

973. K Closest Points to Origin

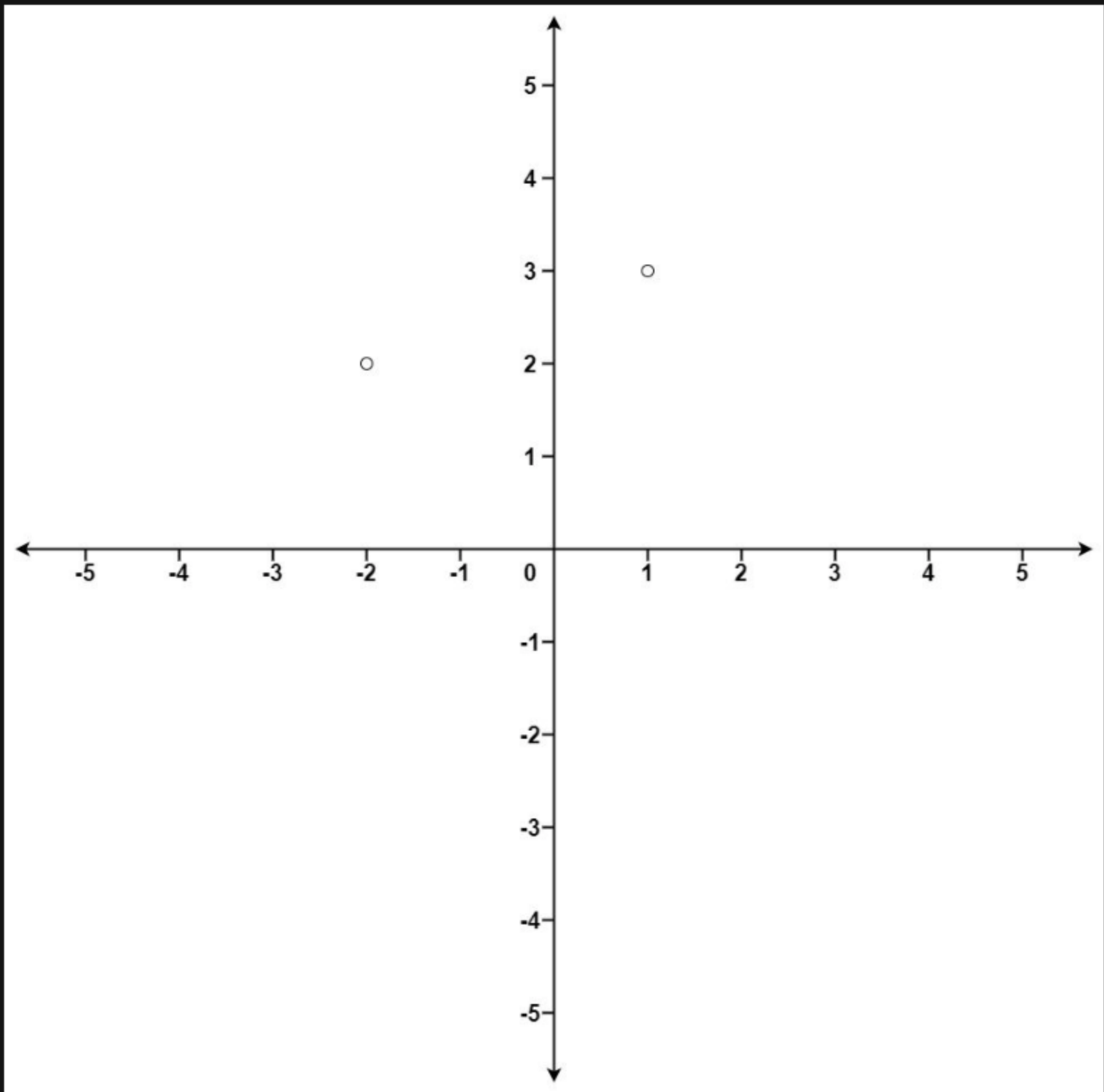
Description

Given an array of `points` where `points[i] = [xi, yi]` represents a point on the **X-Y** plane and an integer `k`, return the `k` closest points to the origin `(0, 0)`.

The distance between two points on the **X-Y** plane is the Euclidean distance (i.e., $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$).

You may return the answer in **any order**. The answer is **guaranteed** to be **unique** (except for the order that it is in).

Example 1:



Input: `points = [[1,3],[-2,2]]`, `k = 1`
Output: `[[-2,2]]`
Explanation:
The distance between (1, 3) and the origin is $\sqrt{10}$.
The distance between (-2, 2) and the origin is $\sqrt{8}$.
Since $\sqrt{8} < \sqrt{10}$, (-2, 2) is closer to the origin.
We only want the closest `k = 1` points from the origin, so the answer is just `[[-2,2]]`.

Example 2:

Input: `points = [[3,3],[5,-1],[-2,4]]`, `k = 2`
Output: `[[3,3],[-2,4]]`
Explanation: The answer `[[-2,4],[3,3]]` would also be accepted.

Constraints:

- `1 <= k <= points.length <= 104`
- `-104 <= xi, yi <= 104`

