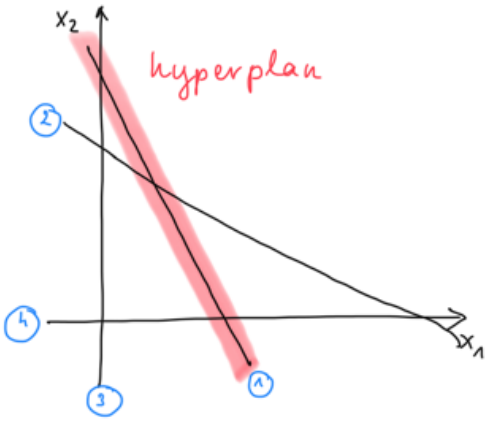
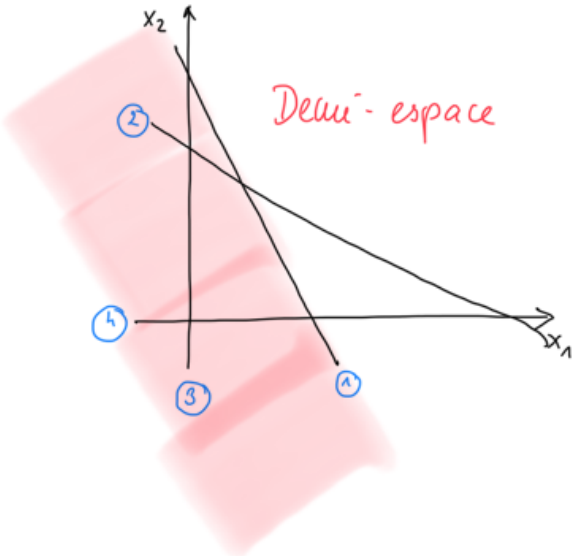
Polyèdres

Hyperplan : $\{\bar{x} : a_i \cdot \bar{x} = b_i\}$ $a_i, b \in \mathbb{R}^m$, $\bar{x} \in \mathbb{R}^n$



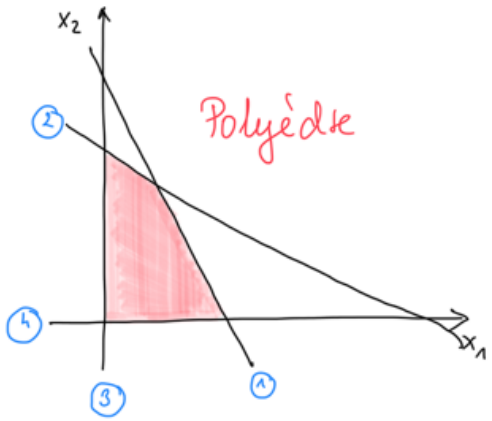
① $2x_1 + 1x_2 \leq 6$
② $1x_1 + 2x_2 \leq 8$
③④ $x_1, \quad x_2 \geq 0$

Demi-espace : $\{\bar{x} : a_i \cdot \bar{x} \leq b_i\}$ (or $a_i \cdot \bar{x} \geq b_i$)

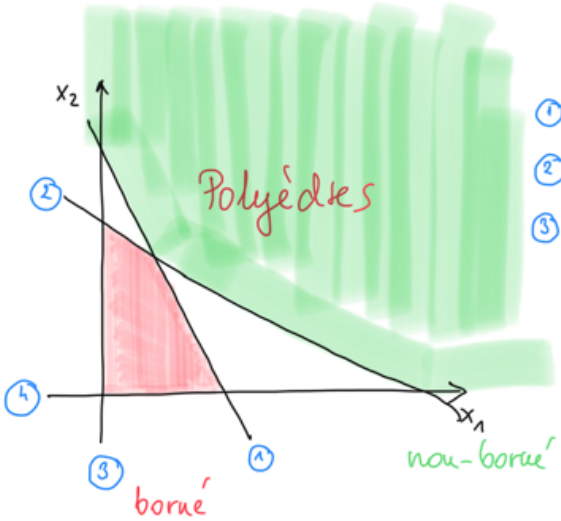


① $2x_1 + 1x_2 \leq 6$
② $1x_1 + 2x_2 \leq 8$
③④ $x_1, \quad x_2 \geq 0$

Polyédres : $\{\bar{x} : A \cdot x \leq b\}$



① $2x_1 + 1x_2 \leq 6$
② $1x_1 + 2x_2 \leq 8$
③④ $x_1, \quad x_2 \geq 0$



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$2x_1 + 1x_2 \geq 6$
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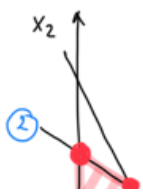

① $2x_1 + 1x_2 \leq 6$
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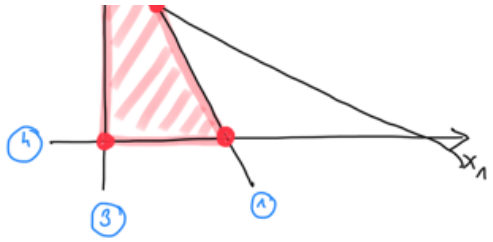
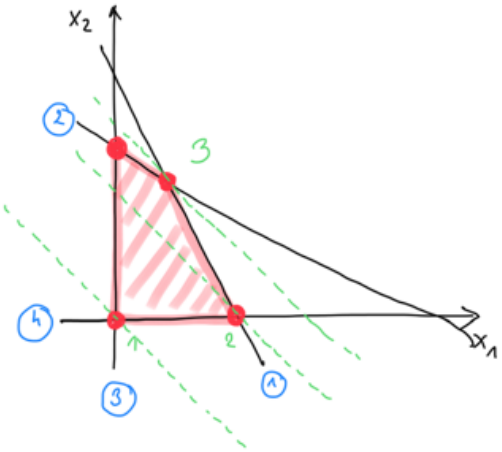
③④ $x_1, \quad x_2 \geq 0$



Simplexe



① $2x_1 + 1x_2 \leq 6$

② $1x_1 + 2x_2 \leq 8$

③④ $x_1, \quad x_2 \geq 0$

⑤ $1 \cdot x_1 + 1 \cdot x_2 = z(\max)$