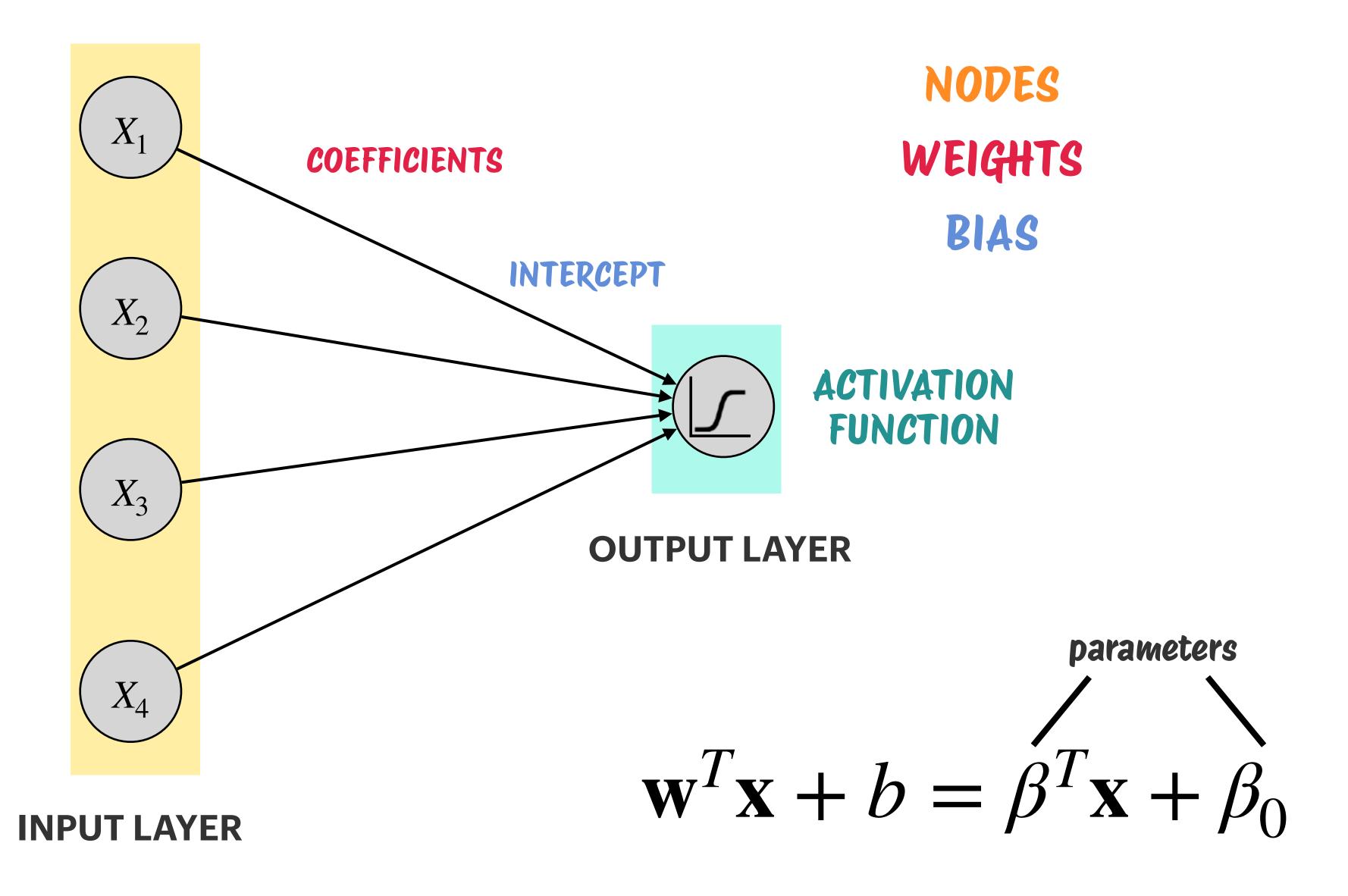
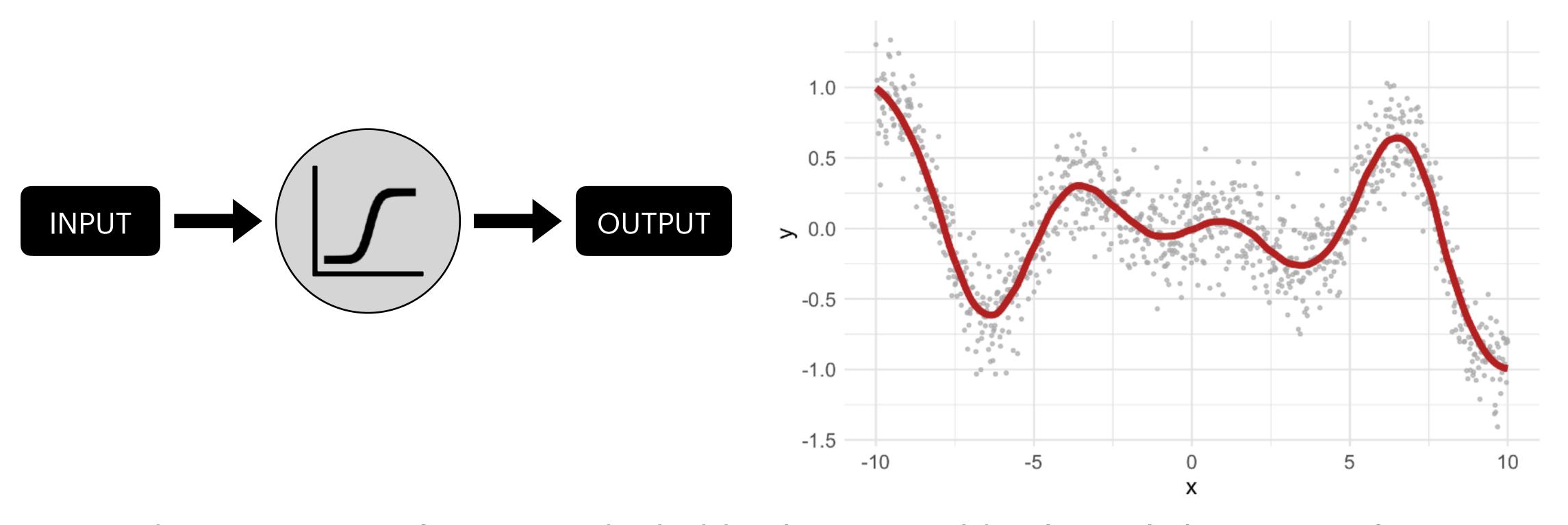
## Logistic Regression as a Neural Network



## Activation Function

the purpose of an activation function is to add non-linearity to the neural network.

they determine whether a neuron should be activated based on its input



Without activation functions, the hidden layers would only apply linear transformations (weighted sums), and the entire network is collapsed into a single-layer model because the composition of two linear functions is a linear function itself