1. Select the right assertion: 1 / 1 point

- (●) Autoencoders learn from a compressed representation of the data, while variational autoencoders learn from a probability distribution representing the data.
- ( ) Variational autoencoders learn from a compressed representation of the data, while autoencoders learn from a probability distribution representing the data.
- ( ) Autoencoders and Principal Component Analysis can be used interchangeably.
- ( ) Variational Autoencoders and Principal Component analysis can be used interchangeably.

✓ Correct
Correct! You can find more information in the Autoencoders lesson.

2. (True/False) Variational autoencoders are generative models. 1 / 1 point

- (●) True
- ( ) False

✓ Correct
Correct! There is no labeled data, which is why Autoencoders are considered unsupervised Deep Learning. You can find more information in the Autoencoders lesson.

3. When comparing the results of Autoencoders and Principal Component Analysis, which approach might best improve the results from Autoencoders? 1 / 1 point

- ( ) Add labels to the data
- (●) Add layers and epochs
- ( ) Add a Variational Autoencoder
- ( ) Reduce the dimensions of the data

✓ Correct
Correct! You can find more information in the Autoencoders Python notebook demonstration.

4. (True/False) KL loss is used in Variatoinal Autoencoders to represent the measure of the difference between two distributions. 1 / 1 point

- (●) True
- ( ) False

✓ Correct
Correct! You can find more information in the Autoencoders Python notebook demonstration.

5. A good way to compare the inputs and outputs of a Variational Autoencoder is to calculate the mean of a reconstruction function based on binary crossentropy. 1 / 1 point

- (●) True
- ( ) False

Correct
Correct! You can find more information in the Autoencoders Python notebook demonstration.

6. The main parts of GANs architecture are: 1 / 1 point

- (•) generator and discriminator
- ( ) loss error and random noise
- ( ) adversarial and non adversarial neurons
- ( ) generated and adversarial neurons

Correct
Correct! You can find more information in the GANs lesson.

7. (True/False) One of the main advantages of GANs over other adversarial networks is that it does not spend any time evaluating whether an input or image is fake or real. It only computes probability of being fake. 1 / 1 point

- (•) True
- ( ) False

Correct
Correct! You can find more information in the GANs lesson.