

# 356. Line Reflection

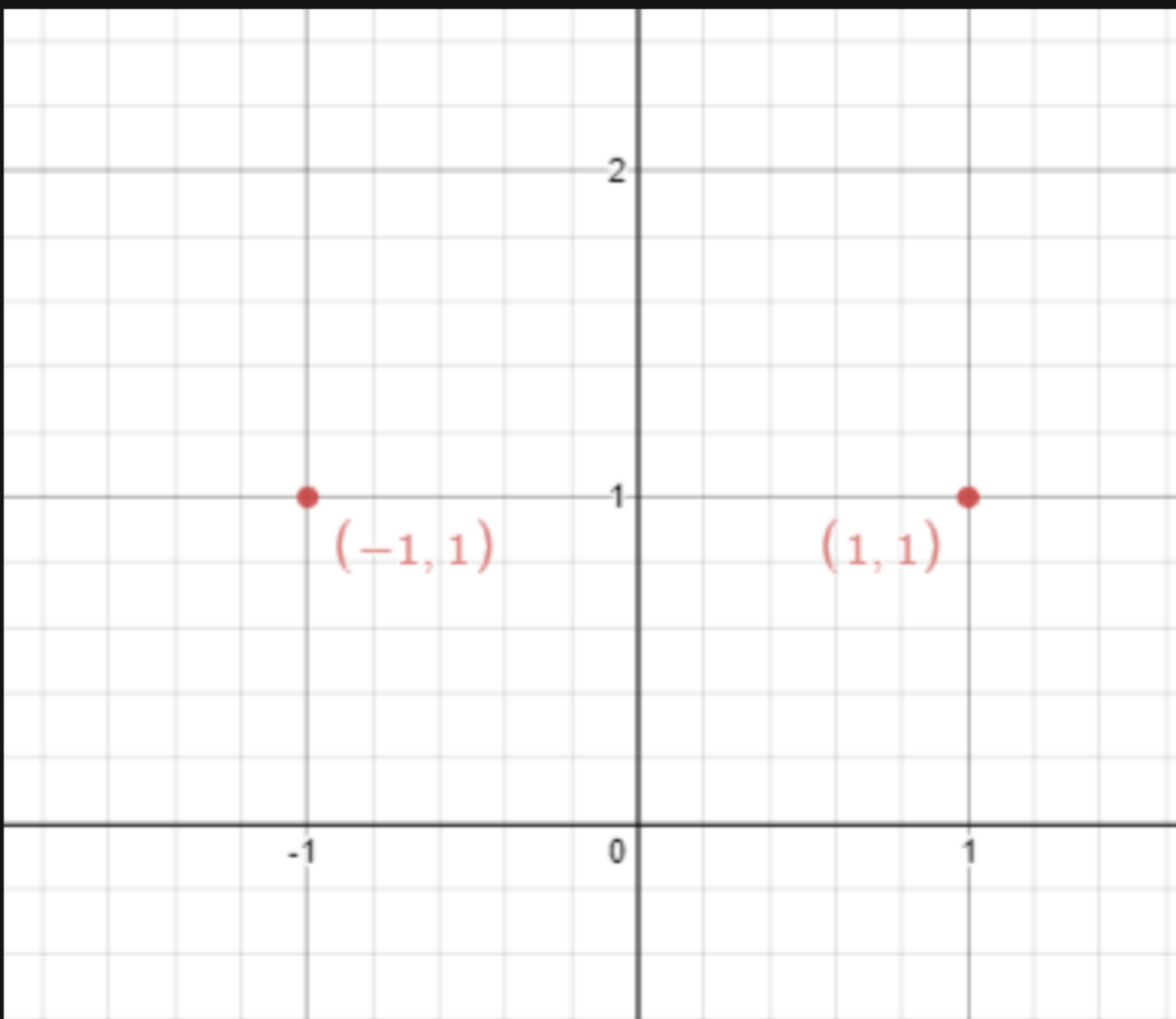
## Description

Given `n` points on a 2D plane, find if there is such a line parallel to the y-axis that reflects the given points symmetrically.

In other words, answer whether or not if there exists a line that after reflecting all points over the given line, the original points' set is the same as the reflected ones.

