



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

The equation is annotated with colored arrows and text: a pink arrow points to  $y$  with the label "output"; a red arrow points to  $g$  with the label "nonlinearity"; a blue arrow points to  $b$  with the label "bias"; a green arrow points to  $x_i$  with the label "i'th input"; and another blue arrow points to  $w_i$  with the label "i'th weight".