

# 3102. Minimize Manhattan Distances

## Description

You are given a array `points` representing integer coordinates of some points on a 2D plane, where `points[i] = [xi, yi]` .

The distance between two points is defined as their Manhattan distance .

Return *the **minimum** possible value for **maximum** distance between any two points by removing exactly one point* .

### Example 1:

**Input:** `points = [[3,10],[5,15],[10,2],[4,4]]`

**Output:** `12`

### Explanation:

The maximum distance after removing each point is the following:

- After removing the 0<sup>th</sup> point the maximum distance is between points (5, 15) and (10, 2), which is  `$\sqrt{5 - 10}^2 + \sqrt{15 - 2}^2 = 18$`  .
- After removing the 1<sup>st</sup> point the maximum distance is between points (3, 10) and (10, 2), which is  `$\sqrt{3 - 10}^2 + \sqrt{10 - 2}^2 = 15$`  .
- After removing the 2<sup>nd</sup> point the maximum distance is between points (5, 15) and (4, 4), which is  `$\sqrt{5 - 4}^2 + \sqrt{15 - 4}^2 = 12$`  .
- After removing the 3<sup>rd</sup> point the maximum distance is between points (5, 15) and (10, 2), which is  `$\sqrt{5 - 10}^2 + \sqrt{15 - 2}^2 = 18$`  .

12 is the minimum possible maximum distance between any two points after removing exactly one point.

### Example 2:

**Input:** `points = [[1,1],[1,1],[1,1]]`

**Output:** `0`

### Explanation:

Removing any of the points results in the maximum distance between any two points of 0.

### Constraints:

- `3 <= points.length <= 105`
- `points[i].length == 2`
- `1 <= points[i][0], points[i][1] <= 108`

