

LP Graphical Solution

Enter the following LP problems into QM or TORA and solve them using graphical solution:

1. Minimize costs = $X_1 + X_2$
Subject to $-0.6X_1 + 0.4X_2 \leq 0$
 $0.2X_1 + 0.1X_2 \geq 14$
 $0.25X_1 + 0.6X_2 \geq 30$
 $0.15X_1 + 0.1X_2 \geq 8$
 $X_1, X_2 \geq 0$

2. Minimize $Z = 3X_1 + 8X_2$
Subject to $X_1 + X_2 \geq 8$
 $2X_1 - 3X_2 \leq 0$
 $X_1 + 2X_2 \leq 30$
 $3X_1 - X_2 \geq 0$
 $X_1 \leq 10$
 $X_2 \geq 9$
 $X_1, X_2 \geq 0$

3. Maximize profit = $5X_1 + 4X_2$
Subject to $6X_1 + 4X_2 \leq 24$
 $6X_1 + 3X_2 \leq 22.5$
 $X_1 + X_2 \leq 5$
 $X_1 + 2X_2 \leq 6$
 $-X_1 + X_2 \leq 1$
 $X_2 \leq 2$
 $X_1, X_2 \geq 0$