**Quick Check-Point #2**

**#1**

In ML, **features** are the input data. **A label** is the output of the ML system. It is the thing we would like to predict or classify using the system after we trained that system. A labeled example includes the feature(s) which is x and also the label related to such features, which is y.

Yes/No

**#2**

In supervised learning, a large group of unlabeled examples can be used as a **training dataset** to train a model.

Yes/No

**#3**

A machine learning system is going to learn patterns inside the training dataset and store that knowledge in something that is called a **model**. This model is supposed to define as close as possible the relationship between features and the target label.

Yes/No

**#4**

In machine learning, **inference** means applying the trained model in an actual ML system working in a production environment for making ongoing predictions.

Yes/No

**#5**

The objective of the ML system is to be able to make good predictions on data it has never seen before. This is called **generalization**. A well-generalized model is a model were the patterns learned from the examples provided in the training dataset can be successfully used also on new unseen data instances.

Yes/No

**#6**

**Underfitting** refers to a situation that the trained model is not working well on the training data, but it is working great on new data.

Yes/No

**#7**

One of themain reasons for underfitting is that the model is probably too simple and we need to build a more complex model that can better learn the underlying structure of the data.

Yes/No

**#8**

**Overfitting** is a very common situation when training models. It means that the trained model we created performs very well on the training data, but it does not generalize well to new data. The model is not performing well on new data.

Yes/No