# 963. Minimum Area Rectangle II

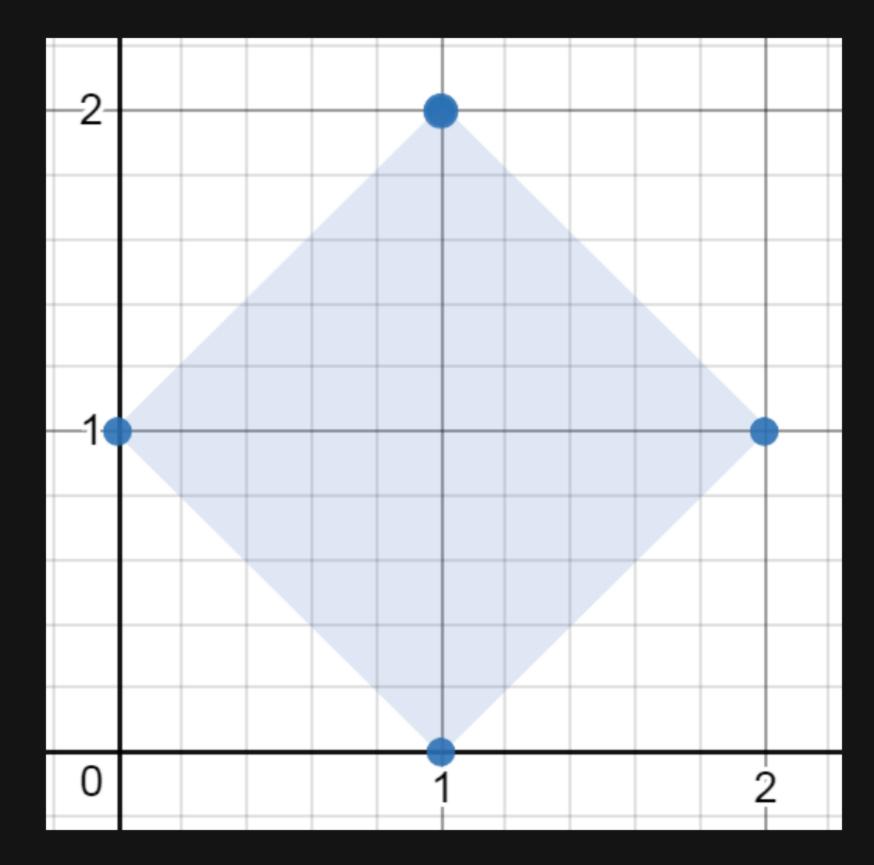
# Description

You are given an array of points in the X-Y plane points where points[i] = [x i, y i].

Return the minimum area of any rectangle formed from these points, with sides not necessarily parallel to the X and Y axes. If there is not any such rectangle, return 0.

Answers within 10 -5 of the actual answer will be accepted.

