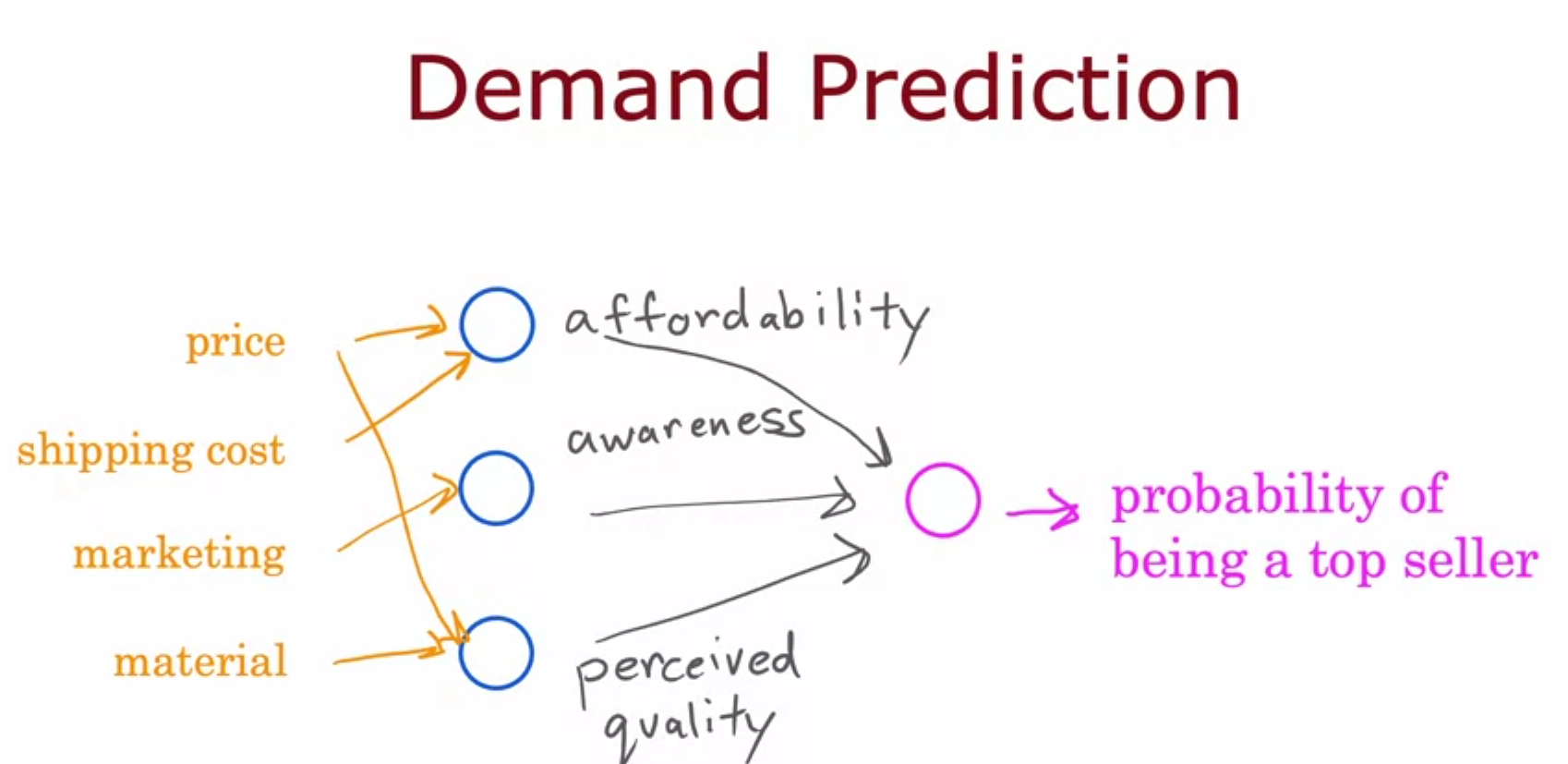
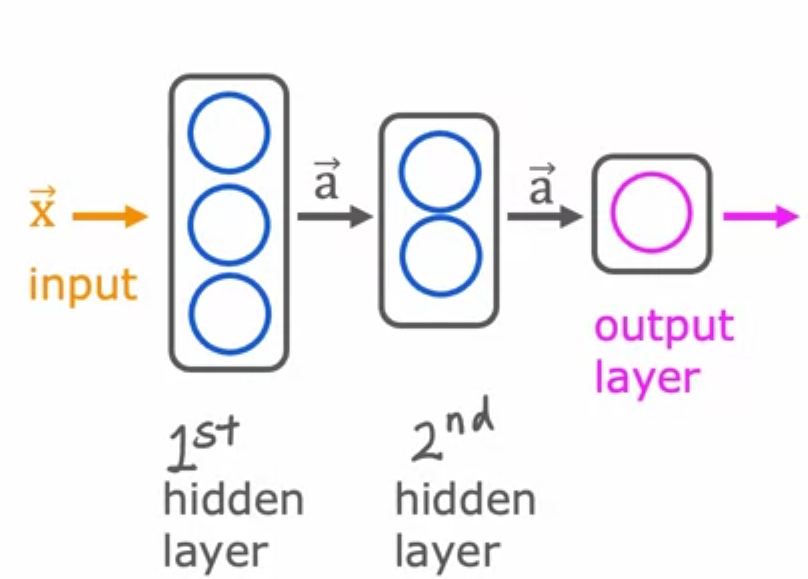
**Advanced Learning Algorithms**

