



$$y = g \left( b + \sum_i x_i w_i \right)$$

Diagram illustrating the mathematical formula for the output  $y$  of a neuron. The formula is  $y = g \left( b + \sum_i x_i w_i \right)$ . The components are labeled with colored arrows:  $y$  is the output (pink arrow),  $g$  is the nonlinearity (red arrow),  $b$  is the bias (blue arrow),  $x_i$  is the  $i$ 'th input (green arrow), and  $w_i$  is the  $i$ 'th weight (blue arrow).

