

QUIZ: Artificial Neural Networks

Pregunta 1:

1. The weights and biases in a neural network are optimized using:

- ☐ Gradient Descent
- ☐ Logistic Descent
- ☐ Vanishing Gradient
- ☐ Activation Descent
- ☒ Activation Function

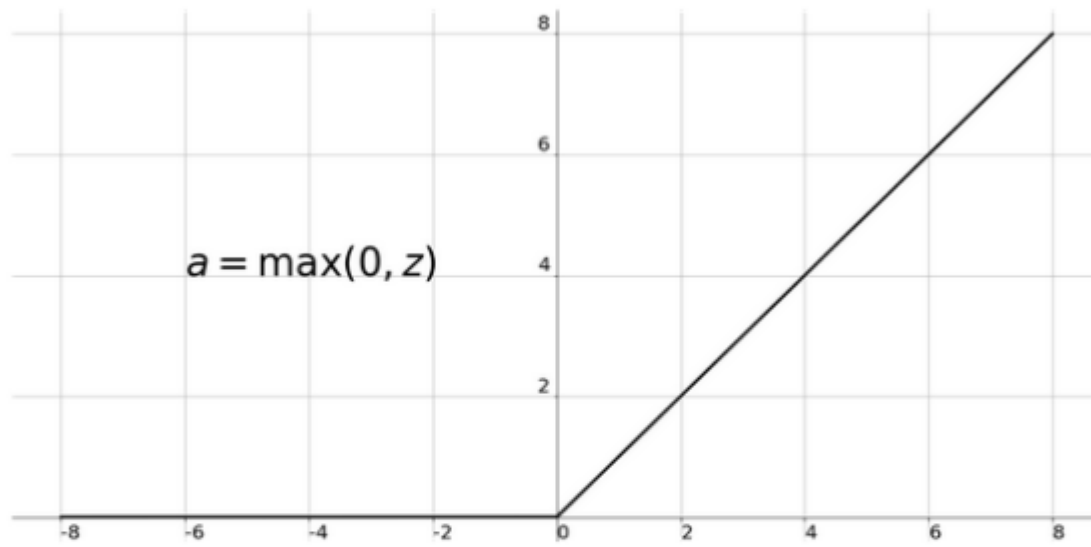
Pregunta 2:

2. For a cost function, $J = \sum_{i=1}^m (z_i - wx_i - b)^2$, that we would like to minimize, which of the following expressions represent updating the parameter, w , using gradient descent?

- ☐ $w \rightarrow w + b - \eta * \frac{\partial J}{\partial w}$
- ☒ $w \rightarrow w + \eta * \frac{\partial J}{\partial w}$
- ☐ $w \rightarrow w - \eta * \frac{\partial J}{\partial w}$
- ☐ $w \rightarrow w - \eta * x \frac{\partial J}{\partial w}$
- ☐ $w \rightarrow w - \eta * b \frac{\partial J}{\partial w}$

Pregunta 3:

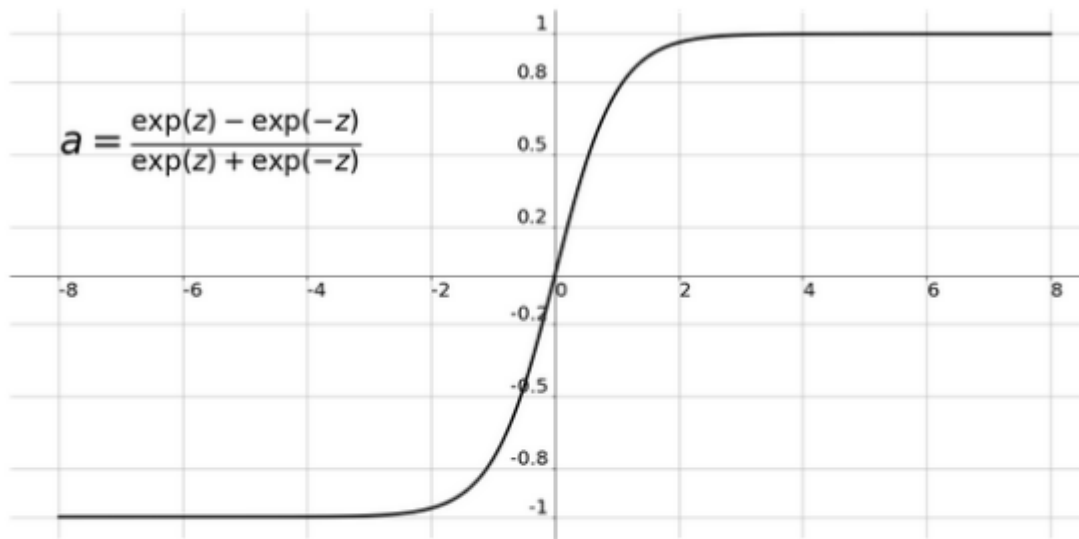
3. What type of activation function is this?



- ☐ Binary Function
- ☐ Hyperbolic Tangent Function
- ☒ ReLU
- ☐ Sigmoid Function
- ☐ Linear Function
- ☐ Leaky ReLU

Pregunta 4:

4. What type of activation function is this?



- ☐ Sigmoid Function
- ☐ Leaky ReLU
- ☐ Linear Function
- ☐ Binary Function
- ☐ ReLU
- ☒ Hyperbolic Tangent Function

Pregunta 5:

5. Softmax activation function is most commonly used in hidden layers?

- ☐ True
- ☒ False