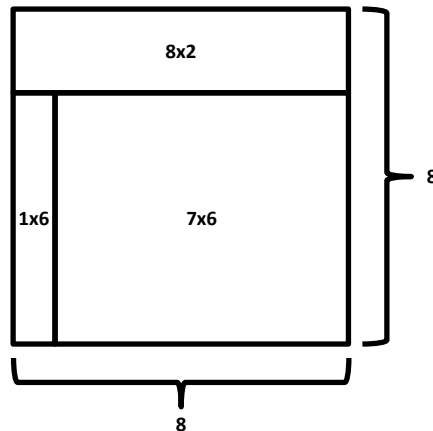# It Takes Three

Given three rectangles, determine if they can be glued together to form a square. The rectangles can be rotated, but they cannot overlap.

Here's an example of how three rectangles, 8x2, 1x6 and 7x6, can be put together to form a square 8x8:

Input

Each input will consist of a single test case. Note that your program may be run multiple times on different inputs. There will be exactly three lines of input.

The first line of input contains two integers *w1* and *h1* (1≤*w1*,*h1*≤100), which are the width and height of the first rectangle.

The second line of input contains two integers *w2* and *h2* (1≤*w2*,*h2*≤100), which are the width and height of the second rectangle.

The third line of input contains two integers *w3* and *h3* (1≤*w3*,*h3*≤100), which are the width and height of the third rectangle.

Output

Output **1** if the two rectangles can be put together to form a square, and **0** of they cannot.

Sample Input

Sample Output

Sample Input	Sample Output
8 2 1 6 7 6	1