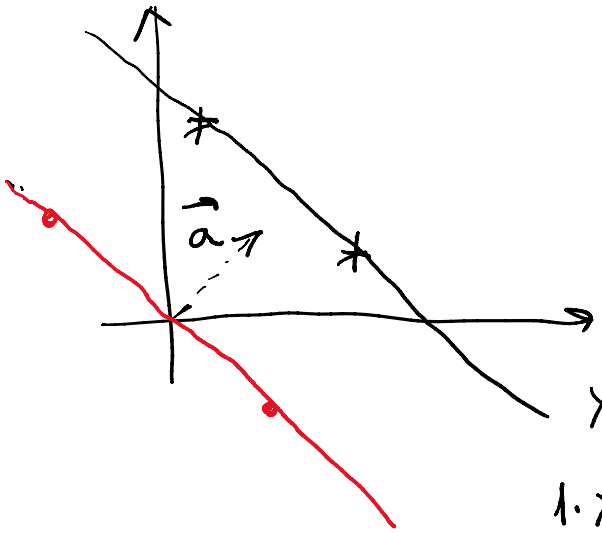
Vejledningsmøde

17. marts 2020 07:22

Polyeder

Om sætning 5.1

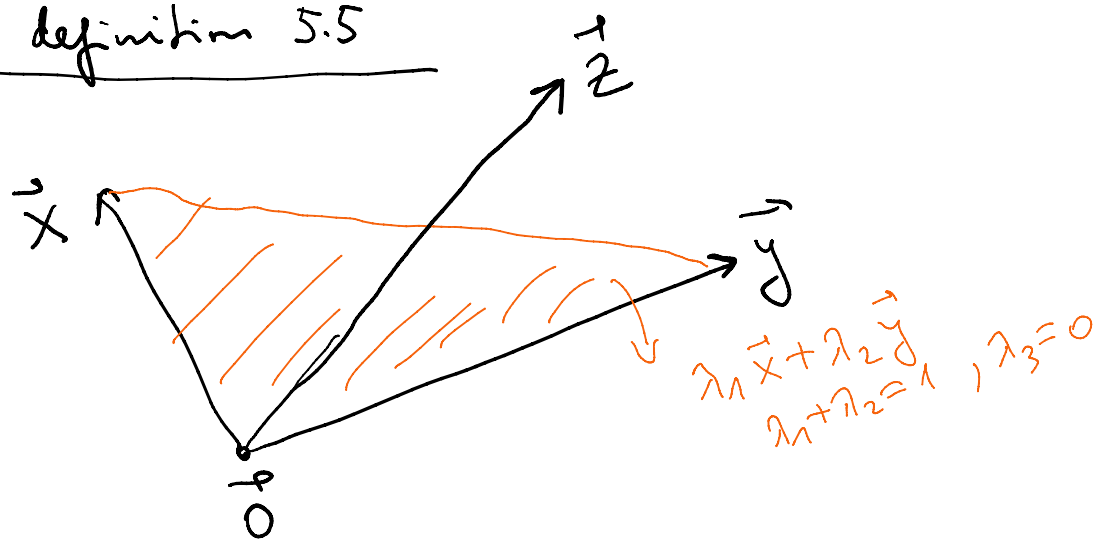


$x_1 + x_2 = 2$

$1 \cdot x_1 + 1 \cdot x_2 = 2$

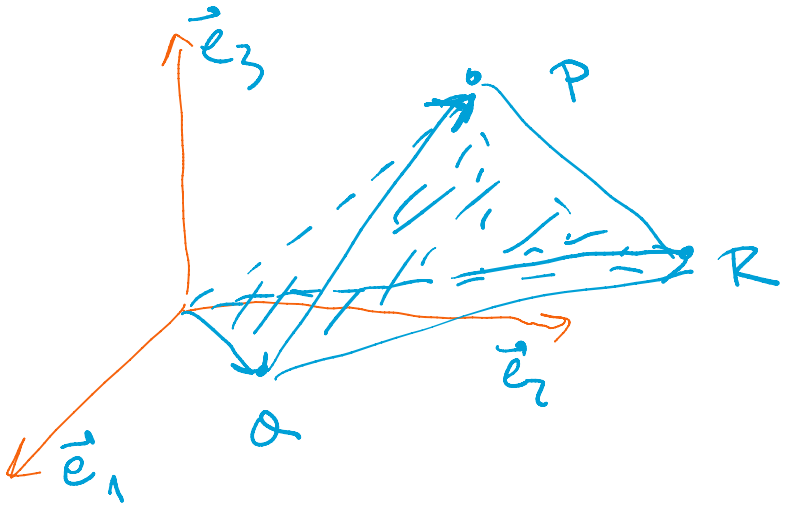
$\vec{a} = \begin{bmatrix} 1 \\ 1 \end{bmatrix}$; $\vec{a}^T \vec{x} = 2$

Om definition 5.5



$$\left\{ \lambda_1 \vec{x} + \lambda_2 \vec{y} + \lambda_3 \vec{z} : \begin{array}{l} \lambda_1 + \lambda_2 + \lambda_3 = 1 \\ \lambda_i \geq 0 \end{array} \right\}$$

$\vec{e}_3$



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om punkt c) på side 8

$K=2$

$$\lambda_1\vec{x}_1+\lambda_2\vec{x}_2+\lambda_3\vec{x}_3 \underset{\lambda_3\neq 1}{=\!=}$$

$$\lambda_1+\lambda_2+\lambda_3=1$$

$$= \lambda_3\vec{x}_3 + (1-\lambda_3)\vec{y}, \quad \text{hvor}$$

$$\vec{y}=\frac{\lambda_1}{1-\lambda_3}\vec{x}_1+\frac{\lambda_2}{1-\lambda_3}\vec{x}_2$$

$\frac{\lambda_1}{1-\lambda_3} = t_1$, $\frac{\lambda_2}{1-\lambda_3} = t_2$

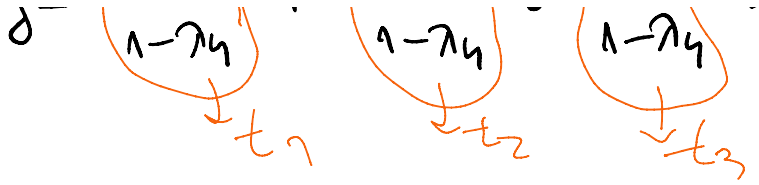
$t_1+t_2=\frac{\lambda_1+\lambda_2}{1-\lambda_3}=1 \Rightarrow \vec{y}\in S$

$K=3$

$$\lambda_1\vec{x}_1+\dots+\lambda_4\vec{x}_4 \underset{\lambda_4\neq 1}{=\!=}$$

$$\lambda_4\vec{x}_4+(1-\lambda_4)\vec{y}$$

$$\vec{y}=\frac{\lambda_1}{1-\lambda_4}\vec{x}_1+\frac{\lambda_2}{1-\lambda_4}\vec{x}_2+\frac{\lambda_3}{1-\lambda_4}\vec{x}_3 \in S$$


1−λ4
1−λ4
1−λ4