### Example assessment questions for k-means clustering and autoencoders

Question

Autoencoders require both normal and anomalous data to train.

1. True
2. **False**

Explanation: Autoencoders require just normal data to train.

Question

Latent space is a compact, lower-dimensional representation of similar data points that are close together in space.

1. **True**
2. False

Question

Thresholds for autoencoders are consistent across all applications for a given data type.

1. True
2. **False**

Explanation: thresholds for anomaly detection systems (including autoencoders) must be tuned for each application.

Question

Which of the following is a disadvantage of k-means clustering?

1. It only works with data that has a gaussian distribution
2. It does not support more than 5 clusters
3. **It does not scale well with very high dimensional data**
4. It requires a large neural network

Question

Which metric is used to evaluate the performance of a model independent of the threshold?

1. Recall
2. Precision
3. **Area under the curve (AUC)**
4. Accuracy