Objective function: min $3x_{11} + 4x_{12} + 6x_{13} + 5x_{21} + 7x_{22} + 3x_{23}$

$$\sum_{i=1}^{3} x_{1i} \leq 15 \longrightarrow \text{Supply limit of P1}$$

$$\sum_{i=1}^{3} x_{2i} \leq 20 \longrightarrow \text{Supply limit of P2}$$

$x_{11} + x_{21} \geq 17 \longrightarrow \text{Demand constraint of } M_1$

$x_{12} + x_{22} \geq 8 \longrightarrow \text{Demand constraint of } M_2$

$x_{13} + x_{23} \geq 10 \longrightarrow \text{Demand constraint of } M_3$