C. Non-Overlapping Area

time limit per test: 1 second

memory limit per test: 256 megabytes

input: **C.inp** output: **C.out**

Given the coordinates of the lower-left and upper-right points of two rectangles A and B. Calculate the area of the non-overlapping areas of the two rectangles knowing that the sides of the two rectangles parallel to the two coordinate axes.

Input

There are 2 lines follow

Each line contains 4 integers x1, y1, x2, y2.

x1, y1 are the lower-left points of the rectangles

x2, y2 are the upper-right points of the rectangles

$$-10^6 \le x1 < x2 \le 10^6.$$

$$-10^6 \le y1 < y2 \le 10^6.$$

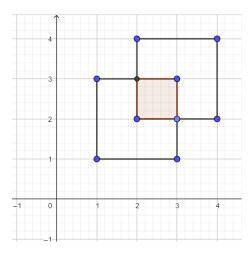
Output

Integer, the sum of positive integer divisor of x

Example

input	
1 1 3 3	
2 2 4 4	
output	
6	

Note



The non-overlapping area is 6.