

Question 1

Consider the following lines of code. What is the name of the column that contains the target values?

```
from sklearn.linear_model import LinearRegression lm=LinearRegression()  
X = df[['highway-mpg']]  
Y = df['price']  
lm.fit(X, Y)  
Yhat=lm.predict(X)  
1 / 1 point
```

'price'
'highway-mpg'
fit
Yhat

Correct

Correct! This is the column name of the target values.

Question 2

Consider the following Residual Plot. Which of the following is a correct interpretation? 1 / 1 point

Since the number of values above the line is the same as the number below the line, it indicates the linear model is not a good fit.

Since the values are distributed uniformly around a straight line, the linear model is a good fit.

Since the values are randomly distributed on the graph, it indicates the linear model is not a good fit.

Correct

Correct! Random distribution of the residuals around the line indicates the linear model is not a good fit.

Question 3

Which statement is most accurate about a higher-order polynomial model than a linear one? 0 / 1 point

When you compare their R2 values, the larger value indicates the better fit.

When you compare their R2 values, the smaller value indicates the better fit.

The linear model will usually appear to fit the data better.

You cannot compare their R2 values to decide which is a better fit.

Question 4

Consider the following lines of code. What value does the variable out contain?

```
lm = LinearRegression()  
  
X = df[['highway-mpg']]
```

```
Y = df['price']
```

```
lm.fit(X, Y)
```

```
out=lm.score(X,Y)
```

1 / 1 point

Mean Square Error with respect to y.

A multiple linear regression

Mean Squared Error with respect to X

The Coefficient of Determination

Correct

Correct! The score() method will calculate the coefficient of determination of a linear regression model.