

Deep learning pre-enrolment quiz

Question 1

Marked out of 0.10

v1 (latest)

Let x_1 and x_2 be the inputs of a neuron, y be the output of this neuron, what's the meaning of w_1 and w_2 in the equation below:

$$y = f(x_1 * w_1 + x_2 * w_2 + b)$$

- ☒ a. weighted matrix
- ☐ b. bias
- ☐ c. output
- ☐ d. fixed matrix

Question **2**

Marked out of 0.10

v1 (latest)

Let x_1 and x_2 be the inputs of a neuron, y be the output of this neuron, what's the meaning of b in the equation below:

$$y = f(x_1 * w_1 + x_2 * w_2 + b)$$

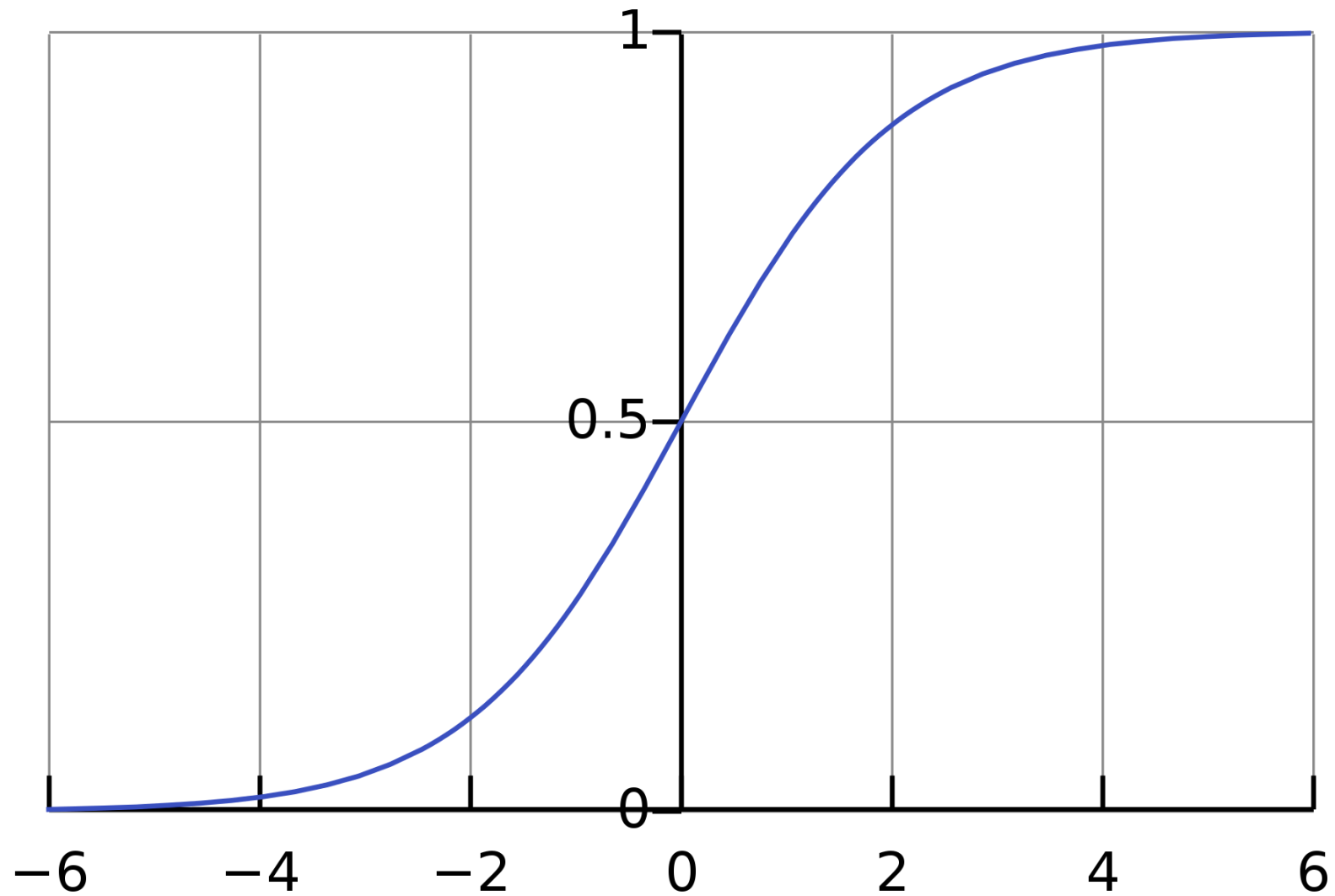
- ☒ a. bias
- ☐ b. weighted matrix
- ☐ c. fixed matrix
- ☐ d. weighted inputs

Question **3**

Marked out of 0.10

v1 (latest)

What is the activation function below?



