

$$L = \sum_i (X_i W - y_i)^2, i \in \{1, 2, 3\}, X_i \in \mathbb{R}^{1 \times 5}, W \in \mathbb{R}^{5 \times 1}$$

$$\frac{\partial L}{\partial W} = 2 \cdot \underbrace{\sum_i}_{|x|} \underbrace{(X_i W - y_i)}_{5 \times 1} \cdot X_i^T = 2 \cdot \sum_{i=1}^3 [(X_i W - y_i) \cdot X_i^T], i \in \{1, 2, 3\}$$

$$W^{k+1} = W^k - \mu \cdot \frac{\partial L}{\partial W}(W^k)$$

$$W^{k+1} = W^k - \mu \cdot 2 \cdot \sum_{i=1}^3 [(X_i W - y_i) \cdot X_i^T], i \in \{1, 2, 3\}.$$