

## Triangles Square

The coordinates of the vertices of two triangles are given, it is required to determine their area and derive the number of the triangle, the area of which is larger.

### Input

From a standard input device, the coordinates of six points are entered through a space:

$A_x, A_y, B_x, B_y, C_x, C_y, D_x, D_y, E_x, E_y, F_x, F_y,$

where points  $A, B, C$  are the vertices of the first triangle, and points  $D, E, F$  are the vertices of the second. The coordinates of all points are real from the range from -1000 to 1000, given with three decimal places.

### Output

It is required to print "1" (without quotes) if the area of the first triangle is equal or greater than the area of the second, otherwise it is required to print "2" (without quotes).

### Sample Input

1.000 1.000 1.000 3.000 4.000 1.000 1.000 1.000 1.000 6.000 7.000 1.000

### Sample Output

2

### Note

Use the qualifier "%f" to enter real numbers.

It is guaranteed that the area of each of the triangles is greater than zero.

Comparing real numbers is required with an error of 0.001, which means: the number  $A$  will be equal to the number  $B$  with an accuracy of 0.001 when  $abs(A-B) \leq 0.001$ , where  $abs(A-B)$  returns the absolute value  $(A-B)$ , that is  $max(A, B) - min(A, B)$ .

The area of the triangle by the coordinates of its vertices can be found as follows:

$$S = |(B_x - A_x) * (A_y + B_y) + (C_x - B_x) * (C_y + B_y) + (A_x - C_x) * (A_y + C_y)| / 2.$$

Try to implement the `getArea()` function, which takes the coordinates of the three vertices of a triangle and returns its area.