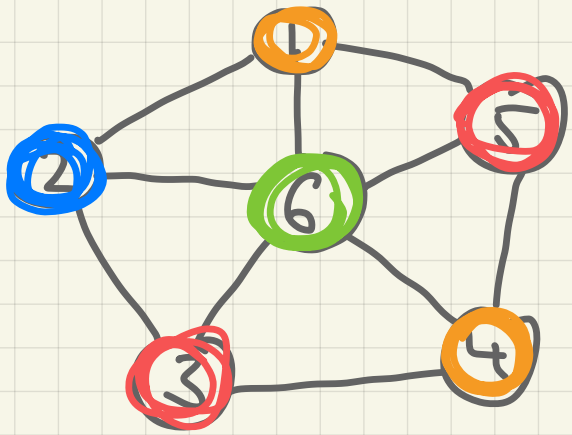
MOD 14.6.19



1 2 3 4

1 2 3 4

3 1 2 6

3. Variante

(Hier: $V(H) = [n]$, $q := n$)

Beobachtung: Wir können annehmen: Falls Farbe j benutzt wird, so ist j die kleinste Nummer eines Knotens in Farbklasse j.

$$\min \sum_{j=1}^{n} y_j$$

$$\sum_{j=1}^{n} x_{vj} = 1 \qquad \forall v \in V(G)$$

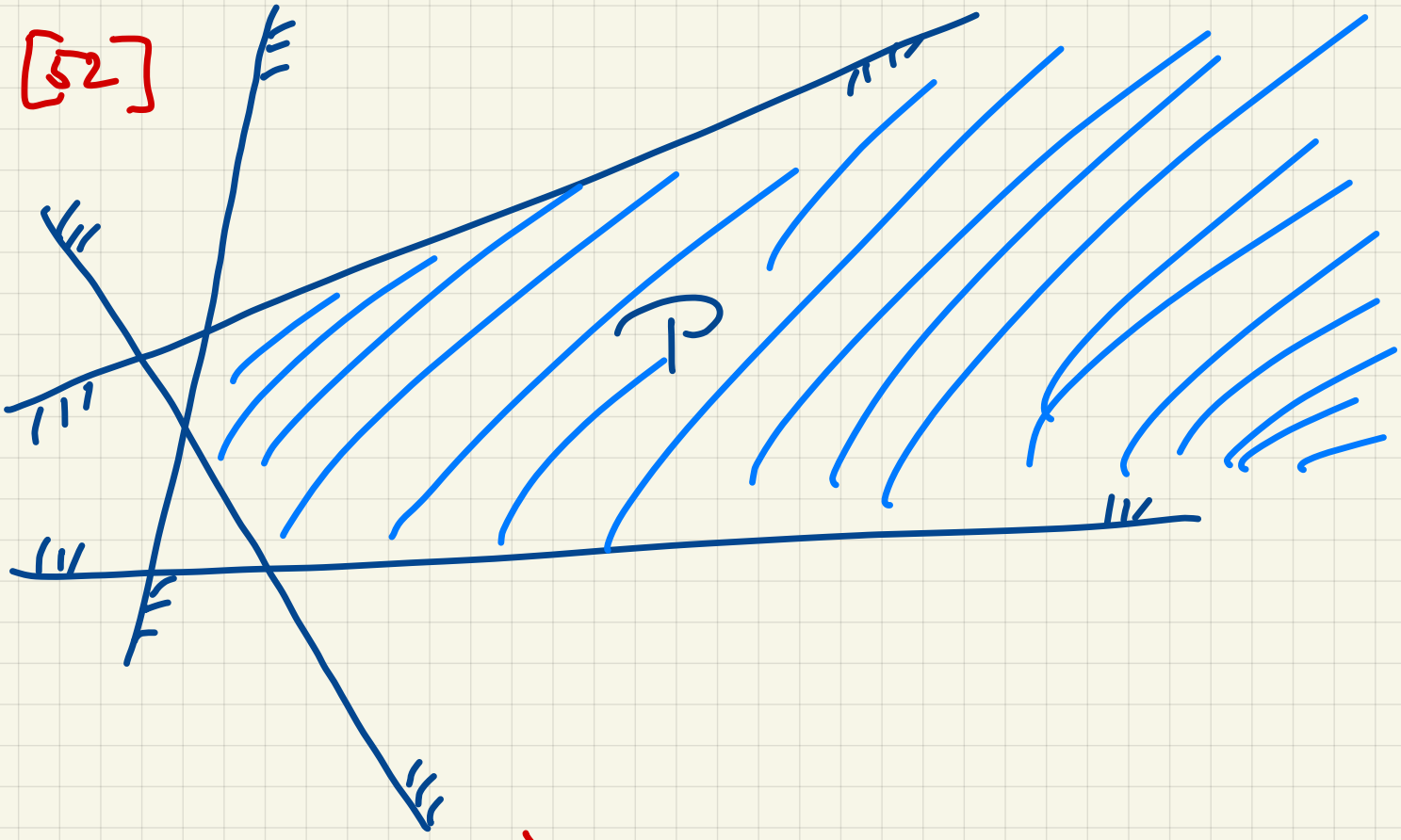
$$x_{vj} + x_{wj} \leq y_j \qquad \forall vw \in E(H)\ \forall j \in [n]$$