Neural Networks

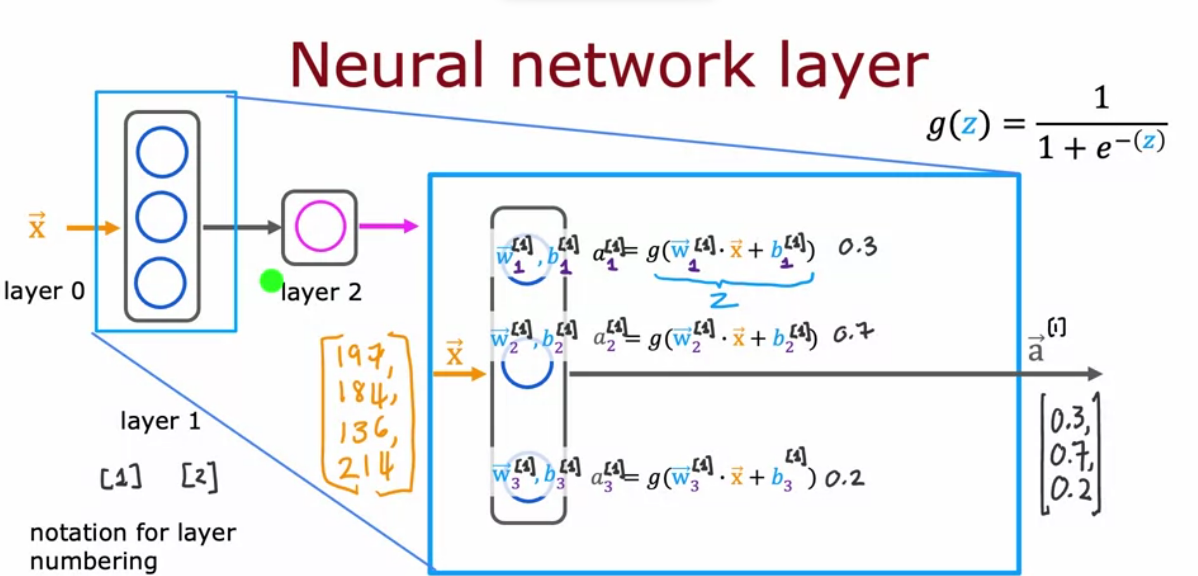
Let’s imagine we have a clothes shop, and we want to predict the demand of a certain shirt.

So we will have multiple parameters like price, shipping cost, marketing, and material to predict through it, then these parameters go through small neural networks that it’s output is 0 or 1 (logistic regression) then the output is the probability of being top seller.





Neural Network consists of input layer, hidden layers, and output layer

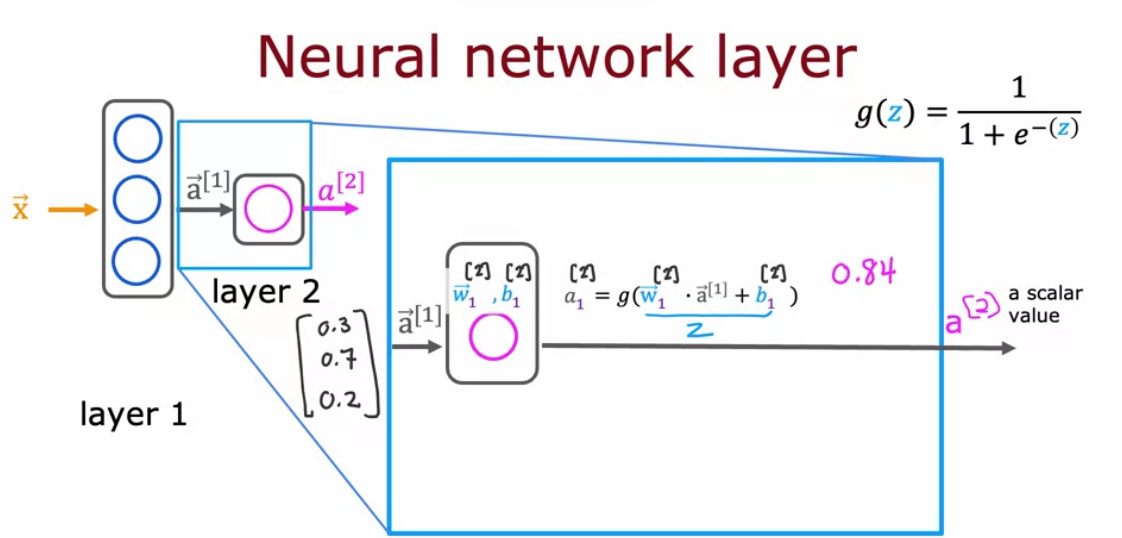


Superscript refers to the index of layer.

e.g. [1] means layer 1

subscript refers to index of neuron of the layer

so w[1]2 layer 1 neuron 2



A diagram of a network

Description automatically generated

A diagram of a diagram

Description automatically generated

a general equation to get a[l]j

