Break 1

Example 1

$$\min c^T x$$
$$s.t \quad 0 \leq x \leq 1$$

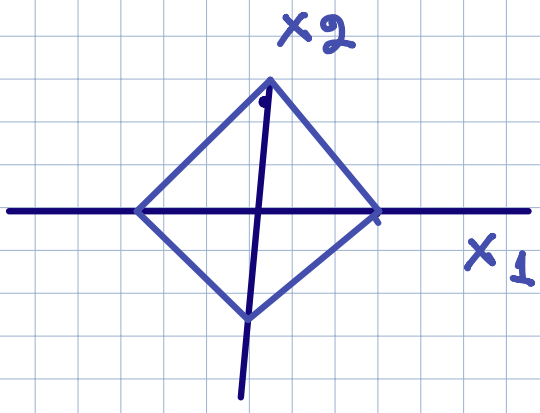
Example 2: transform from ① → ② general form to standard form

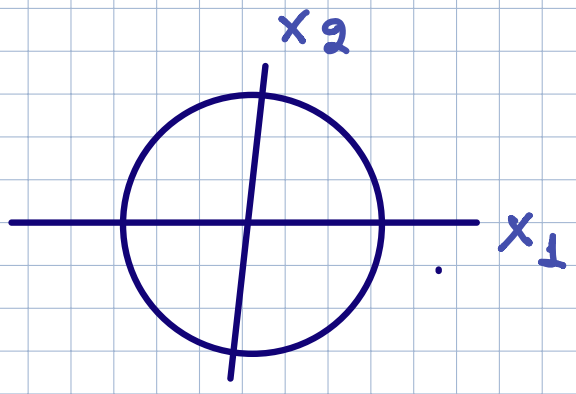
$$\min c^T x$$
$$s.t \quad Ax \leq b$$
$$Dx = f$$

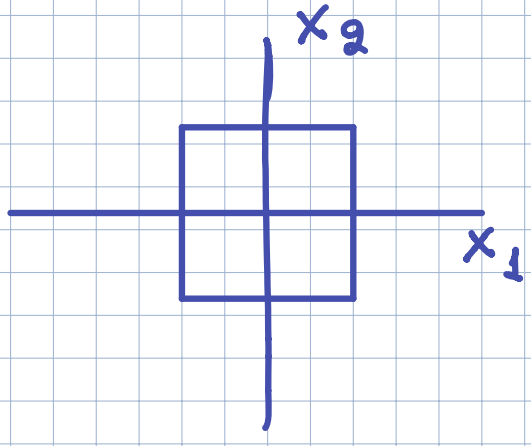
$$\min c^T x$$
$$s.t \quad Ax = b$$
$$x \geq 0$$

Unit circles in two dimensions

$$x = \begin{pmatrix} x_1 \\ x_2 \end{pmatrix}$$







Prove that $x^T y \leq \|x\|_1$ for all y with $\|y\|_\infty \leq 1$.