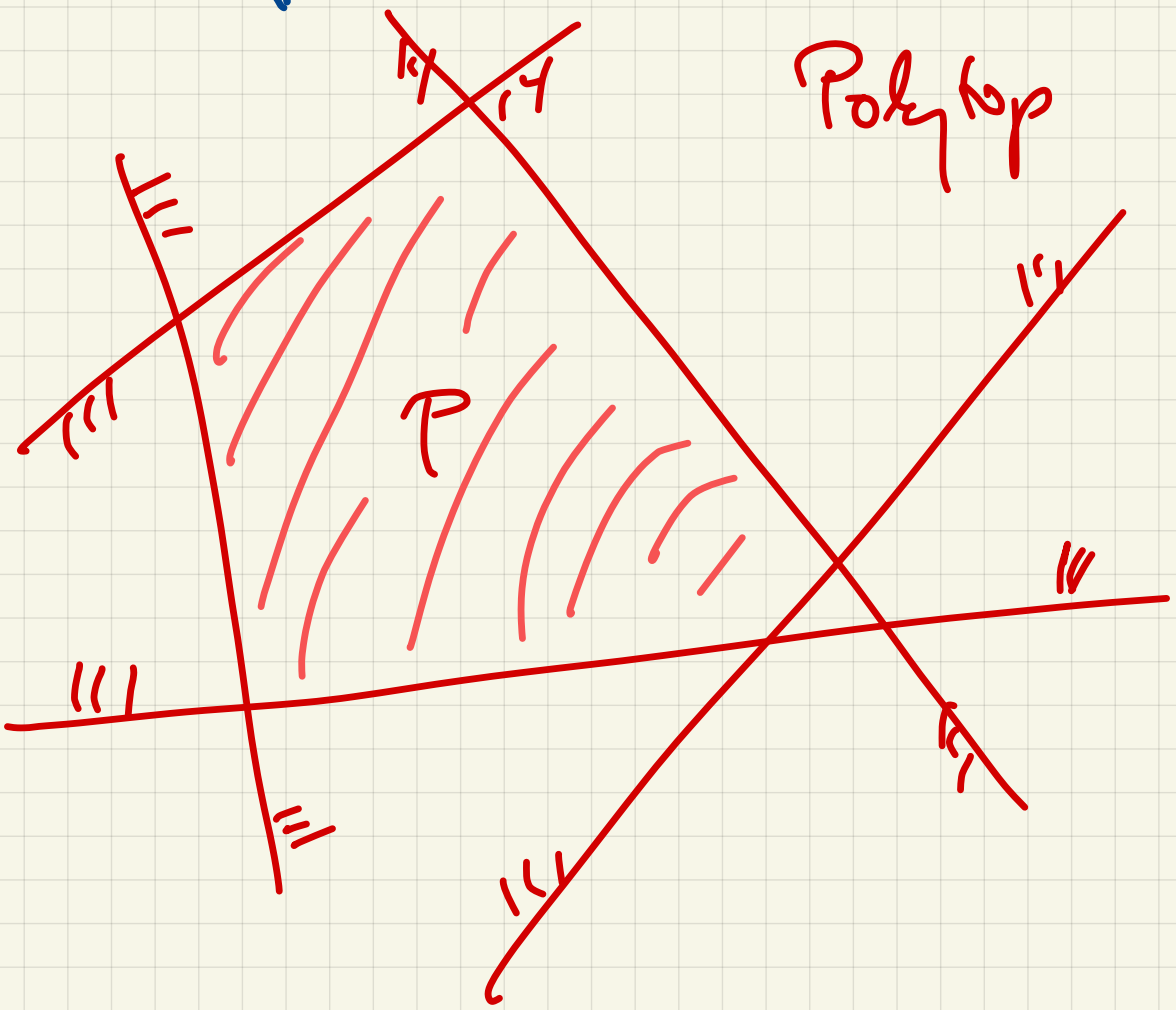
$$x_{vj} = 0 \qquad \forall v \in V(G)\ \forall j > v$$

