

Problem X: Rectangle Cutting

Problem Description

Given an $a \times b$ rectangle, your task is to cut it into squares. On each move you can select a rectangle and cut it into two rectangles in such a way that all side lengths remain integers. What is the minimum possible number of moves?

Input

The only input line has two integers a and b , where $1 \leq a, b \leq 500$.

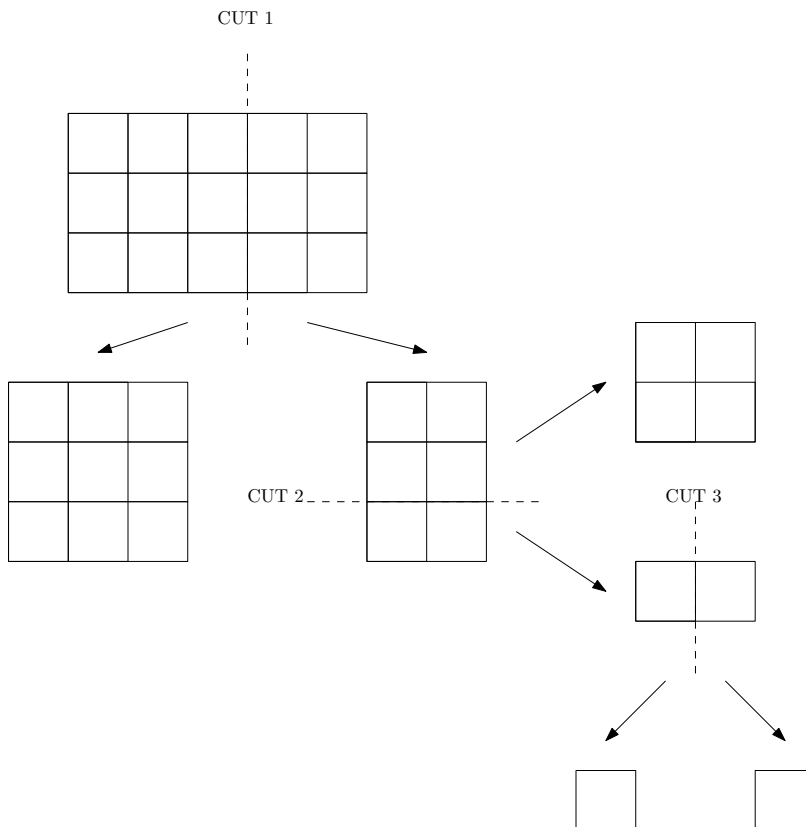
Output

Print one integer: the minimum number of moves.

Sample

Sample Input 1	Sample Output 1
3 5	3

Explanation:



Sample Input 2	Sample Output 2
5 6	4