Practice Quiz: Introduction to Machine Learning
Practice Assignment • 10 min

Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 60%. We keep your highest score.

Next item →

1. Which one of the following best describes machine learning? 1 / 1 point

- ○ Machine learning enables computers to detect anomalies and find patterns to assign data into similar groups.
- ○ Machine learning enables computers to automatically make decisions without the need for data or explicit instructions.
- ○ Machine learning teaches computers to learn under supervision how to make predictions from labeled data.
- ◉ Machine learning teaches computers to learn from data, identify patterns, and make decisions without receiving explicit instructions from a human being.

Correct
ML algorithms use computational methods to "learn" information directly from data without depending on an explicit set of instructions created by a human being.

2. Which one of the following tasks is a machine learning engineer more likely to perform than a data scientist? 1 / 1 point

- ○ Research the latest trends in data analytics.
- ◉ Build a data pipeline for deploying a machine learning model.
- ○ Creating informative plots for illustrating key insights and telling stories about data.
- ○ Investigate causal relationships between variables by developing and testing hypotheses.

Correct
A machine learning engineer builds pipelines to productionize tasks like storing, retrieving, and preprocessing data for use in machine learning model deployment.

3. What are the key lifecycle stages of a machine learning model? 1 / 1 point

- ○ Monitor, train, test, and deploy your model.
- ○ Collect the data and develop, evaluate, and deploy a model into production.
- ○ Define the problem, collect the data, and develop, evaluate, and deploy a model.
- ◉ Define the problem, collect the data, preprocess the data, and develop, evaluate, and deploy a model.

Correct
These are the primary stages in the machine learning model lifecycle. This process is often iterative, meaning you may need to revisit earlier steps, like data collection or problem definition, and repeat subsequent steps.

4. Which library is at the core of an open-source Python machine learning ecosystem that enables you to develop machine learning models? 1 / 1 point

- (●) Scikit-learn
- ( ) Pandas
- ( ) SciPy
- ( ) NumPy

Correct
Scikit-learn is a free Python machine learning library designed for building models in classification, regression, clustering, and dimensionality reduction. It is central to Python's open-source machine learning ecosystem and works seamlessly with NumPy and SciPy.

5. Which library is a tool for data analysis, visualization, cleaning, and preparing data for machine learning? 1 / 1 point

- ( ) Scikit-learn
- (●) Pandas
- ( ) SciPy
- ( ) NumPy

Correct
Pandas is a powerful Python library commonly used for data analysis, visualization, cleaning, and preprocessing to prepare data for downstream tasks, including machine learning modeling.