

Visualization and dimension reduction

Quiz, 5 questions



Congratulations! You passed!

Next Item



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point

1.

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



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



Un-selected is correct



Calculate the Standard Deviation of each row



Un-selected is correct



Apply Fast Fourier Transformation



Un-selected is correct



Add multiple lines to a run chart

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Correct

Correct



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2.

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



PCA removes the dimensions with the highest correlation because their information content is lowest



Un-selected is correct



PCA is a linear transformation, this means most of the original properties 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



Un-selected is correct



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3.

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



PCA dimensionality reduction is lossless





PCA dimensionality reduction is lossy

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Correct

Correct



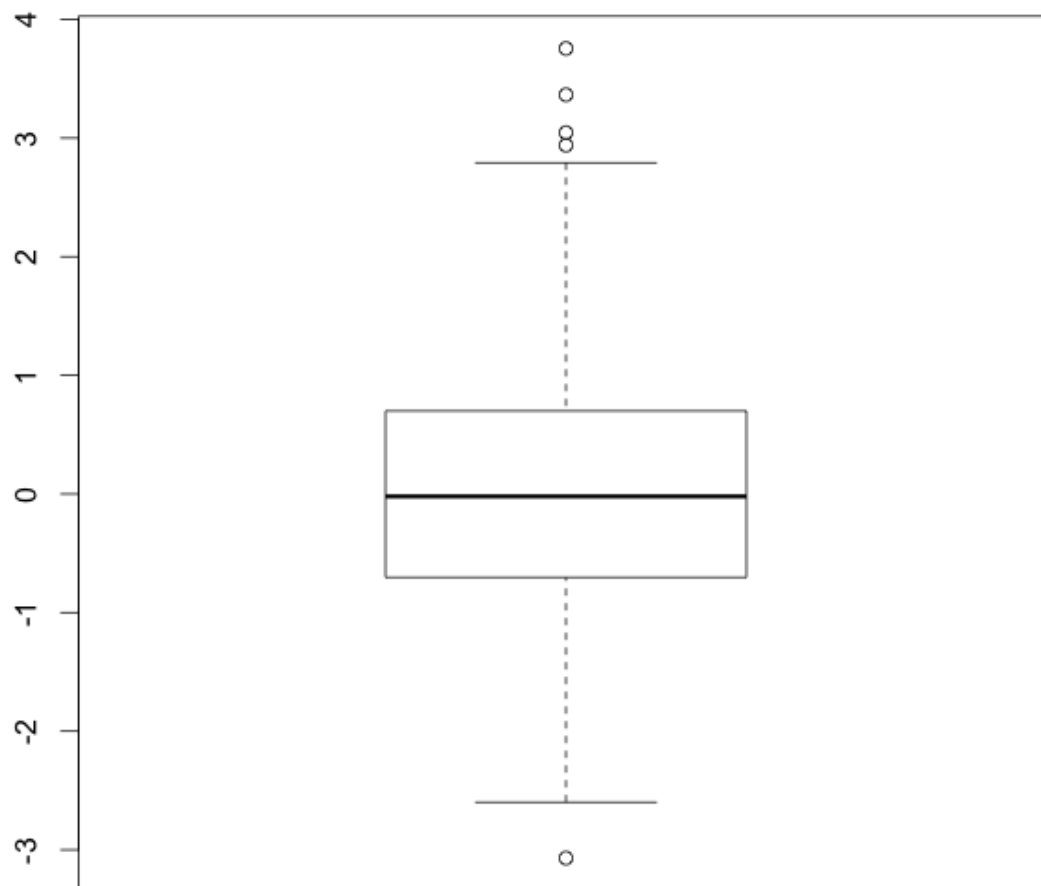
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4.

How many outliers are present in this dataset?

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5

Correct Response

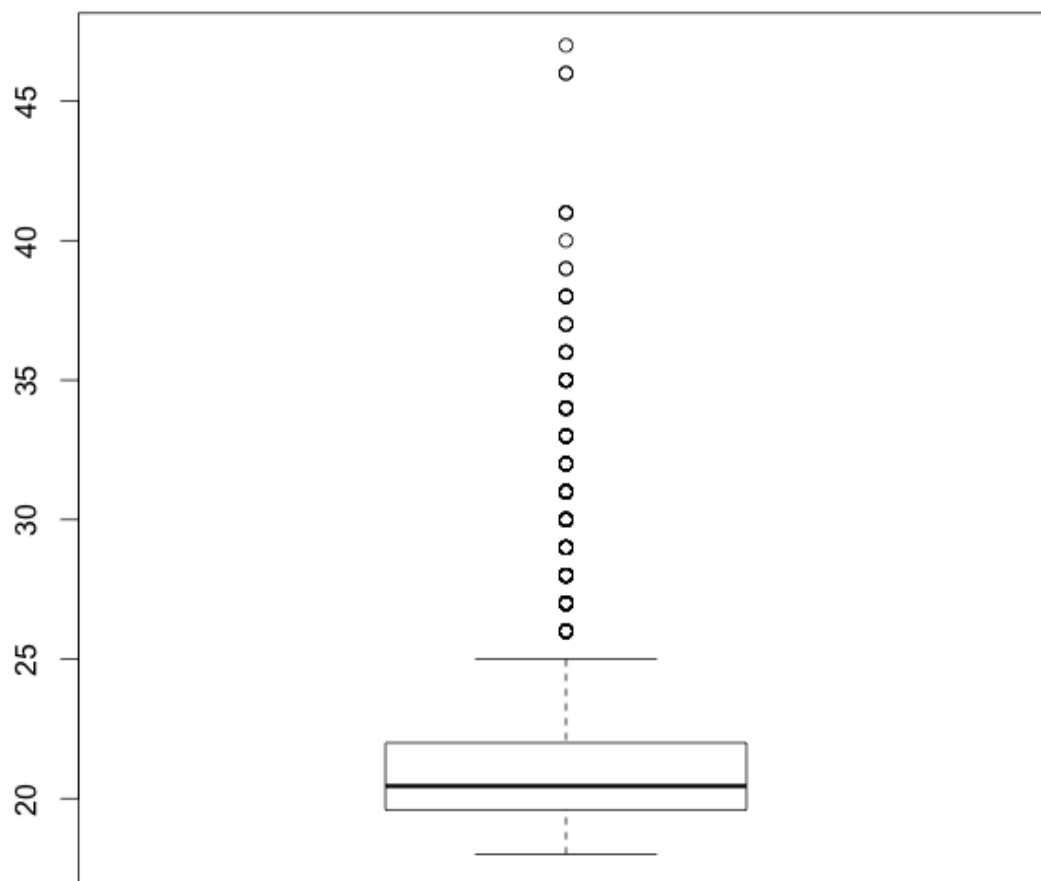
Correct

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5.

Which statements are true about this plot? (select all that apply)



This is a box plot



Correct

Correct





This is a star ship of space invaders

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Un-selected is correct



There are more than 15 outliers present



Correct

Correct



The distribution is centered around mean zero



Un-selected is correct



Kurtosis is zero



Un-selected is correct



Kurtosis is >1



Correct

Correct



Skew is zero



Un-selected is correct



Skew is > 1



Correct

Correct



$>50\%$ of all values are <30



Correct



Mean is >20



Correct

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Un-selected is correct

