

1Př. $\lambda \in [0, 10]$

+ BAZE!

$$\begin{aligned} \min \quad & 3x_1 + 5x_2 \\ \text{s.t.} \quad & 2x_1 + x_2 \geq 10 \quad (1) \\ & x_1 + 2x_2 \geq 12 + \lambda \quad (2) \\ & x_1 + x_2 \geq 8 \quad (3) \\ & x_1, x_2 \geq 0 \end{aligned}$$

$$\begin{aligned} 1) \lambda \leq -4 & : x_1 = 0, x_2 = 0 \\ 2) -4 \leq \lambda \leq 2 & : x_1 = 4 - \lambda \\ & \quad x_2 = 4 + \lambda \\ 3) 2 \leq \lambda \leq 8 & : x_1 = \frac{8 - \lambda}{3} \\ & \quad x_2 = \frac{14 + 2\lambda}{3} \end{aligned}$$

$$4) \lambda \geq 8 : x_1 = 0, x_2 = 6 + \frac{\lambda}{2}$$

GRAFICKY...

určit optimální hodnoty
a řádky.

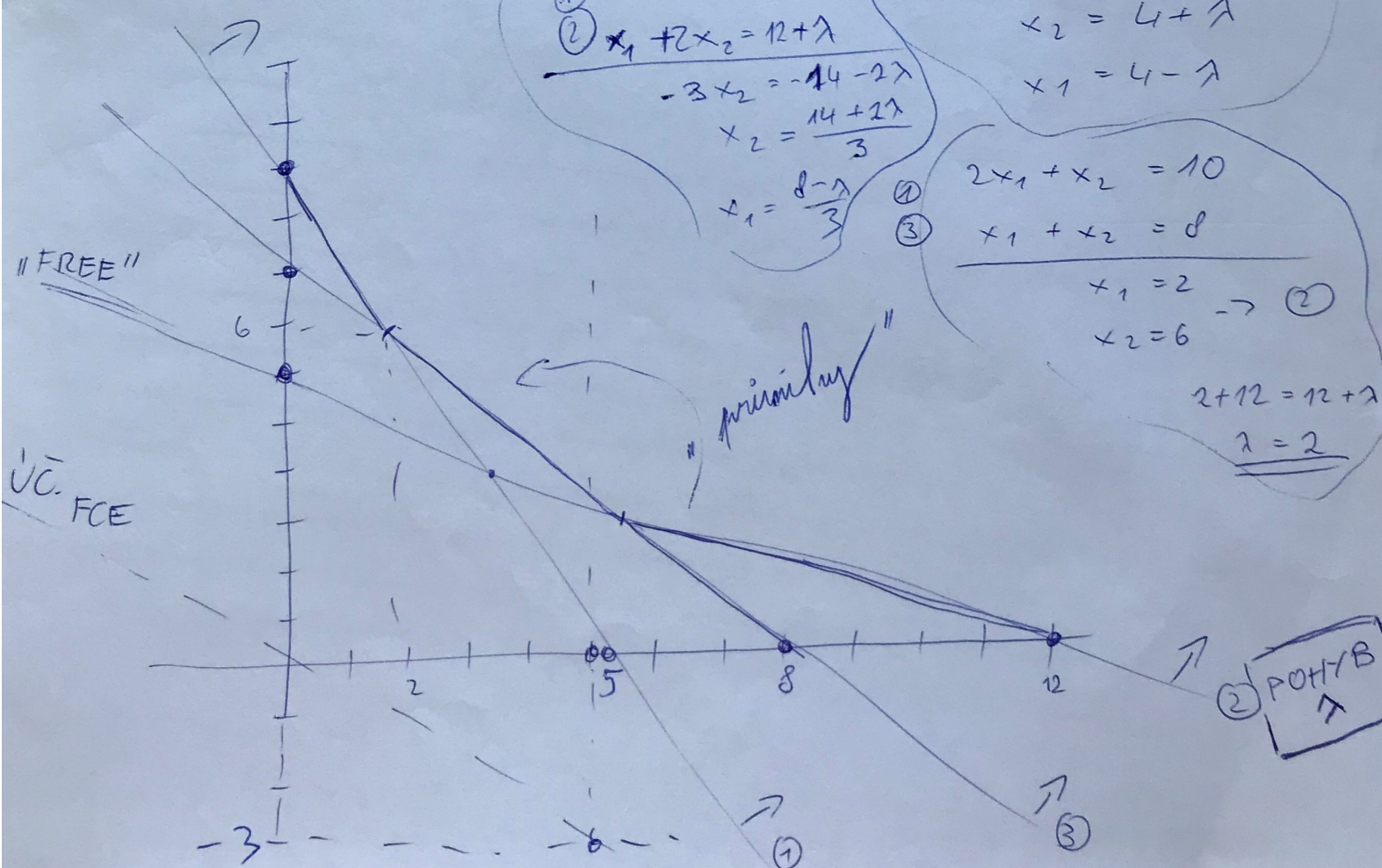
ÚC - FCE: $3x_1 = -5x_2$
 $(10, 0), (5, -3)$

- Body
- ① $(0, 10), (5, 0)$
 - ② $\lambda = 0 : (0, 6), (12, 0)$
 - ③ $(0, 8), (8, 0)$

$$\begin{aligned} (1) \quad & 2x_1 + x_2 = 10 \\ (2) \quad & x_1 + 2x_2 = 12 + \lambda \\ \hline & -3x_2 = -14 - 2\lambda \\ & x_2 = \frac{14 + 2\lambda}{3} \\ & x_1 = \frac{8 - \lambda}{3} \end{aligned}$$

$$\begin{aligned} (2) \quad & x_1 + 2x_2 = 12 + \lambda \\ (3) \quad & x_1 + x_2 = 8 \\ \hline & x_2 = 4 + \lambda \\ & x_1 = 4 - \lambda \end{aligned}$$

$$\begin{aligned} (1) \quad & 2x_1 + x_2 = 10 \\ (3) \quad & x_1 + x_2 = 8 \\ \hline & x_1 = 2 \rightarrow (2) \\ & x_2 = 6 \\ & 2 + 12 = 12 + \lambda \\ & \lambda = 2 \end{aligned}$$



② POHYB
↑