

1 Soluzione LKKT

$$\begin{cases} l_2 - l_1 - \frac{2l_3}{5} - \frac{4l_4}{3} - 6x_2 - 3 = 0 \\ l_4 - l_3 - 6x_1 - 4x_2 - 10 = 0 \\ -l_1 (x_1 + 4) = 0 \\ l_2 (x_1 - 2) = 0 \\ -l_3 \left(\frac{2x_1}{5} + x_2 + \frac{6}{5} \right) = 0 \\ -l_4 \left(\frac{4x_1}{3} - x_2 + 4 \right) = 0 \\ -x_1 - 4 \leq 0 \\ x_1 - 2 \leq 0 \\ -\frac{2x_1}{5} - x_2 - \frac{6}{5} \leq 0 \\ x_2 - \frac{4x_1}{3} - 4 \leq 0 \end{cases}$$

Le soluzioni (per riga) sono:

$$x^* = \begin{pmatrix} -\frac{4}{3} & -\frac{1}{2} \\ 2 & -2 \\ -3 & 0 \\ -\frac{157}{104} & -\frac{31}{52} \\ 2 & \frac{20}{52} \\ -\frac{555}{208} & \frac{23}{52} \end{pmatrix} \quad \lambda^* = \begin{pmatrix} 0 & 0 & 0 & 0 \\ 0 & -\frac{73}{5} & -14 & 0 \\ 0 & 0 & \frac{115}{26} & -\frac{93}{26} \\ 0 & 0 & \frac{75}{52} & 0 \\ 0 & \frac{971}{9} & 0 & \frac{146}{3} \\ 0 & 0 & 0 & -\frac{441}{104} \end{pmatrix} \quad \mu^* = ()$$