#### Example 1:

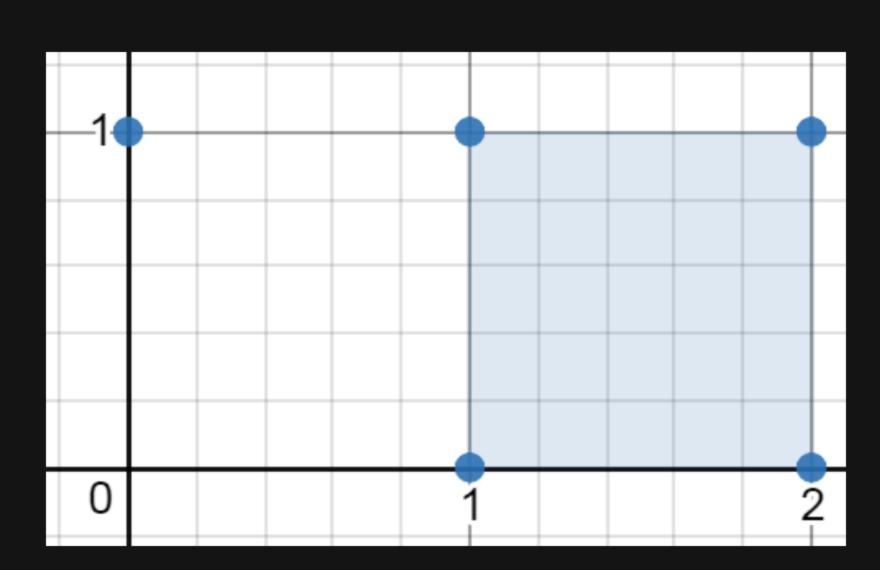


Input: points = [[1,2],[2,1],[1,0],[0,1]]

**Output:** 2.00000

Explanation: The minimum area rectangle occurs at [1,2],[2,1],[1,0],[0,1], with an area of 2.

#### Example 2:

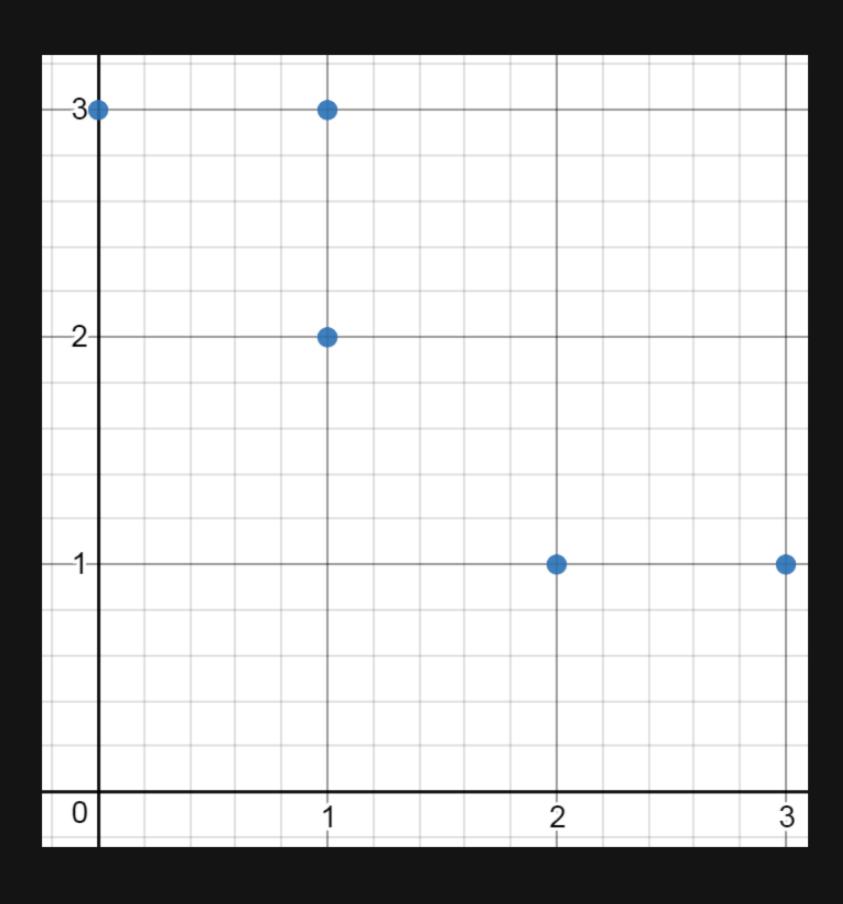


Input: points = [[0,1],[2,1],[1,1],[1,0],[2,0]]

**Output:** 1.00000

Explanation: The minimum area rectangle occurs at [1,0],[1,1],[2,1],[2,0], with an area of 1.

## Example 3:



Input: points = [[0,3],[1,2],[3,1],[1,3],[2,1]]

Output: 0

**Explanation:** There is no possible rectangle to form from these points.

### **Constraints:**

- 1 <= points.length <= 50
- points[i].length == 2
- $0 \ll x_i, y_i \ll 4 * 10^4$
- All the given points are unique.