

1. What is the main function of backpropagation when training a Neural Network?

1 / 1 point

- ☐ Preprocess the input layer
- ☒ Make adjustments to the weights
- ☐ Make adjustments to the loss function
- ☐ Propagate the output on the output layer

☒ Correct
Correct! You can find more information on the lesson Introduction to Neural Networks part 3.

2. (True/False) The “vanishing gradient” problem can be solved using a different activation function.

1 / 1 point

- ☒ True
- ☐ False

☒ Correct
Correct! You can find more information on the lesson Introduction to Neural Networks part 3.

3. (True/False) Every node in a neural network has an activation function.

1 / 1 point

- ☒ True
- ☐ False

☒ Correct
Correct! You can find more information on the lesson Introduction to Neural Networks part 3.

4. These are all activation functions except:

1 / 1 point

- ☐ Sigmoid
- ☐ Hyperbolic tangent
- ☒ Leaky hyperbolic tangent
- ☐ ReLu

☒ Correct
Correct! You can find more information on the lesson Other Activation Functions.

5. Deep Learning uses deep Neural Networks for all these uses, except

1 / 1 point

- ☐ As an alternative to manual feature engineering
- ☐ To uncover usually unobserved relationships in the data
- ☒ Cases in which explainability is the main objective

☐ As a classification and regression technique

☒ Correct

Correct! You can find more information in the lesson Regularization Techniques for Deep Learning.

6. These are all activation functions except:

1 / 1 point

☐ Regularization penalty in cost function

☐ Dropout

☐ Early stopping

☒ Pruning

☒ Correct

Correct! You can find more information in the lesson Regularization Techniques for Deep Learning.

7. (True/False) Optimizer approaches for Deep Learning Regularization use gradient descent:

1 / 1 point

☐ True

☒ False

☒ Correct

Correct! You can find more information in the lesson Regularization Techniques for Deep Learning.

8. Stochastic gradient descent is this type of batching method:

1 / 1 point

☒ online learning

☐ mini batch

☐ full batch

☐ stochastic batch

☒ Correct

Correct! You can find more information in the lesson Neural Networks Training Details

9. (True/False) The main purpose of data shuffling during the training of a Neural Network is to aid convergence and use the data in a different order each epoch.

1 / 1 point

☒ True

☐ False

☒ Correct

Correct! You can find more information in the lesson Neural Networks Training Details

10. This is a high-level library that is commonly used to train deep learning models and runs on either TensorFlow or Theano:

1 / 1 point

- ☐ PyTorch
- ☒ Keras
- ☐ Watson Studio
- ☐ Deep Learning

☒ Correct
Incorrect. Please review the Keras lesson.