

Month	Demand	<u>At t=1:</u>
1	20	$z_{1,1} = (A_1 + v_1 D_1) / 1 = 105$
2	40	$z_{1,2} = [A_1 + v_1 (D_1 + D_2) + h_1 D_2] / 2 = 136,5 > 105$
3	110	Q1 = D1 = 20
4	120	
5	60	<u>At t=2:</u>
6	30	$z_{2,2} = (A_2 + v_2 D_2) / 1 = 185$
7	20	$z_{2,3} = [A_2 + v_2 (D_2 + D_3) + h_2 D_3] / 2 = 323,5 > 185$
8	30	Q2 = D2 = 40
9	80	
10	120	<u>At t=3:</u>
11	130	$z_{3,3} = (A_3 + v_3 D_3) / 1 = 465$
12	40	$z_{3,4} = [A_3 + v_3 (D_3 + D_4) + h_3 D_4] / 2 = 484,5 > 465$
	800	Q3 = D3 = 110
A	25	<u>At t=4:</u>
r	0,05	$z_{4,4} = (A_4 + v_4 D_4) / 1 = 505$
v	4	$z_{4,5} = [A_4 + v_4 (D_4 + D_5) + h_4 D_5] / 2 = 378,5 < 505$
h	0,2	$z_{4,6} = [A_4 + v_4 (D_4 + D_5 + D_6) + h_4 (D_5 + D_6) + h_5 D_6] / 3 = 296,3333 < 378,5$
		$z_{4,7} = [A_4 + v_4 (D_4 + D_5 + D_6 + D_7) + h_4 (D_5 + D_6 + D_7) + h_5 (D_6 + D_7) + h_6 D_7] / 4 = 245,25 < 296,33$
		$z_{4,8} = [A_4 + v_4 (D_4 + D_5 + D_6 + D_7 + D_8) + h_4 (D_5 + D_6 + D_7 + D_8) + h_5 (D_6 + D_7 + D_8) + h_6 (D_7 + D_8) + h_7 D_8] / 5 = 225 < 245,25$
		$z_{4,9} = [A_4 + v_4 (D_4 + D_5 + D_6 + D_7 + D_8 + D_9) + h_4 (D_5 + D_6 + D_7 + D_8 + D_9) + h_5 (D_6 + D_7 + D_8 + D_9) + h_6 (D_7 + D_8 + D_9) + h_7 (D_8 + D_9) + h_8 D_9] / 6 =$
		Q4 = D4 + D5 + D6 + D7 + D8 = 120 + 60 + 30 + 20 + 30 = 260
		<u>At t=9:</u>
		$z_{9,9} = (A_9 + v_9 D_9) / 1 = 345$
		$z_{9,10} = [A_9 + v_9 (D_9 + D_{10}) + h_9 D_{10}] / 2 = 424,5 > 345$
		Q9 = D9 = 80
		<u>At t=10:</u>
		$z_{10,10} = (A_{10} + v_{10} D_{10}) / 1 = 505$
		$z_{10,11} = [A_{10} + v_{10} (D_{10} + D_{11}) + h_{10} D_{11}] / 2 = 525,5 > 505$

$$Q_{10} = D_{10} = 120$$

At t=11:

$$z_{11,11} = (A_{11} + v_{11}D_{11})/1 = 545$$

$$z_{11,12} = [A_{11} + v_{11}(D_{11} + D_{12}) + h_{11}D_{12}]/2 = 356,5 < 545$$

$$Q_{11} = D_{11} + D_{12} = 130 + 40 = 170$$

t	1	2	3	4	5	6	7	8	9	10	11	12	Total
Dt	20	40	110	120	60	30	20	30	80	120	130	40	800
Qt	20	40	110	260					80	120	170		800
It	0	0	0	140	80	50	30	0	0	0	40	0	340
Setup cost	25	25	25	25	0	0	0	0	25	25	25	0	175
Holding cost	0	0	0	28	16	10	6	0	0	0	8	0	68
Total cost	25	25	25	53	16	10	6	0	25	25	33	0	243

254,1666667 >225

