

Q79. Three products A, B, and C are produced from raw materials at plant X. The production time per unit volume of each product, the required quantity of raw materials, and the profit amounts are shown in the table below. The maximum production hours per month at this plant total 240 hours, and the amount of raw materials that can be fed for production is 150 kg per month.

Under these conditions, management would like to know how many of A, B, and C should be manufactured so as to yield maximum profits. Which of the following is an appropriate method for solving this problem?

Product	A	B	C
Production time (hours)	2	3	1
Quantity of raw materials required (kg)	2	1	2
Profit (US\$)	80	50	50

- a) Fixed order quantity system
- b) Least squares method
- c) Linear programming method
- d) Moving average method