

$$\begin{array}{ll} \min & [-2 \quad -5] x \\ \text{s. a.} & \begin{bmatrix} 1 & 2 & 1 & 0 \\ 2 & 1 & 0 & 1 \end{bmatrix} x = \begin{bmatrix} 16 \\ 12 \end{bmatrix} \end{array}$$

Problema tem base, vamos começar a pivotar.

$$\begin{bmatrix} 1. & 2. & 1. & 0. & 16. \\ 2. & 1. & 0. & 1. & 12. \\ 2. & 5. & 0. & 0. & 0. \end{bmatrix}$$

Pivotando na linha 1 e coluna 2.

$$\begin{bmatrix} 0.5 & 1. & 0.5 & 0. & 8. \\ 2. & 1. & 0. & 1. & 12. \\ 2. & 5. & 0. & 0. & 0. \end{bmatrix}$$

$$\begin{bmatrix} 0.5 & 1. & 0.5 & 0. & 8. \\ 1.5 & 0. & -0.5 & 1. & 4. \\ 2. & 5. & 0. & 0. & 0. \end{bmatrix}$$

$$\begin{bmatrix} 0.5 & 1. & 0.5 & 0. & 8. \\ 1.5 & 0. & -0.5 & 1. & 4. \\ -0.5 & 0. & -2.5 & 0. & -40. \end{bmatrix}$$

$$\begin{bmatrix} 0.5 & 1. & 0.5 & 0. & 8. \\ 1.5 & 0. & -0.5 & 1. & 4. \\ -0.5 & 0. & -2.5 & 0. & -40. \end{bmatrix}$$

Solução $x =$

$$[0. \quad 8. \quad 0. \quad 4. \quad 0. \quad 0.]$$