,1)**, **(3,2)**, **(3,3)**, **(4,1)**, and **(4,3)**.