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X_{11} = Liters of C1 to be included in product GCA
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$$X_{21} = \text{Liters of C2 to be included in product GCA}$$

$$X_{12}$$
 = Liters of C1 to be included in product GCB

$$X_{22} = \text{Liters of C2 to be included in product GCB}$$

$$X_{13} = \text{Liters of C1 to be included in product GCC}$$

$$X_{23} = \text{Liters of C2 to be included in product GCC}$$

Maximize
$$z = 120(X_{11} + X_{21}) + 135(X_{12} + X_{22}) + 155(X_{13} + X_{23})$$

Subject to:
$$X_{11} + X_{12} + X_{13} \le 10000$$
 (availability of component C1)

$$X_{21} + X_{22} + X_{23} \le 15000$$
 (availability of component C2)

$$X_{11} + X_{21} \ge 6000$$
 (demand of product GCA)

$$X_{12} + X_{22} \ge 7000$$
 (demand of product GCB)

$$X_{13} + X_{23} \ge 9000$$
 (demand of product GCC)

$$0.4X_{11} + 0.2X_{21} \ge 0.3(X_{11} + X_{21})$$

(Product GCA must contain at least one 0.3 fraction of the critical element)

$$0.4X_{12} + 0.2X_{22} \le 0.3(X_{12} + X_{22})$$

(Product GCB must contain one 0.3 fraction of the critical element at the most)

 $X_{13} \ge 0.3X_{23}$ (the minimum ratio between C1 and C2 must be 0.3)

$$X_{11}, X_{21}, X_{12}, X_{22}, X_{13}, X_{23} \geq 0$$