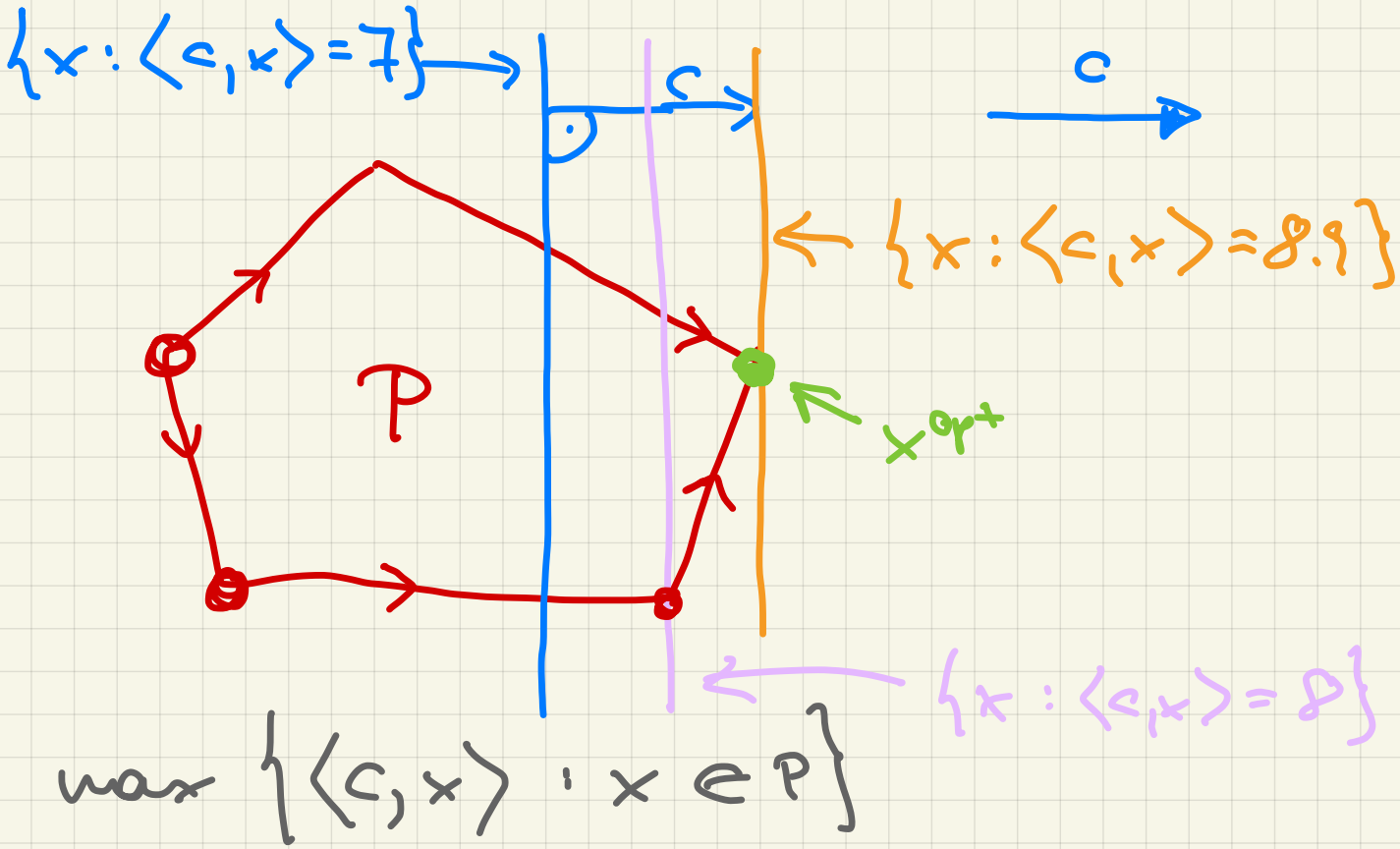
$$x_{vj} \in \{0,1\} \qquad \forall v \in V(G)\ \forall j \in [n]$$

$$y_j \in \{0,1\} \qquad \forall j \in [n]$$

[52]

