### Example assessment questions for limitations and ethics

Question

Machine learning models are prone to biases in the data.

1. **True**
2. False

Explanation: Be careful with the biases in your data, as it can easily cause your model to discriminate along gender, racial, age, etc lines.

Question

Which of the following are good ways to build societal trust into an artificial intelligence (AI) system? Select all that apply.

1. Efficiency
2. **Lawful**
3. **Robust**
4. **Ethical**

Explanation: Efficiency (speed or power requirements) may help machine learning algorithms run better on hardware, but it is not necessary for society to trust it. The others are required to make a trustworthy AI system.

Question

Machine learning is often easier to maintain and debug than traditional (deterministic) programming.

1. True
2. **False**

Explanation: machine learning is often a complex solution to help solve complex problems. As a result, models can be opaque and difficult to troubleshoot.

Question

What is a Type 1 error?

1. A true positive
2. **A false positive**
3. A true negative
4. A false negative

Question

What is a Type 2 error?

1. A true positive
2. A false positive
3. A true negative
4. **A false negative**

Question

Setting a threshold that tries to minimize type 2 errors (but increases type 1 errors) has been optimized for:

1. High precision
2. **High recall**
3. High accuracy
4. High efficiency