✓ **Congratulations! You passed!**

Grade received 100%   **To pass** 66% or higher

[Go to next item]

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1. Which of the following is an application of clustering?   1 / 1 point

○ Price estimation

◉ Customer segmentation

○ Customer churn prediction

○ Sales prediction

> ✓ **Correct**
> Correct! Clustering can help partition individuals into groups with similar characteristics.

2. Which approach can be used to calculate dissimilarity of objects in clustering?   1 / 1 point

○ Cosine similarity

○ Minkowski distance

○ Euclidian distance

◉ All of the above

> ✓ **Correct**
> Correct! All of the approaches are valid approaches to calculate dissimilarity.

3. How is a center point (centroid) picked for each cluster in k-means upon initialization? (select two)   1 / 1 point

☑ We can randomly choose some observations out of the data set and use these observations as the initial means.

> ✓ **Correct**
> Correct! These centroids will be updated based on the clusters formed at each iteration.

☐ We select the k points closest to the mean/median of the entire dataset.

☐ We can select it through correlation analysis.

☑ We can create some random points as centroids of the clusters.

> ✓ **Correct**
> Correct! We can randomly place k centroids, one for each cluster. Each data point is then assigned to its closest centroid.