Problem 1: Sandwich Holes

Input File: *holesin.txt*
Output File: *holesout.txt*

Time limit	Memory limit
1 second	256 MB

Statement

Your friend Kevin has just made you a big tasty sandwich. Just as you are about to pick up the sandwich and take a bite, you realise you had forgotten to tell Kevin something crucially important: you are terribly allergic to cheese! Being afraid to even touch the sandwich with your hands, you grab a nearby toothpick and decide to poke holes through the sandwich with the toothpick, and see if any cheese residue ends up on the toothpick.

Kevin's sandwich is exactly L centimetres long and W centimetres wide, while the slices of cheese he cuts are always exactly A centimetres long and B centimetres wide. You can assume the side of length L is always parallel to the side of length A (Kevin is very particular about his sandwiches), the cheese is completely encased by the bread, and that the top-left corner of the cheese is an integer number of centimetres down and to the right of the top left corner of the bread. Note that Kevin does not rotate the cheese, it's against his personal code!

You can poke holes anywhere on the sandwich (not necessarily at integer coordinates), but the toothpick will only pick up cheese residue if it goes through the cheese, not if it touches the corner or side of the cheese. What is the minimum number of holes you need to poke with your toothpick so you can be absolutely sure the sandwich has no cheese in it?

Input

The first line of input contains two integers: L and W.
The second line of input contains two integers: A and B.

Output

Output one integer, the minimum number of holes.

Sample Input 1

```
3 3
2 2
```

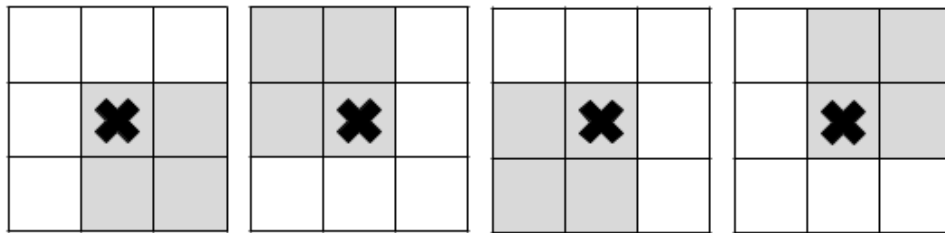## Sample Output 1

```
1
```

Sample Input 2

```
2 2
1 1
```

Sample Output 2

```
4
```

Sample Input 3

```
10 4
3 2
```

Sample Output 3

```
6
```

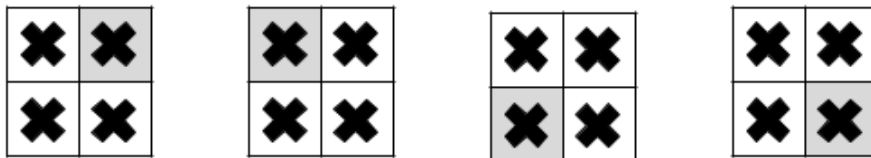## Explanation

Sample Input 1

Sample Input 2

- For sample input 1, you can poke a single toothpick hole in the middle 1cm by 1cm square of the sandwich, since any 2cm by 2cm cheese slice must cover that square.

- For sample input 2, you have to poke a hole for every single 1cm by 1cm square of the sandwich, since the cheese slice could be in any one of those squares.

- Sample input 3 can be solved with 6 holes.

Constraints

- $1 \leq A \leq L \leq 10000$

- $1 \leq B \leq W \leq 10000$

- As you can see, we were not joking when we said the sandwich was big.

Subtasks

- For Subtask 1 (15 points), $L = 12$, $W = 8$, $A = 5$, $B = 2$. *You are allowed to work out the answer for this subtask by hand and output the result.*

- For Subtask 2 (15 points), $A = 1$ and $B = 1$.

- For Subtask 3 (20 points), $W = 1$.

- For Subtask 4 (25 points), $L \leq 5$ and $W \leq 5$.

- For Subtask 5 (25 points), no further constraints apply.