Axis-Aligned Area

Input file: standard input
Output file: standard output

Time limit: 2 seconds

Memory limit: 1024 megabytes

Alex has four sticks with positive integer lengths a_1 , a_2 , a_3 , and a_4 ($a_1 \le a_2 \le a_3 \le a_4$).

She wants to place them on a plane in such a way that each stick is parallel to one of the two coordinate axes, and the area enclosed by these sticks is as large as possible.

Find this maximum enclosed area.

Input

The input contains four positive integers a_1 , a_2 , a_3 , and a_4 , each on a separate line, denoting the lengths of the sticks in non-decreasing order $(1 \le a_1 \le a_2 \le a_3 \le a_4 \le 100)$.

Output

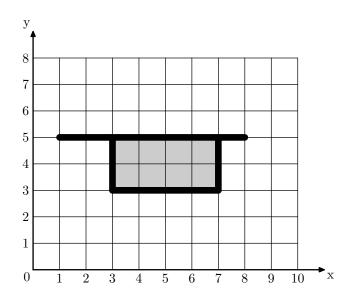
Print the maximum area that can be enclosed.

Examples

standard output
8
100

Note

Here is one optimal way to place the sticks on the plane for the first example:



The enclosed area is shaded in gray.