



Knowledge Check

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1

Which of the following is an advantage of feature selection?

- A. It reduces the calculation time required to obtain the model's predictions.
- B. It prevents overfitting by removing unimportant variables and focusing on the key ones.
- C. It eliminates irrelevant information, which helps to enhance the model's forecast accuracy.
- D. All of the above



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- D. All of the above



The correct answer is **D**

Feature selection reduces the calculation time required to obtain the model's predictions. It prevents overfitting by removing unimportant variables. It eliminates irrelevant information, which helps to enhance the model's forecast accuracy.

Knowledge Check

2

Which technique is used for data reduction that enables researchers to investigate concepts that cannot be measured directly?

- A. Maximum likelihood
- B. Principal component analysis
- C. Cluster analysis
- D. Factor analysis



Knowledge Check

2

Which technique is used for data reduction that enables researchers to investigate concepts that cannot be measured directly?

- A. Maximum likelihood
- B. Principal component analysis
- C. Cluster analysis
- D. Factor analysis



The correct answer is **D**

Factor analysis is a powerful data reduction technique that enables researchers to investigate concepts that cannot easily be measured directly.

Knowledge Check

3

What is an eigenvector?

- A. The proportion of the variance explained in the matrix
- B. A higher-order dimension that subsumes all of the lower-order errors
- C. A higher-order dimension that subsumes similar lower-order dimensions
- D. A higher-order dimension that subsumes all lower-order dimensions



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The correct answer is **C**

A higher-order dimension that subsumes similar lower-order dimensions.