Best response Polytopes

$(A,B) \in \mathbb{R}^{m \times n} \times \mathbb{R}^{m \times n}$

row player best resp polytope:

$P = \{x \in \mathbb{R}^m \mid x \geq 0,\ xB \leq 1\}$

col player best resp polytope:

$Q = \{y \in \mathbb{R}^n \mid Ay \leq 1,\ y \geq 0\}$

$A = \begin{pmatrix} 1 & -1 \\ -1 & 1 \end{pmatrix}$ $B = \begin{pmatrix} -1 & 1 \\ 1 & -1 \end{pmatrix}$

$+2$

$A = \begin{pmatrix} 3 & 1 \\ 1 & 3 \end{pmatrix}$ $B = \begin{pmatrix} 1 & 3 \\ 3 & 1 \end{pmatrix}$

"labels"

$\{0,1\}$

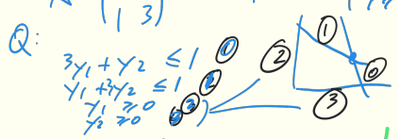
$\{1,3\}$

$\{0,2\}$

$\{2,3\}$

$P = \{x \in \mathbb{R}^m \mid x \geq 0,\ xA \leq 1\}$

$A = \begin{pmatrix} 3 & 1 \\ 1 & 3 \end{pmatrix}$ $Q = \{y \in \mathbb{R}^n \mid Ay \leq 1,\ y \geq 0\}$



(0,0) $\{2,3\}$

$(\frac{1}{3}, 0)$ $\{0,3\}$

$(0, \frac{1}{3})$ $\{1,2\}$

$(\frac{1}{4}, \frac{1}{4})$ $\{0,1\}$

$\{0,2,3\}$

$\{(\frac{1}{4}, \frac{1}{4})\}$, $\{(\frac{1}{4}, \frac{1}{4})\}$ is fully labelled

$\{(\frac{1}{2}, \frac{1}{2}), (\frac{1}{2}, \frac{1}{2})\}$ is a Nash equilibria