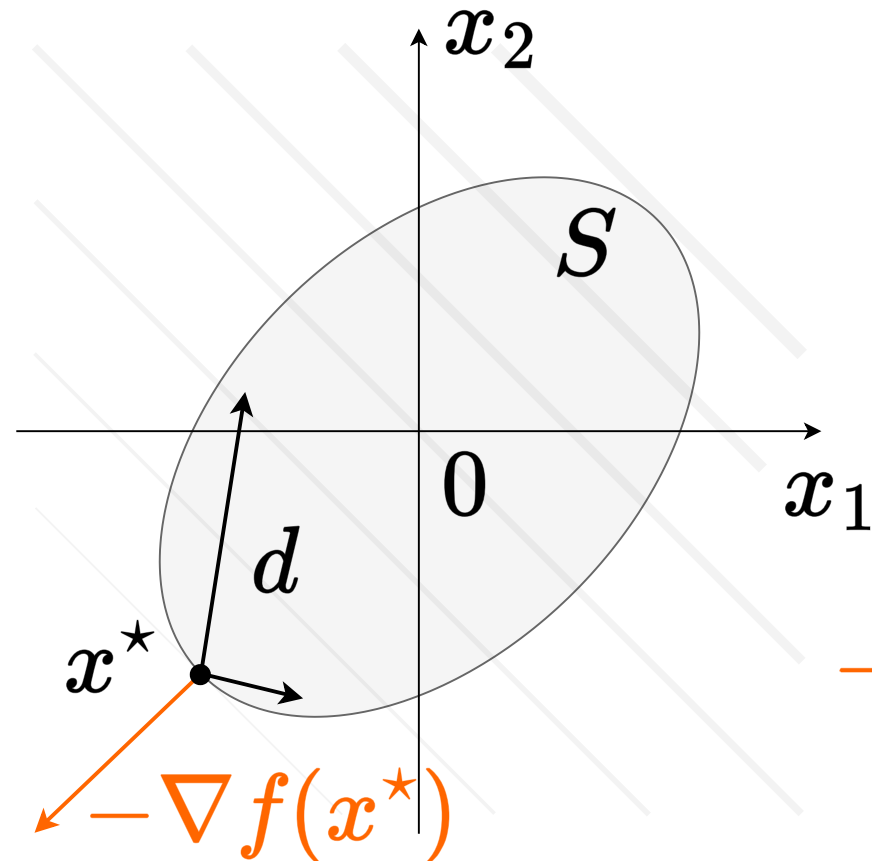


$$f(x) = x_1 + x_2 \rightarrow \min_{x_1, x_2 \in \mathbb{R}^2}$$

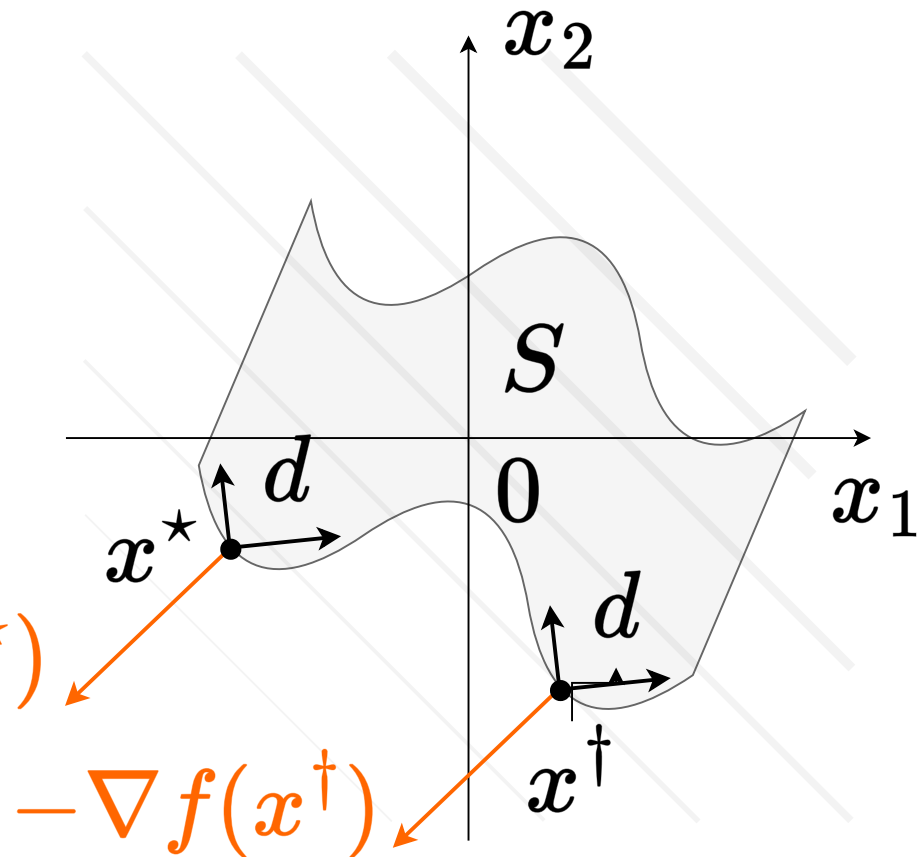
S - convex



$$\langle -\nabla f(x^*), d \rangle \leq 0$$

x^* - optimal

S - not convex



$$\langle -\nabla f(x^\dagger), d \rangle \leq 0$$

x^\dagger - not optimal