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 1 line Ruby, 2 lines Python



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★ 47270

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Idea: Reflect the points by replacing every x with $\min X + \max X - x$ and then check whether you get the same points. Why $\min X + \max X - x$? I actually thought of it as $\min X + (\max X - x)$, i.e., first the subtraction ($\max X - x$). That's how far x is away from the max, so instead go that distance from the min.

Update to reflect the changed problem: (Originally, the problem was about a set of points, so no duplicates.)

```
def is_reflected(points)
  points.sort!.uniq == points.map { |x, y| [points[0][0] + points[-1][0] - x, y] }.sort.uniq
end
```

```
def isReflected(self, points):
  points = sorted(set(map(tuple, points)))
  return points == sorted((points[0][0] + points[-1][0] - x, y)
                          for x, y in points)
```

Ruby

```
def is_reflected(points)
  points.sort! == points.map { |x, y| [points[0][0] + points[-1][0] - x, y] }.sort
end
```

Python

```
def isReflected(self, points):
  points.sort()
  return points == sorted([points[0][0] + points[-1][0] - x, y]
                          for x, y in points)
```

A linear time one:

```
def isReflected(self, points):
  if not points: return True
  X = min(points)[0] + max(points)[0]
  return {(x, y) for x, y in points} == {(X - x, y) for x, y in points}
```

Shorter, but I think less nice:

```
return set(map(tuple, points)) == {(X - x, y) for x, y in points}
```

python

ruby

short

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