- ☐ a. Leaky ReLu
- ☐ b. Rectified linear unit(ReLU)
- ☐ c. ELU (Exponential Linear Units)

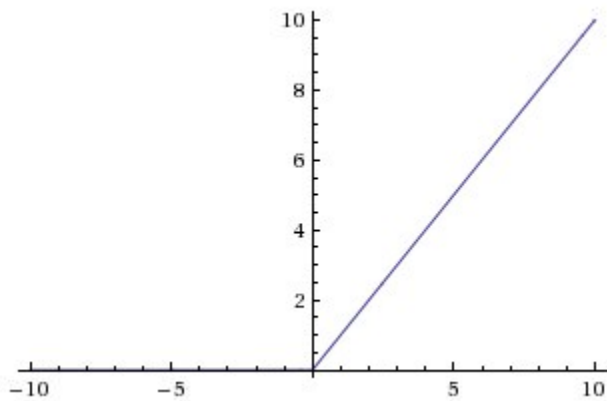
- ☒ d. Sigmoid

Question **4**

Marked out of 0.10

v1 (latest)

What is the activation function below?



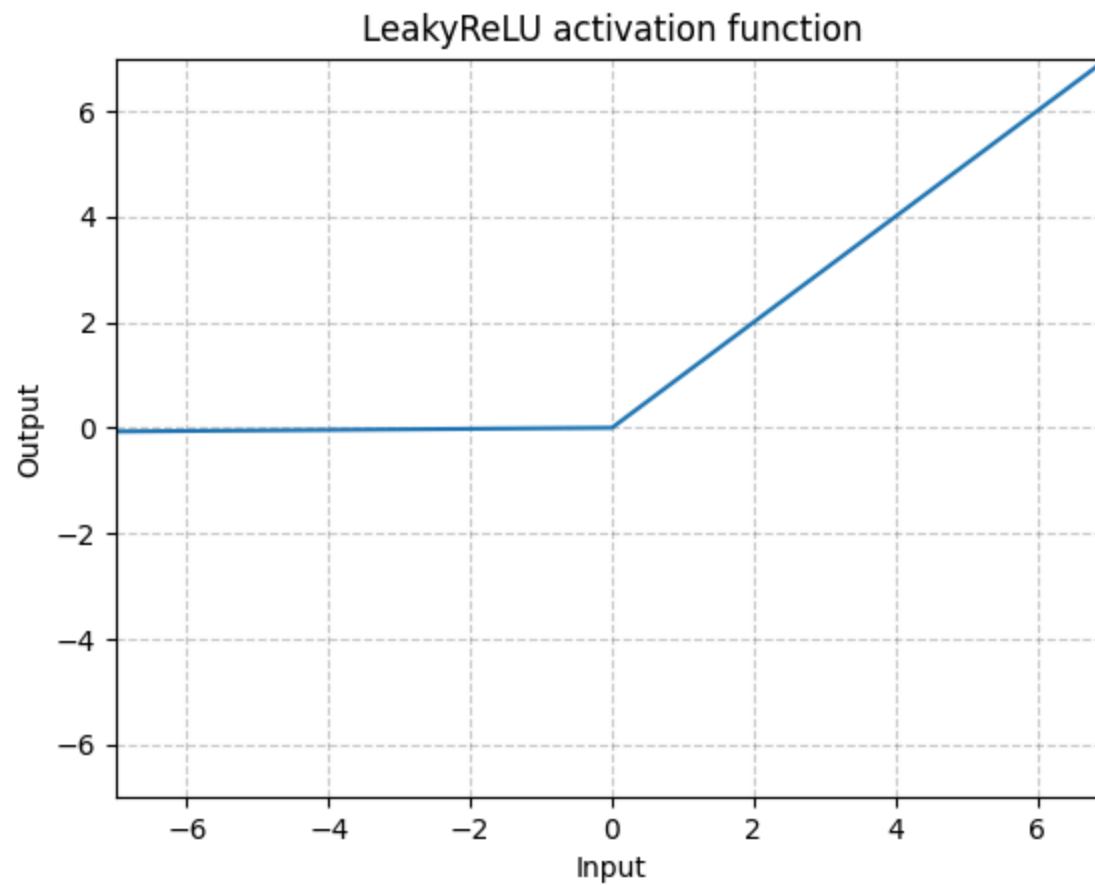
- ☐ a. Sigmoid
- ☐ b. ELU (Exponential Linear Units)
- ☐ c. Leaky ReLu
- ☒ d. Rectified linear unit(ReLU)

Question **5**

Marked out of 0.10

v1 (latest)

What is the activation function below?



