

HOMEWORK 3

Question 1:

Consider a company facing a demand pattern and costs as follows:

Month	Sequential Number	Requirements (units)
January	1	20
February	2	40
March	3	110
April	4	120
May	5	60
June	6	30
July	7	20
August	8	30
September	9	80
October	10	120
November	11	130
December	12	40
	Total	800

A	\$25.00
r (per month)	0.05\$/\$ (carrying costs are very high in this industry)
v	\$4.00

- Construct a replenishment schedule and calculate the associated costs using the Silver–Meal heuristic.
- Repeat using the LUC method.
- Repeat using the PPB method.

Question 2:

Consider a company facing a demand pattern and costs as follows:

Month	Sequential Number	Requirements (units)
January	1	350
February	2	200
March	3	0
April	4	150
May	5	500
June	6	600
July	7	450
August	8	350
September	9	200
October	10	0
November	11	150
December	12	200
	Total	3,150

A	\$50.00
r (per month)	1.05\$/\$
v	\$65.00

Construct a replenishment schedule and calculate the associated costs using the Network method.