



臺灣大學

cost

$$\text{Min } 3P_1M_1 + 4P_1M_2 + 6P_1M_3 + 5P_2M_1 + 7P_2M_2 + 5P_2M_3$$

$$P_1M_1 + P_2M_1 \geq 17 \quad P_1M_1 + P_1M_2 + P_1M_3 \leq 15$$

$$P_1M_2 + P_2M_2 \geq 8 \quad P_2M_1 + P_2M_2 + P_2M_3 \leq 20$$

$$P_1M_3 + P_2M_3 \geq 10$$

demand supply

This is a transshipment problem.

Our goal is to minimize the total transshipment costs, while successfully meet markets' demands and avoid overloading the production plants. The equations can be seen above, each variable denotes to how many unit of toys to be sent via each route

To conclude.

Send	7	units of toys from	P1 to M1
"	8	"	P1 to M2
"	10	"	P2 to M1
"	10	"	P2 to M3

And the total cost will be \$153