

1. The main purpose of splitting your data into a training and test sets is:

1 / 1 point

- ☐ To improve accuracy
- ☒ To avoid overfitting
- ☐ To improve regularization
- ☐ To improve crossvalidation and overfitting

☒ Correct
Correct! You can find more information in the Training and Test Splits lessons.

2. Complete the following sentence: The training data is used to fit the model, while the test data is used to:

1 / 1 point

- ☐ measure the parameters and hyperparameters of the model
- ☐ tweak the model hyperparameters
- ☐ tweak the model parameters
- ☒ measure error and performance of the model

☒ Correct
Correct! You can find more information in the Training and Test Splits lessons.

3. What term is used if your test data leaks into the training data?

1 / 1 point

- ☐ Test leakage
- ☐ Training leakage
- ☒ Data leakage
- ☐ Historical data leakage

☒ Correct
Correct! Data leakage is when your test data leaks into the training data

4. Which one of the below terms *use* a linear combination of features?

1 / 1 point

- ☐ Binomial Regression
- ☒ Linear Regression
- ☐ Multiple Regression
- ☐ Polynomial Regression

☒ Correct
Correct! Linear regression is the linear combinations of features. For more information please review the Polynomial Regression lesson.

5. When splitting your data, what is the purpose of the training data?

1 / 1 point

- ☐ Compare with the actual value
- ☒ Fit the actual model and learn the parameters
- ☐ Predict the label with the model
- ☐ Measure errors

☒ Correct
Correct! The training data is used to fit the actual model and learn the parameters

6. Polynomial features capture what effects?

1 / 1 point

- ☒ Non-linear effects.
- ☐ Linear effects.
- ☐ Multiple effects.
- ☐ Regression effects.

☒ Correct
Correct. You can find more information in the polynomial regression lesson.

7. Which fundamental problems are being solved by adding non-linear patterns, such as polynomial features, to a standard linear approach?

1 / 1 point

- ☐ Prediction.
- ☐ Interpretation.
- ☒ Prediction and Interpretation.
- ☐ None of the above.

☒ Correct
Correct! You can find out more information in the Polynomial Regression Features lesson.

8. A testing data could be also referred to as:

1 / 1 point

- ☐ Training data
- ☒ Unseen data
- ☐ Corroboration data
- ☐ None of the above

☒ Correct
Correct! You can find more information in the Training and Test Splits lessons.

9. Select the correct syntax to obtain the data split that will result in a train set that is 60% of the size of your available data.

1 / 1 point

- ☐ `X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.6)`
- ☒ `X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.4)`

- ☐ `X_train, y_test = train_test_split(X, y, test_size=0.40)`
- ☐ `X_train, y_test = train_test_split(X, y, test_size=0.6)`

☒ Correct
Correct! You can find more information in the Training and Test Splits lessons.

10. What is the correct sklearn syntax to add a third degree polynomial to your model?

1 / 1 point

- ☐ `polyFeat = polyFeat.add(degree=3)`
- ☐ `polyFeat = polyFeat.fit(degree=3)`
- ☒ `polyFeat = PolynomialFeatures(degree=3)`
- ☐ `polyFeat = polyFeat.transform(degree=3)`

☒ Correct
Correct! You can find more information in the Polynomial Regression lesson.