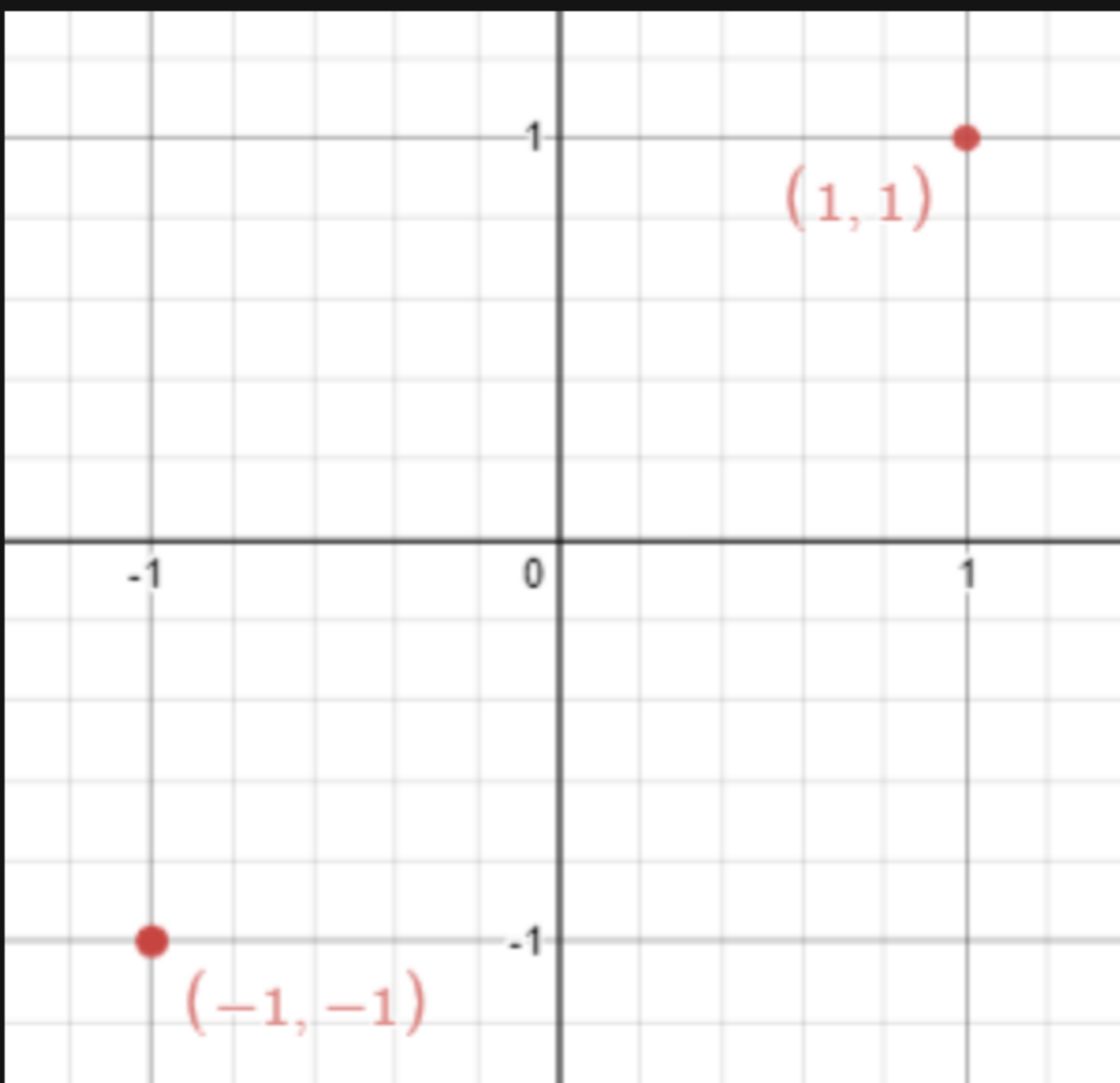
**Note** that there can be repeated points.

### Example 1:



```
Input: points = [[1,1],[-1,1]]
Output: true
Explanation: We can choose the line x = 0.
```

### Example 2:



```
Input: points = [[1,1],[-1,-1]]
Output: false
Explanation: We can't choose a line.
```

### Constraints:

- `n == points.length`
- `1 <= n <= 104`
- `-108 <= points[i][j] <= 108`

**Follow up:** Could you do better than `O(n2)` ?

