

1. What is another name for the “neuron” on which all neural networks are based?

1 / 1 point

- ☐ deep neuron
- ☐ sigmoid
- ☐ neutron
- ☒ perceptron

✓ Correct

Correct! Neurons are also commonly referred to as perceptrons. You can find more information on the lesson Introduction to Neural Networks part 3.

2. What is an advantage of using a network of neurons?

1 / 1 point

- ☐ The network is not limited to using only the sigmoid function as an activation function.
- ☒ A network of neurons can represent a non-linear decision boundary.
- ☐ Feedforward capabilities are limited.
- ☐ The output of neurons can be averaged.

✓ Correct

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

3. A dataset with 8 features would have how many nodes in the input layer?

1 / 1 point

- ☐ 10
- ☐ 2
- ☐ 4
- ☒ 8

✓ Correct

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

4. For a single data point, the weights between an input layer with 3 nodes and a hidden layer with 4 nodes can be represented by a:

1 / 1 point

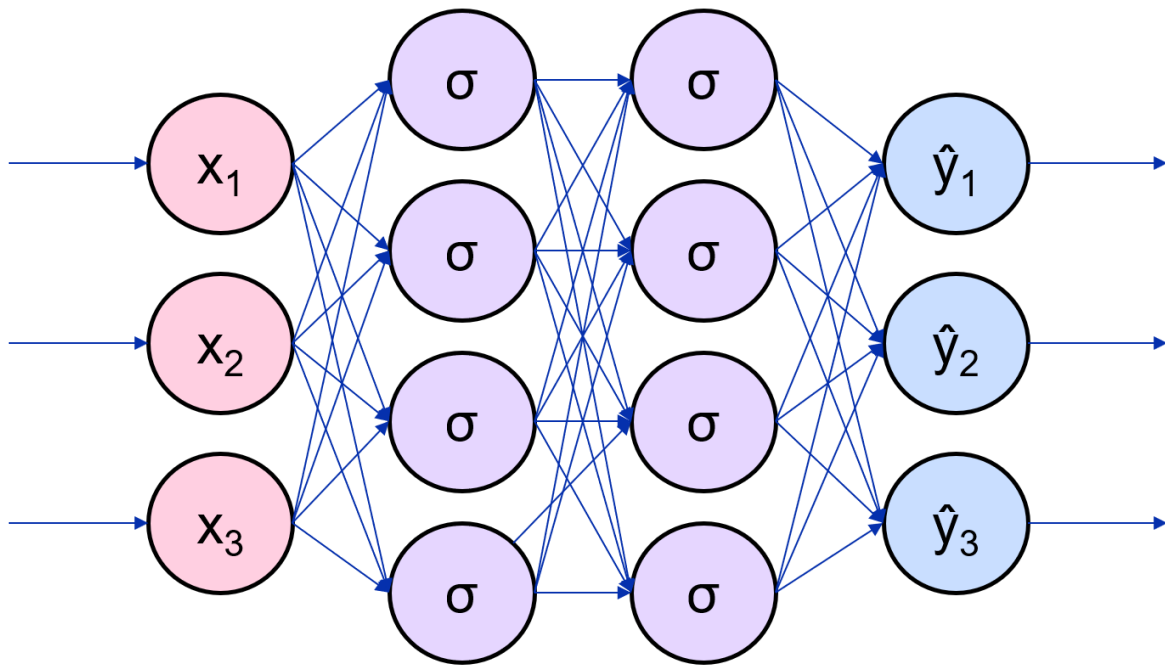
- ☐ 4 x 3 matrix
- ☒ 3 x 4 matrix.
- ☐ 4 x 4 matrix
- ☐ 3 x 3 matrix

✓ Correct

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

5. Use the following image for reference. How many hidden layers are in this Neural Network?

1 / 1 point



- ☒ Two
- ☐ Four
- ☐ Eight
- ☐ Fourteen

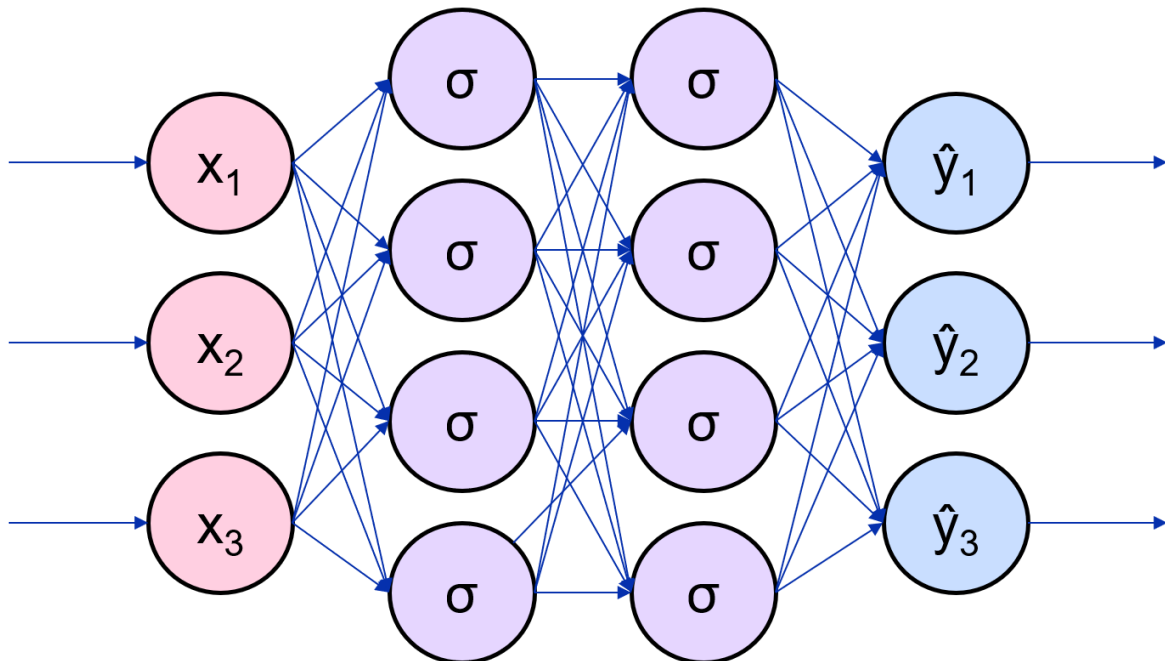


Correct

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

6. Use the following image for reference. How many hidden units are in this Neural Network?

1 / 1 point



- ☐ Two

- ☐ Four
- ☒ Eight
- ☐ Fourteen

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

7. Which statement is TRUE about the relationship between Neural Networks and Logistic Regression?

1 / 1 point

- ☐ A Neural Network is less likely to overfit to training data than Logistic Regression.
- ☐ A Neural Network with two or more deep layers will likely outperform Logistic Regression.
- ☐ A Multi-Layer Perceptron is equivalent to Logistic Regression if all activation functions are the same.
- ☒ A single-layer Neural Network can be parameterized to generate results equivalent to Linear or Logistic Regression.

☒ Correct
Correct! You can find more information on the lesson Introduction to Neural Networks part 2.