

Month Demand

1 20

2 40

3 110

4 120

5 60

6 30

7 20

8 30

9 80

10 120

11 130

12 40

800

A 25

r 0,05

v 4

h 0,2

### At t=1:

Ch1,1 = 0 < 25

Ch1,2 = h1D2 = 8 < 25

Ch1,3 = h1(D2+D3)+h2D3 = 52 > 25

**Q1 = D1+D2 = 20+40 = 60**

17 --> closer to 25

27

### At t=3:

Ch3,3 = 0 < 25

Ch3,4 = h3D4 = 24 < 25

Ch3,5 = h3(D4+D5)+h4D5 = 48 > 25

**Q3 = D3+D4 = 110+120 = 230**

1 --> closer to 25

23

### At t=5:

Ch5,5 = 0 < 25

Ch5,6 = h5D6 = 6 < 25

Ch5,7 = h5(D6+D7)+h6D7 = 14 < 25

Ch5,8 = h5(D6+D7+D8)+h6(D7+D8)+h7D8 = 32 > 25

**Q5 = D5+D6+D7+D8 = 60+30+20+30 = 140**

11

7 --> closer to 25

### At t=9:

Ch9,9 = 0 < 25

Ch9,10 = h9D10 = 24 < 25

Ch9,11 = h9(D10+D11)+h10D11 = 76 > 25

**Q9 = D9+D10 = 80+120 = 200**

1 --> closer to 25

51

### At t=11:

Ch11,11 = 0 < 25

Ch11,12 = h11D12 = 8 < 25

**Q11 = D11+D12 = 130+40 = 170**

t	1	2
Dt	20	40
Qt	60	
It	40	0
Setup cos	25	0
Holding c	8	0
Total cost	33	0

3	4	5	6	7	8	9	10	11	12	Total
110	120	60	30	20	30	80	120	130	40	800
230		140				200		170		800
120	0	80	50	30	0	120	0	40	0	480
25	0	25	0	0	0	25	0	25	0	125
24	0	16	10	6	0	24	0	8	0	96
49	0	41	10	6	0	49	0	33	0	221