

$$\begin{array}{ll} \min & [-5 \quad -4] x \\ \text{s. a.} & \begin{bmatrix} 1 & 2 & 1 & 0 & 0 \\ 2 & -1 & 0 & 1 & 0 \\ 5 & 3 & 0 & 0 & 1 \end{bmatrix} x = \begin{bmatrix} 6 \\ 4 \\ 15 \end{bmatrix} \end{array}$$

Problema tem base, vamos começar a pivotar.

Tableau

$$\begin{bmatrix} 1. & 2. & 1. & 0. & 0. & 6. \\ 2. & -1. & 0. & 1. & 0. & 4. \\ 5. & 3. & 0. & 0. & 1. & 15. \\ 5. & 4. & 0. & 0. & 0. & 0. \end{bmatrix}$$

Pivotando na linha 2 e coluna 1.

$$\begin{bmatrix} 0. & 2.5 & 1. & -0.5 & 0. & 4. \\ 1. & -0.5 & 0. & 0.5 & 0. & 2. \\ 0. & 5.5 & 0. & -2.5 & 1. & 5. \\ 0. & 6.5 & 0. & -2.5 & 0. & -10. \end{bmatrix}$$

Pivotando na linha 3 e coluna 2.

$$\begin{bmatrix} 0. & 0. & 1. & 0.636 & -0.455 & 1.727 \\ 1. & 0. & 0. & 0.273 & 0.091 & 2.455 \\ 0. & 1. & 0. & -0.455 & 0.182 & 0.909 \\ 0. & 0. & 0. & 0.455 & -1.182 & -15.909 \end{bmatrix}$$

Pivotando na linha 1 e coluna 4.

$$\begin{bmatrix} 0. & 0. & 1.571 & 1. & -0.714 & 2.714 \\ 1. & 0. & -0.429 & 0. & 0.286 & 1.714 \\ 0. & 1. & 0.714 & 0. & -0.143 & 2.143 \\ 0. & 0. & -0.714 & 0. & -0.857 & -17.143 \end{bmatrix}$$

Solução  $x =$

$$[1.714 \quad 2.143 \quad 0. \quad 2.714 \quad 0.]$$