### Example assessment questions for the machine learning paradigm

Question

In machine learning, programmers write explicit rules to match answers to data.

1. True
2. **False**

Explanation: In machine learning, programmers design programs that learn rules and patterns from data.

Question

Which of the following are true about learning rates? Select all that apply.

1. **If it is too large, we may never reach the minimum**
2. If it is too small, we will never reach the minimum
3. **If it is too small, it may take a long time to reach the minimum**
4. If it just right, the loss is guaranteed to be 0

Question

Models can be made to generalize patterns in data by minimizing the loss function.

1. **True**
2. False

Question

A dense neural network can be used to compute linear regression.

1. **True**
2. False

Explanation: with a linear activation function, a neural network can be used as a regression model.

Question

Neural network parameters must be manually computed by the programmer.

1. True
2. **False**

Explanation: in machine learning, model parameters are updated automatically during the training process.