Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 70%. We keep your highest score.

Next item →

1. What is the result of the following code? **1 / 1 point**

```
cross_val_predict (lr2e, x_data, y_data, cv=3)
```

- ○ Calculates the free parameter alpha
- ○ The average R^2 on the test data for each of the two folds
- ◉ The predicted values of the test data using cross-validation
- ○ Performs multiple out-of-sample evaluations

Correct
Correct! The method `cross_val_predict()` predicts values using cross-validation.

2. How would you organize the values 1, 10, and 100 as possible values of alpha for Grid Search? **1 / 1 point**

- ○ `parameter = Ridge(alpha=[1,10,100])`
- ○ `parameter = alpha(1,10,100)`
- ○ `parameter=[1,10,100]`
- ◉ `parameter = [{'alpha': [1,10,100]}]`

Correct
Correct! This is the correct syntax to create the variable 'parameter' for Grid Search.

3. You do the following steps with a data set: **1 / 1 point**

1. Divide a data set into testing and training sets.
2. Create a linear model with the training set.
3. Find the average R^2 value on your training data. It is found to be 0.5.
4. Perform a 100th-order polynomial transform on your data.
5. Use these transformed values to train another model.
6. Find the new value for R^2. It is found to be 0.99.

Which of the following statements is correct?

- ○ 100-th order polynomial will work better on the rest of your data
- ○ Create another linear model with all of the data and compare results
- ○ You should use the simpler model
- ◉ You should use your test data to test the model further

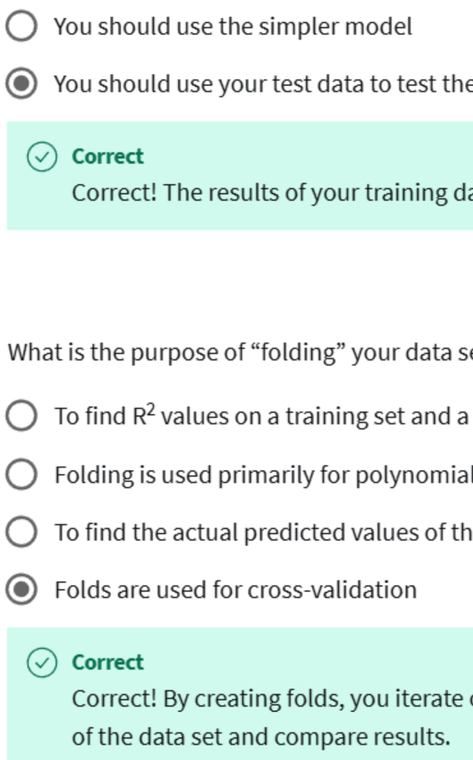
Correct
Correct! The results of your training data are not the best indicator of how your model performs.

4. What is the purpose of "folding" your data sets? **1 / 1 point**

- ○ To find R^2 values on a training set and a test set of data
- ○ Folding is used primarily for polynomial transformations
- ○ To find the actual predicted values of the model before calculating R^2
- ◉ Folds are used for cross-validation

Correct
Correct! By creating folds, you iterate on your training and testing data using different combinations of the data set and compare results.

5. In the following image, the blue curve represents a model, the blue dots represent the data, and the orange curve represents the true function. Which of the following is true about the model? **1 / 1 point**



- ○ No conclusions can be drawn about the model
- ◉ It displays overfitting
- ○ It displays underfitting
- ○ The model is a good fit

Correct
Correct! Although the model tracks the training points, it does poorly at tracking the function that generated those points.