Check Your Understanding

Before getting into the code, let's check some of the main ideas of PCA.

QUESTION 1 OF 3

Which of the following best describes the goal of PCA?

To reduce the dimensionality of an existing dataset to a smaller number of features.

- To create a new dataset.
- To maximize the variability in a dataset.
- None of the above are related to the goal of PCA.

SUBMIT

QUESTION 2 OF 3

You can also think of a **principal component** as a... (select all that apply)

linear combination of the original features in a dataset.

latent variable.

a new feature that can be used in a future analysis.

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QUESTION 3 OF 3

The amount of information lost when performing PCA can be thought of as

- the variability in the original data.
- the difference between the value we predict and the value that is actually calculated.

the distance from the original points to the created component.



3. Text: Lesson Topics

4. Video: Latent Features

5. Quiz: Latent Features

6. Video: How to Reduce Features?

7. Video: Dimensionality Reduction

8. Video: PCA Properties

9. Quiz: How Does PCA Work?

10. Screencast: PCA

11. Notebook: PCA - Your Turn

12. Screencast: PCA Solution

13. Screencast: Interpret PCA Res...

14. Notebook: Interpretation

15. Screencast: Interpretation Sol...

16. Text: What Are EigenValues & ...

17. Video: When to Use PCA?

18. Video: Recap

19. Notebook: Mini-Project

20. Mini-Project Solution

21. Video: Outro