$$\mathbf{X}' = \sigma(\mathbf{Z}) \in \mathbb{R}^{b \times d_{\text{out}}}$$

$$\mathbf{Z} = \mathbf{X}\mathbf{W}^T \in \mathbb{R}^{b \times d_{\text{out}}}$$

$$\mathbf{W} \in \mathbb{R}^{d_{\text{out}} \times d_{\text{in}}}$$

$$\mathbf{X} \in \mathbb{R}^{b \times d_{\text{in}}}$$