

✓

Congratulations! You passed!

TO PASS 80% or higher

Keep Learning

GRADE
100%

Questions on PCA

TOTAL POINTS 3

1. Among dimension reduction, what technique exist to visualize more than three dimensions in a single plot? (Select all that apply)

1 / 1 point

☒ Color coding for discrete dimensions

✓

Correct

Correct

☒ Using different symbols apart from simple points for discrete dimensions

✓

Correct

Correct

☐ Sum Kurtosis and Skewness together for each row

☐ Calculate the Standard Deviation of each row

☐ Apply Fast Fourier Transformation

☒ Add multiple lines to a run chart

✓

Correct

Correct

2. What properties are true about PCA for dimension reduction? (Select all that apply)

1 / 1 point

☐ PCA simply removes the columns with the highest correlation because their information content is lowest

☒ PCA is a linear transformation, this means most of the original propertes of your data are preserved

✓

Correct

Correct

☒ PCA transforms your dataset so that the first k dimensions have the lowest correlation among each other

✓

Correct

Correct

☐ PCA is a non-linear transformation, this means most of the original properties of your data set are lost

3. Which of the following statements is true about information loss using PCA?

1 / 1 point

☐ PCA dimensionality reduction is lossless

☒ PCA dimensionality reduction is lossy

✓

Correct

Correct