

#### Let's recap our knowledge on supervised ML!



# What is the purpose of a training dataset in supervised learning?



To test the model's performance.



To teach the model and help it learn patterns in the data.



To evaluate the model's accuracy.



# What is the purpose of a test dataset in supervised learning?



To test the model's performance.



To increase the training dataset's size and improve model accuracy.



To evaluate the model's performance and assess its ability to generalize to new, unseen data.



To fine-tune
hyperparameters
and adjust the
model's
architecture



# What does the term "feature" refer to in machine learning?



The target variable.



A machine learning algorithm.



The input variables or attributes used to make predictions.



### In a bioactivity predictor, the target variable could be...



The predicted biological activity or response of a small molecule



The chemical structure of the small molecule.



The temperature at which a chemical reaction occurs.



### What does precision measure in binary classification?



The ratio of true positives to all actual positives.



The ratio of true positives to all predicted positives.



The ratio of true negatives to all actual negatives.



# What does recall (sensitivity) measure in binary classification?



The ratio of true positives to all predicted positives.



The ratio of true positives to all actual positives.



The ratio of true negatives to all actual negatives.



#### What is overfitting in machine learning?



When a model performs well on the training data but poorly on unseen data.



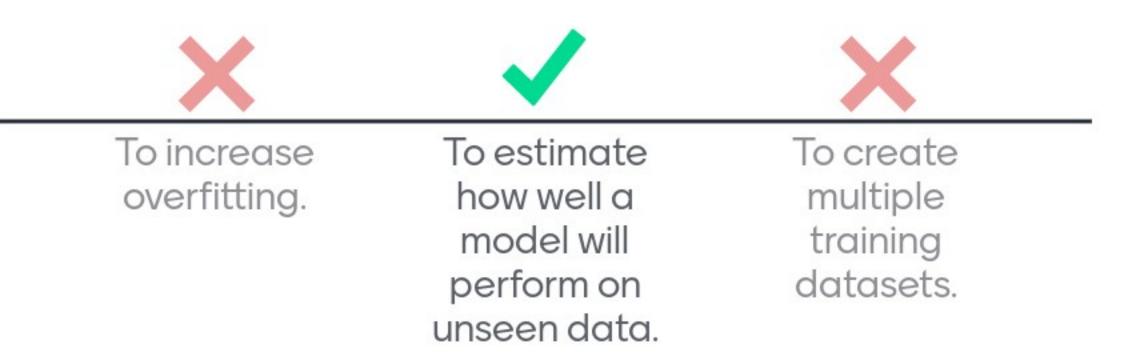
When a model performs consistently on both training and testing data.



When a model doesn't learn from the training data.

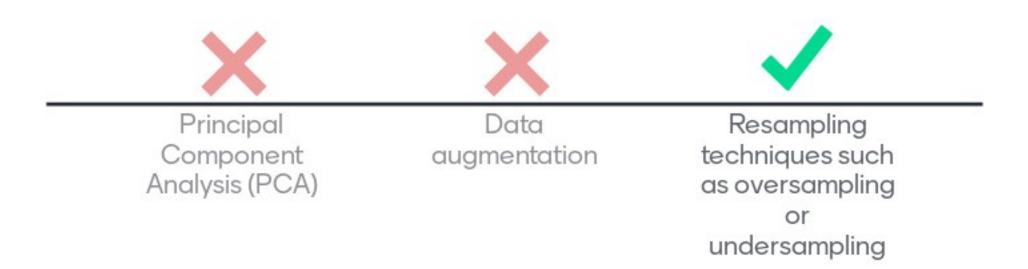


### What is the purpose of cross-validation in model evaluation?





When working with imbalanced datasets, which technique can help address the issue of class imbalance in binary classification?





# What is the ROC-AUC (Receiver Operating Characteristic - Area Under the Curve) score, and how does it relate to binary classifiers?



It measures the accuracy of a model's predictions.



It quantifies the tradeoff between the true positive rate and the false positive rate at different classification thresholds.



It calculates the ratio of true positives to false positives in binary classification.



#### Leaderboard

#### No results yet

Top Quiz participants will be displayed here once there are results!