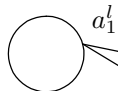


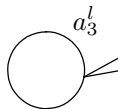
$l^{\text{th}}$  layer



$a_1^l$




$a_2^l$



$a_3^l$

$(l+1)^{\text{th}}$  layer


$$z_1^{l+1} = \sum_k w_{1k}^{l+1} a_k^l + b_1^{l+1}$$



A circle representing the first node in the  $(l+1)^{\text{th}}$  layer. It receives three incoming arrows from the nodes in the  $l^{\text{th}}$  layer.

$$a_1^{l+1} = \sigma(z_1^{l+1})$$

$$z_2^{l+1} = \sum_k w_{2k}^{l+1} a_k^l + b_2^{l+1}$$



A circle representing the second node in the  $(l+1)^{\text{th}}$  layer. It receives three incoming arrows from the nodes in the  $l^{\text{th}}$  layer.

$$a_2^{l+1} = \sigma(z_2^{l+1})$$