

$$\mathbf{w} = [1, 2]$$

$$f(S)$$

$$f(\mathbf{x}^{(2)})$$

$$f(\mathbf{x}^{(1)})$$

$$w_1x_1 + w_2x_2 = 3$$

$$w_1x_1 + w_2x_2 = 2.5$$

$$w_1x_1 + w_2x_2 = 1 \text{ (minimized)}$$

\mathcal{F}

