Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 80%. We keep your highest score.

Next item →

1. What is the main difference between classification and regression? 1 / 1 point

- ○ There is no difference since you're predicting a numeric value from the input variables in both tasks.
- ◉ In classification, you're predicting a category, and in regression, you're predicting a number.
- ○ In classification, you're predicting a categorical variable, and in regression, you're predicting a nominal variable.
- ○ In classification, you're predicting a number, and in regression, you're predicting a category.

Correct
That's correct!

2. Which of the following is NOT an example of regression? 1 / 1 point

- ○ Estimating the amount of rain
- ◉ Determining whether power usage will rise or fall
- ○ Predicting the price of a stock
- ○ Predicting the demand for a product

Correct
That's correct!

3. In linear regression, the least squares method is used to 1 / 1 point

- ○ Determine how to partition the data into training and test sets.
- ○ Determine the distance between two pairs of samples.
- ○ Determine whether the target is categorical or numerical.
- ◉ Determine the regression line that best fits the samples.

Correct
That's correct!

4. How does simple linear regression differ from multiple linear regression? 1 / 1 point

- ◉ In simple linear regression, the input has only one variable. In multiple linear regression, the input has more than one variables.
- ○ In simple linear regression, the input has only categorical variables. In multiple linear regression, the input can be a mix of categorical and numerical variables.
- ○ They are the just different terms for linear regression with one input variable.
- ○ In simple linear regression, the input has only categorical variables. In multiple linear regression, the input has only numerical variables.

Correct
That's correct!

5. The goal of cluster analysis is 1 / 1 point

- ○ To segment data so that all categorical variables are in one cluster, and all numerical variables are in another cluster.
- ○ To segment data so that all samples are evenly divided among the clusters.
- ◉ To segment data so that differences between samples in the same cluster are minimized and differences between samples of different clusters are maximized.
- ○ To segment data so that differences between samples in the same cluster are maximized and differences between samples of different clusters are minimized.

Correct
That's correct!

6. Cluster results can be used to 1 / 1 point

- ○ Create labeled samples for a classification task
- ◉ All of these choices are valid uses of the resulting clusters.
- ○ Segment the data into groups so that each group can be analyzed further
- ○ Classify new samples
- ○ Determine anomalous samples

Correct
That's correct!

7. A cluster centroid is 1 / 1 point

- ◉ The mean of all the samples in the cluster
- ○ The mean of all the samples in the two closest clusters.
- ○ The mean of all the samples in the two farthest clusters.
- ○ The mean of all the samples in all clusters

Correct
That's correct!

8. The main steps in the k-means clustering algorithm are 1 / 1 point

- ○ Count the number of samples, then determine the initial centroids.
- ○ Calculate the centroids, then determine the appropriate stopping criterion depending on the number of centroids.
- ◉ Assign each sample to the closest centroid, then calculate the new centroid.
- ○ Calculate the distances between the cluster centroids, then find the two closest centroids.

Correct
That's correct!

9. The goal of association analysis is 1 / 1 point

- ○ To find the number of outliers in the data
- ○ To find the most complex rules to explain associations between as many items as possible in the data.
- ◉ To find rules to capture associations between items or events
- ○ To find the number of clusters for cluster analysis

Correct
That's correct!

10. In association analysis, an item set is 1 / 1 point

- ○ A set of items that two rules have in common
- ◉ A transaction or set of items that occur together
- ○ A set of items that infrequently occur together
- ○ A set of transactions that occur a certain number of times in the data

Correct
That's correct!

11. The support of an item set 1 / 1 point

- ◉ Captures the frequency of that item set
- ○ Captures the number of items in that item set
- ○ Captures how many times that item set is used in a rule
- ○ Captures the correlation between the items in that item set

Correct
That's correct!

12. Rule confidence is used to 1 / 1 point

- ○ Determine the rule with the most items
- ○ Identify frequent item sets
- ◉ Prune rules by eliminating rules with low confidence
- ○ Measure the intuitiveness of a rule

Correct
That's correct!