

## Primal problem

### Problemformulering

$$\begin{aligned} & \max 4x_1 + 3x_2 + 5x_3 \\ \text{u.b.b. } & 2x_1 + x_2 + 3x_3 \leq 4 \\ & -x_1 + x_2 \geq 0 \\ & x_1 + x_3 = 1 \end{aligned}$$

Samt fortegnskrav:  $x_1 \in \mathbb{R}, x_2 \geq 0, x_3 \geq 0$

## Dual problem

### Problemformulering

$$\begin{aligned} & \min 4y_1 + y_3 \\ \text{u.b.b. } & 2y_1 - y_2 + y_3 = 4 \\ & y_1 + y_2 \geq 3 \\ & 3y_1 + y_3 \geq 5 \end{aligned}$$

Samt fortegnskrav:  $y_1 \geq 0, y_2 \leq 0, y_3 \in \mathbb{R}$