

max: $x_1 + 3x_2$
 sub to: $-x_1 - 1x_2 \leq -3$
 $-x_1 + 1x_2 \leq -1$
 $x_1 + 2x_2 \leq 4$
 $x_1, x_2 \geq 0$

Primal

min: $-3y_1 - 1y_2 + 4y_3$
 sub to: $-1y_1 - 1y_2 + 1y_3 \geq 1$
 $-1y_1 + 1y_2 + 2y_3 \geq 3$
 $y_1, y_2, y_3 \geq 0$

DUAL