- ☒ a. Leaky ReLu
- ☐ b. Sigmoid

- ☐ c. Rectified linear unit(ReLU)
- ☐ d. ELU (Exponential Linear Units)

Question **6**

Marked out of 0.10

v1 (latest)

What is the activation function below?

$$f(x) = \frac{1}{1 + e^{-z}}$$

- ☐ a. Rectified linear unit(ReLU)
- ☐ b. Leaky ReLU
- ☒ c. Sigmoid
- ☐ d. ELU (Exponential Linear Units)

Question **7**

Marked out of 0.10

v1 (latest)

What is the activation function below?

$$f(x) = \max(\alpha x, x)$$

- ☐ a. Sigmoid
- ☒ b. Leaky ReLu
- ☐ c. Rectified linear unit(ReLU)
- ☐ d. ELU (Exponential Linear Units)

Question **8**

Marked out of 0.10

v1 (latest)

What is the activation function below?

$$f(x) = \max(0, x)$$

- ☒ a. Rectified linear unit(ReLU)
- ☐ b. Sigmoid
- ☐ c. Leaky ReLU
- ☐ d. ELU (Exponential Linear Units)

Question 9

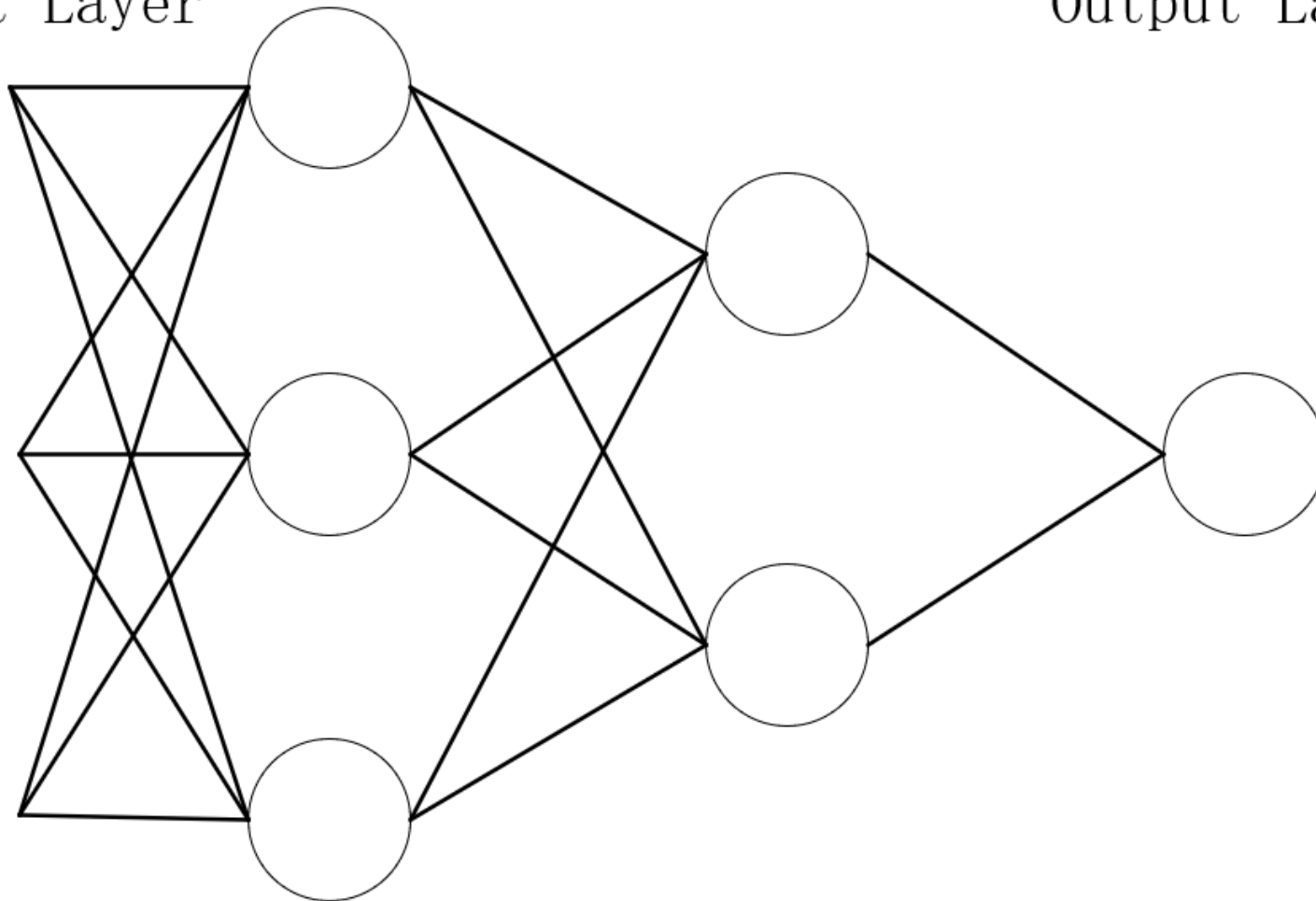
Marked out of 0.10

v1 (latest)

There are two hidden layers in the network below:

Input Layer

Output Layer



Select one:

- ☒ True
- ☐ False

Question **10**

Marked out of 0.10

v1 (latest)

To build a neural network from 'sklearn' package, we should import the 'neural_network' module from the 'sklearn' package.

Select one:

- ☒ True
- ☐ False