1.

$L = 2x_1 + 2x_2 \to \max$

$3x_1 - 2x_2 \geq -6$

$x_1 + x_2 \geq 3$

$x_1 \leq 3$

$x_2 \leq 5$

$x_1 \geq 0,\ x_2 \geq 0$

2.

$L = 2x_1 - 4x_2 \to \max$

$8x_1 - 5x_2 \leq 16$

$x_1 + 3x_2 \geq 2$

$2x_1 + 7x_2 \leq 9$

$x_1 \geq 0,\ x_2 \geq 0$

3.

$L = x_1 + x_2 \to \max$

$x_1 + x_2 \geq 1$

$-5x_1 + x_2 \leq 0$

$-x_1 + 5x_2 \geq 0$

$x_1 + x_2 \leq 6$

$x_1 \geq 0,\ x_2 \geq 0$

4.

$L = -2x_1 + x_2 \to \min$

$2x_1 + x_2 \leq 8$

$x_1 + 3x_2 \geq 6$

$3x_1 + x_2 \geq 3$

$x_1 \geq 0,\ x_2 \geq 0$

5.

$L = 2x_1 - x_2 \to \max$

$2x_1 + x_2 \leq 8$

$x_1 + x_2 \leq 6$

$-3x_1 + 2x_2 \geq 3$

$x_1 \geq 0,\ x_2 \geq 0$

6.

$L = -3x_1 + x_2 \to \min$

$x_1 + 2x_2 \geq 10$

$3x_1 + x_2 \geq 15$

$x_1 \leq 8$

$x_1 \geq 0,\ x_2 \geq 0$

7.

$L = 2x_1 + 2x_2 \to \max$

$3x_1 - 2x_2 \geq -6$

$x_1 + x_2 \geq 3$

$x_1 \leq 9$

$x_2 \leq 6$

$x_1 \geq 0,\ x_2 \geq 0$

8.

$L = x_1 + 2x_2 \to \max$

$x_1 + x_2 \leq 4$

$3x_1 + x_2 \geq 4$

$x_1 + 5x_2 \geq 4$

$x_1 \leq 3$

$x_2 \leq 3$

$x_1 \geq 0,\ x_2 \geq 0$

9.

$L = 3x_1 + 2x_2 \to \max$

$4x_1 + 2x_2 \geq 12$

$x_1 + 2x_2 \leq 10$

$2x_1 + 2x_2 \leq 6$

$x_1 \geq 0,\ x_2 \geq 0$

10.

$L = 3x_1 + 3x_2 \to \max$

$x_1 + x_2 \leq 4$

$3x_1 + x_2 \geq 4$

$x_1 \leq 3$

$x_2 \leq 3$

$x_1 \geq 0,\ x_2 \geq 0$

11.

$L = x_1 + 2x_2 \to \max$

$2x_1 + 3x_2 \leq 15$

$x_1 + 2x_2 \geq 6$

$x_1 + x_2 \leq 8$

$x_1 \geq 0,\ x_2 \geq 0$

12.

$L = -x_1 - 2x_2 \to \min$

$5x_1 - 2x_2 \leq 4$

$-x_1 + 2x_2 \leq 4$

$x_1 + x_2 \geq 4$

$x_1 \geq 0,\ x_2 \geq 0$