

$$\begin{aligned}
& \frac{d}{d\mathbf{w}} \text{sqr}(\text{sub}(y, \text{add}(\text{matmul}(\mathbf{w}, \mathbf{x}), b))) \\
&= \text{sqr}'(\text{sub}(y, \text{add}(\text{matmul}(\mathbf{w}, \mathbf{x}), b))) \\
& \quad \frac{d}{d\mathbf{w}} \text{sub}(y, \text{add}(\text{matmul}(\mathbf{w}, \mathbf{x}), b)) \\
&= \dots \\
&= \text{sqr}'(\text{sub}(y, \text{add}(\text{matmul}(\mathbf{w}, \mathbf{x}), b))) \\
& \quad \text{sub}'(y, \text{add}(\text{matmul}(\mathbf{w}, \mathbf{x}), b)) \\
& \quad \text{add}'(\text{matmul}(\mathbf{w}, \mathbf{x}), b) \\
& \quad \frac{d}{d\mathbf{w}} \text{matmul}(\mathbf{w}, \mathbf{x})
\end{aligned}$$