

# Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE  
100%

## Lesson 3 Quiz

LATEST SUBMISSION GRADE

100%

- 
1. Considering the k-means algorithm, after the current iteration we have three centroids (0, 1), (2, 1), and (-1, 2). Will points (0.5, 0.5) and (-0.5, 0) be assigned to the same cluster in the next iteration? 1 / 1 point

 Correct

2. Considering the k-means algorithm, if points (1, -3), (1, 1), and (-2, 2) are the only points that are assigned to the first cluster now, what is the new centroid for this cluster? 1 / 1 point

 Correct

3. The k-means++ algorithm is designed for better initialization for k-means, which will take the farthest point from the currently selected centroids. Suppose  $k = 2$ , and we have selected the first centroid as (0, 0). Among the following points (these are all the remaining points), which one should we take for the second centroid? 1 / 1 point

 Correct

4. Considering the k-median algorithm, if points (-1, 3), (-3, 1), and (-2, -1) are the only points that are assigned to the first cluster now, what is the new centroid for this cluster? 1 / 1 point

**Correct**

5. Which of the following statements about the k-means algorithm are correct? Select all that apply. **1 / 1 point**

**Correct**