

$$\begin{aligned}
& \exists x_2, x_3, y_2, y_3, z_{11}, \dots, z_{44}, \exists u_1, \dots, u_{12}, v_1, \dots, v_{12} : \\
& 0 \geq x_2 \geq x_3 \geq 1, \\
& 0 \geq y_2 \geq y_3 \geq 1, \\
& u_9 \geq 0, \\
& u_1x_2 + u_5z_{21} + u_9 \geq 0, \\
& u_1x_3 + u_5z_{31} + u_9 \geq 0, \\
& u_1 + u_9 \geq 0, \\
& u_{10} + u_6z_{12} \geq 0, \\
& u_{10} + u_2x_2 + u_6z_{22} \geq 0, \\
& u_{10} + u_2x_3 + u_6z_{32} \geq 0, \\
& u_{10} + u_2 + u_6z_{42} \geq 0, \\
& u_{11} + u_7z_{13} \geq 0, \\
& u_{11} + u_3x_2 + u_7z_{23} \geq 0, \\
& u_{11} + u_3x_3 + u_7z_{33} \geq 0, \\
& u_{11} + u_3 + u_7z_{43} \geq 0, \\
& u_{12} + u_8 \geq 0, \\
& u_{12} + u_4x_2 + u_8z_{24} \geq 0, \\
& u_{12} + u_4x_3 + u_8z_{34} \geq 0, \\
& u_{12} + u_4 \geq 0, \\
& -u_6y_2 - u_7y_3 - u_8 \geq 0, \\
& -u_1 - u_2 - u_3 - u_4 \geq 0, \\
& -u_5 - u_6 - u_7 - u_8 \geq 0, \\
& u_6y_2 + u_7y_3 + u_8 \geq 0, \\
& u_1 + u_2 + u_3 + u_4 \geq 0, \\
& u_5 + u_6 + u_7 + u_8 \geq 0, \\
& v_9 \geq 0, \\
& v_1y_2 + v_5z_{12} + v_9 \geq 0, \\
& v_1y_3 + v_5z_{13} + v_9 \geq 0, \\
& v_1 + v_5 + v_9 \geq 0, \\
& v_{10} + v_6z_{21} \geq 0, \\
& v_{10} + v_2y_2 + v_6z_{22} \geq 0, \\
& v_{10} + v_2y_3 + v_6z_{23} \geq 0, \\
& v_{10} + v_2 + v_6z_{24} \geq 0, \\
& v_{11} + v_7z_{31} \geq 0, \\
& v_{11} + v_3y_2 + v_7z_{32} \geq 0, \\
& v_{11} + v_3y_3 + v_7z_{33} \geq 0, \\
& v_{11} + v_3 + v_7z_{34} \geq 0, \\
& v_{12} \geq 0, \\
& v_{12} + v_4y_2 + v_8z_{42} \geq 0, \\
& v_{12} + v_4y_3 + v_8z_{43} \geq 0, \\
& v_{12} + v_4 \geq 0, \\
& -v_6x_2 - v_7x_3 - v_8 \geq 0, \\
& -v_1 - v_2 - v_3 - v_4 \geq 0, \\
& -v_5 - v_6 - v_7 - v_8 \geq 0, \\
& v_6x_2 + v_7x_3 + v_8 \geq 0, \\
& v_1 + v_2 + v_3 + v_4 \geq 0, \\
& v_5 + v_6 + v_7 + v_8 \geq 0, \\
& u_{10} + u_{11} + u_{12} + u_9 < 0, \\
& v_{10} + v_{11} + v_{12} + v_9 < 0,
\end{aligned}$$