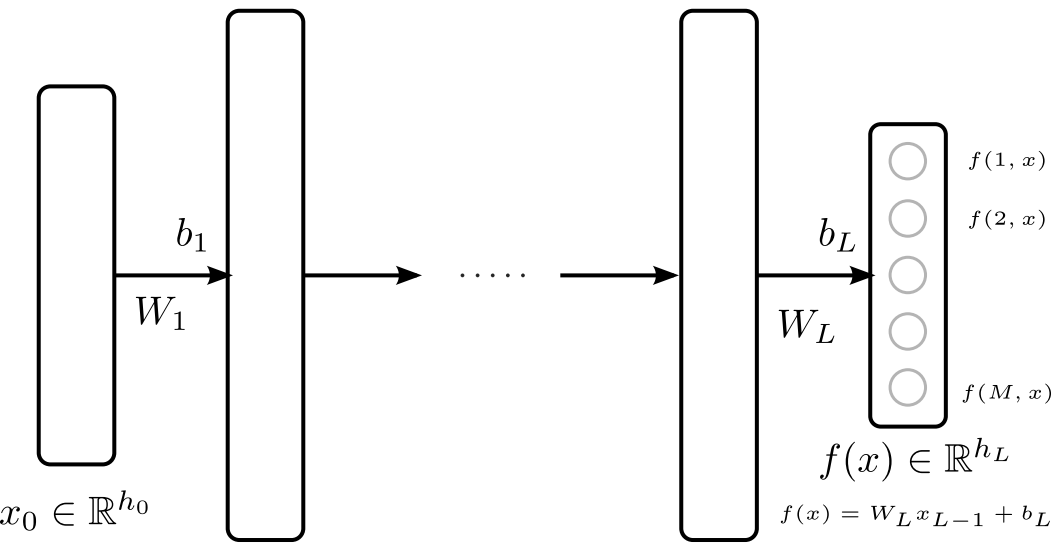
neural network

(notation: $x_0 \equiv x$, $h_0 \equiv d$, $h_L \equiv M$, $x_{L-1} \equiv \phi(x)$)



$x_1 \in \mathbb{R}^{h_1}$

$x_1 = \sigma(W_1 x_0 + b_1)$

$x_{L-1} \in \mathbb{R}^{h_{L-1}}$

$x_{L-1} = \sigma(W_{L-1} x_{L-2} + b_{L-1})$