

4c.

w_{k1} and w_{k3} are both being ~~used~~ used to control the output y . w_{k2} however is acting as an inhibitor to this output.

w_{k1} and w_{k3} act as excitatory nodes in this instance, whether these be ~~the~~ the outputs of other neurons or inputs.

The purpose of having these 3 inputs contribute towards ~~the~~ ^{being} the excitatory signal for the neuron is so that there are more factors that control this total input and ~~so~~ so that in learning systems, it is possible to use back propagation in order to train neurons acting as these inputs.

4d.

$$y = 0.4 - 0.2 + 0.2 + 0.3 = 0.62$$

$$\Phi_{\max}(0, x)$$

