Your grade: 100%

Your latest: **80%** • Your highest: **100%**
To pass you need at least 60%. We keep your highest score.

Next item →

1. What is the primary purpose of logistic regression in machine learning? 1 / 1 point

- ○ Create linear regression models
- ○ Predict continuous values
- ○ Reduce the dimensionality of data
- ◉ Classify based on the predicted probability of an observation belonging to one of two classes

Correct
Logistic regression predicts the probability of an observation belonging to one of two classes, such as true or false, and assigns the class using a threshold probability

2. What kind of outcomes does logistic regression predict? 1 / 1 point

- ○ Only numerical values
- ○ Random outcomes without a clear pattern
- ○ Multiple classes simultaneously
- ◉ Binary classification

Correct
Logistic regression predicts the probability that observations belong to one of two classes, such as true or false, and classifies it using a threshold

3. Which parameter is used in logistic regression to determine the class of an observation? 1 / 1 point

- ○ Linear regression
- ○ Mean of all observations
- ◉ Threshold probability
- ○ Highest numerical value

Correct
Logistic regression assigns classes based on a threshold probability to differentiate between the two classes.

4. What is the primary objective of the logistic regression training process? 1 point

- ○ Create multiple decision boundaries for classification
- ○ Randomly select parameters without any training
- ○ Minimize the cost function, or log-loss
- ◉ Achieve the highest possible accuracy in all classes

Incorrect
While accuracy is important in ensuring quality, it isn't the primary objective of the logistic regression training process.

5. A data scientist is using logistic regression to predict customer churn. After evaluating the model, they notice a high log-loss value. What is the most appropriate first step to improve the model? 1 / 1 point

- ○ Feature selection
- ○ More data
- ◉ Parameter tuning
- ○ Use a different activation function

Correct