



Knowledge Check

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1

What is the purpose of VIF in regression analysis?

- A. To check the correlation between dependent and independent variables
- B. To check the correlation between independent variables
- C. To calculate the accuracy of the regression model
- D. To calculate the variability of the regression model



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The correct answer is **B**

Variance inflation factor (VIF) is used to identify the correlation between independent variables and to address multicollinearity issues in regression analysis.

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2

Why is a sigmoid function used in logistic regression?

- A. To plot data points on a graph
- B. To cluster data points based on their distance from a centroid
- C. To map real values to probabilities between 0 and 1
- D. To perform classification analysis



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2

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The correct answer is **C**

The sigmoid function is used in logistic regression to map any real value to a probability between 0 and 1.

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3

What is ridge regression?

- A. A technique to reduce multicollinearity between features in the data set
- B. A form of regression that shrinks the coefficient toward zero to reduce the complexity of the data
- C. A technique to fit the data points to the line using polynomial features
- D. A technique to predict the rise of different diseases within populations and their spread rates



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The correct answer is **B**

Ridge regression is a form of regression that shrinks the coefficient toward zero to reduce the complexity of the data.



Thank You