

Question 1

What does the following line of code do?

`lm = LinearRegression()` 1 / 1 point

Fits a regression object to the variable `lm`.

Predicts output values of a linear regression object.

Creates a linear regression object and stores it in the `lm` variable.

Assigns a linear regression model to the `lm` variable.

Correct

Correct! The `LinearRegression()` method is a constructor.

Question 2

What is the maximum value of R^2 that you can obtain? 1 / 1 point

Any positive number

1

0

10

Correct

Correct! The largest value of the coefficient of determination is 1.

Question 3

If `X` is a data frame with 100 rows and 5 columns, and `y` is the target with 100 samples, and assuming you have imported all the relevant libraries and data have, and executed the following line of code:

```
LR = LinearRegression()
```

```
LR.fit(X, y)
```

```
yhat = LR.predict(X)
```

How many samples does `yhat` contain? 1 / 1 point

5

20

500

100

Correct

Correct! The variable `yhat` contains the predicted values from a linear regression model using the array `X` as its input.

Question 4

Which statement about R^2 , the coefficient of determination, is true? 0 / 1 point

Its value can be between 0 and 1 inclusive.

Its value can be either 0 or 1.

Its value can be any positive number.

Its value can be in the range of -1 to 1, inclusive.

Question 5

Consider the following equation:

$y =$

0

$+$

1

$+$

$y = b$

0

$+$

b

1

x

The variable

y is _____ ? 1 / 1 point

The degree of the polynomial

The intercept

The target or dependent variable

The predictor or independent variable

Correct

Correct! The variable

y is the output variable, which depends on the values of the other variable

x and parameters

0

b

0

and



1

b

1

.