Problem C
Parachuted
Time limit: 1 second


A man is parachuting down

Thang and his friends are adventure enthusiasts, embarking on a journey to conquer dangerous challenges around the world.

To introduce rewards and penalties for the evening camping party, they came up with the following game. There is a piece of land with an area of $N \times M$ units. Each participant has the right to choose the number of members in their team, with no limit on the number of people and no restriction on selecting the same person multiple times. After forming their team, they went to a very, very, very high place and parachuted down.

Each team member, after parachuting, will land at a random position within the $N \times M$ area. Each person can occupy a 1×1 unit of space. However, since they are jumping from a great height and none of them are professional skydivers, it is difficult to control the parachute to land precisely on a 1×1 area per person. Therefore, Thang decided to allow everyone to land on areas of different sizes such as 1×1, 2×2, 2×1, and 1×2.

With the rules mentioned above, what is the minimum number of people in a parachuting team that can occupy all unit of space?

Input

The first line contains a single integer T – the number of test cases.

The first line of each case contains 2 integers N, M.

Output

For each test case, print the minimum number of people in a parachuting team.

Constraints

$1 \leq T \leq 100\,000$.
$1 \leq N, M \leq 10^9$.

Sample Explanation

In the third test case, we have a land with 5×5 area. The minimum number of people in a parachuting team is 9. Because there are 4 person can land on 2×2 area, 4 person can land on 1×2 area, and 1 person can land on 1×1 area.

Sample Input 1	Sample Output 1
3 1 1 2 3 5 5	1 2 9