

$$\begin{array}{ll}\min & c^T x \\ \text{za podmínek} & Ax = b \\ & x \geq 0\end{array}$$

$$\begin{array}{llllllllllll}\min & -x_1 & - & 2x_2 & & & & & & & & & \\ \text{za podmínek} & x_1 & + & x_2 & + & s_1 & & & & & & = & 4 \\ & -2x_1 & + & x_2 & & & + & s_2 & & & & = & 2 \\ & x_1 & - & x_2 & & & & & + & s_3 & & = & 1 \\ & x_1 & & & & & & & & & & \geq & 0 \\ & & & x_2 & & & & & & & & \geq & 0 \\ & & & & & s_1 & & & & & & \geq & 0 \\ & & & & & & & s_2 & & & & \geq & 0 \\ & & & & & & & & & s_3 & & \geq & 0\end{array}$$

$$A = \begin{pmatrix} 1 & 1 & 1 & 0 & 0 \\ -2 & 1 & 0 & 1 & 0 \\ 1 & -1 & 0 & 0 & 1 \end{pmatrix}$$

$$b = \begin{pmatrix} 4 \\ 2 \\ 1 \end{pmatrix} \quad x = \begin{pmatrix} x_1 \\ x_2 \\ s_1 \\ s_2 \\ s_3 \end{pmatrix} \quad c = \begin{pmatrix} -1 \\ -2 \\ 0 \\ 0 \\ 0 \end{pmatrix}$$

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1 : [1, 2, 3] ----> [-3. -4. 11. 0. 0.]
2 : [1, 2, 4] ----> [2.5 1.5 0. 5.5 0. ]
3 : [1, 2, 5] ----> [0.66666667 3.33333333 0. 0. 3.66666667]
4 : [1, 3, 4] ----> [1. 0. 3. 4. 0.]
5 : [1, 3, 5] ----> [-1. 0. 5. 0. 2.]
6 : [1, 4, 5] ----> [ 4. 0. 0. 10. -3.]
7 : [2, 3, 4] ----> [ 0. -1. 5. 3. 0.]
8 : [2, 3, 5] ----> [0. 2. 2. 0. 3.]
9 : [2, 4, 5] ----> [ 0. 4. 0. -2. 5.]
10 : [3, 4, 5] ----> [0. 0. 4. 2. 1.]
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