

$$y = \varphi\left(\sum_{i=1}^n w_i x_i + b\right) = \varphi(\mathbf{w}^T \mathbf{x} + b)$$

- Rosenblatt's model captures many of the key points of a biological neuron:
  - Output is a function of the sum of inputs
  - Negative weights account for inhibitory connections
  - The “activation function” can ensure that output is only produced once a threshold is exceeded (although we use many variants of these days)





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