Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 75%. We keep your highest score.

Next item →

1. Consider the following lines of code. What is the name of the column that contains the target values? — 1 / 1 point

```
from sklearn.linear_model import LinearRegression lm=LinearRegression()

X = df[['highway-mpg']]

Y = df['price']

lm.fit(X, Y)

Yhat=lm.predict(X)
```

- ○ fit
- ○ 'highway-mpg'
- ○ Yhat
- ⦿ 'price'

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

2. Consider the following **Residual Plot** from a linear model. What information does it give you? — 1 / 1 point

- ○ Since it does not show a pattern in the error values, it indicates the linear model is not a good fit.
- ⦿ Since it shows a pattern in the error values, it indicates the linear model is a not good fit.
- ○ Since it does not show a pattern in the error values, it indicates the linear model is a good fit.

✓ **Correct**
Correct! The variance of the residuals increases with x, which indicates that the model is a not good fit.

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

- ○ When you compare their R^2 values, the larger value indicates the better fit.
- ⦿ You cannot compare their R^2 values to decide which is a better fit.
- ○ When you compare their R^2 values, the smaller value indicates the better fit.
- ○ The linear model will usually appear to fit the data better.

✓ **Correct**
Correct! Higher-order polynomials usually fit the data better because they have more curvature, so the R^2 value does not provide this information.

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)
```

- ⦿ The Coefficient of Determination
- ◯ Mean Square Error with respect to y.
- ◯ A multiple linear regression
- ◯ Mean Squared Error with respect to X

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