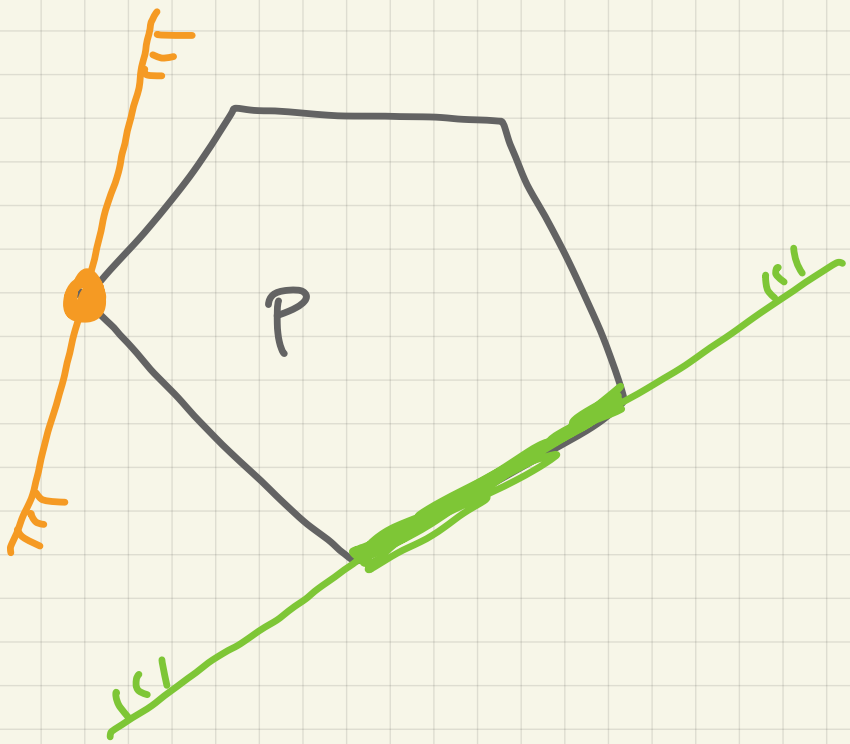




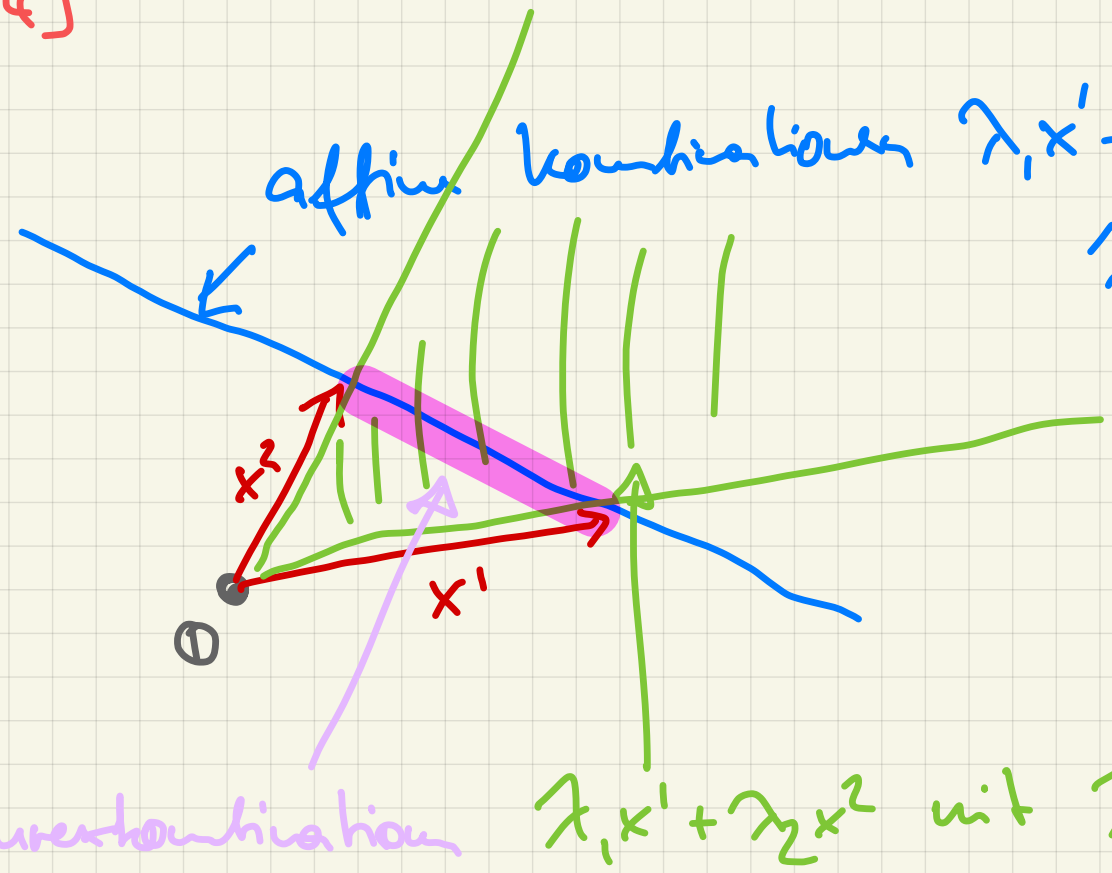


$$\max \{\langle c, x\rangle : x \in P\}$$

[53]



[54]


affine Kombinationen $\lambda_1 x^1 + \lambda_2 x^2$ mit
$\lambda_1 + \lambda_2 = 1$
x^2
x^1
0
Konvexkombination $\lambda_1 x^1 + \lambda_2 x^2$ mit $\lambda_1, \lambda_2 \geq 0$