

**Task. Area**

Given is a set of distinct points in a plane. Write program **area** to find the area of the convex hull of the given set of points.

**Input:** The number  $n$  of points, followed by  $n$  pairs of coordinates of the given point.

**Output:** Found area as a decimal value with exactly one digit in the fractional part.

**Constraints:**  $2 < n < 100$ ; the coordinates of the given points are positive integers, less than 100.

Example 1.

Input

3

0 0

0 1

1 1

Output

0.5

Example 2.

Input

4

0 0

0 1

1 1

1 0

Output

1.0