1.

Question 1

In a regression model, what is a feature and what is a label?

1 / 1 point

A feature is the variable to be predicted.

A label is the variable to be predicted.

A label is the variable that represents characteristics.

A feature is the variable that represents characteristics.

ANSWER: (B) A label is the variable to be predicted.

Correct

The variable we're trying to predict is known as the label.

        (D) A feature is the variable that represents characteristics.

Correct

Variables in the data that represent characteristics are known as the features.

2.

Question 2

When you want to train a regression model based on historical data, which are the two subsets into which you split the data sample?

1 / 1 point

A confirmation dataset

A training dataset

Correct

In this data set you'll apply an algorithm that determines a function encapsulating the relationship between the feature values and the known label values.

A validation dataset

Correct

A validation or test dataset can be used to evaluate the model by using it to generate predictions for the label and comparing them to the actual known label values.

A performance dataset

ANSWER: (B) A training dataset

Correct

In this data set you'll apply an algorithm that determines a function encapsulating the relationship between the feature values and the known label values.

        (C) A validation dataset

Correct

A validation or test dataset can be used to evaluate the model by using it to generate predictions for the label and comparing them to the actual known label values.

3.

Question 3

True or False? In machine learning, the difference between a predicted label value and the actual value is known as "the residuals".

1 / 1 point

True

False

ANSWER:(B)False

Correct

In practice, the "actual" values are based on sample observations (which themselves may be subject to some random variance). "The residuals" is the difference between comparing a predicted value (ŷ) with an observed value (y).

4.
Question 4
To randomly split the data between training and validation subsets, you can use the train_test_split function. In which python library can you find this function?
1 / 1 point
Matplotlib
Scikit-learn
Numpy
Pytorch

ANSWER: (B) Scikit-learn

Correct
This library contains the train_test_split function.

5.
Question 5
This evaluation metric yields a relative metric in which the smaller the value, the better the fit of the model. Which evaluation metric is described above?
1 / 1 point
Coefficient of Determination (usually known as R-squared or R2)
Mean Square Error (MSE)
Root Mean Square Error (RMSE)

ANSWER: (B) Mean Square Error (MSE)

Correct
This is the described metric, which is the mean of the squared differences between predicted and actual values.