

Month	Demand	<b>Step 1:</b>	$z1^* =$	0		
1	350					Q12=D12=200
2	200	<b>Step 2:</b>	$c1,2 = A1+v1D1 =$	22800		Q11=D11=150
3	0		$z2^* = z1^* + c1,2 =$	22800		Q9=D9+D10=200
4	150		<b>p2* = 1</b>			Q8=D8=350
5	500					Q7=D7=450
6	600	<b>Step 3:</b>	$c1,3 = A1+v1(D1+D2)+h1D2 =$	49450		Q6=D6=600
7	450		$c2,3 = A2+v2D2 =$	13050		Q5=D5=500
8	350		$z3^* = \min \quad z1^* + c1,3$	49450		Q4=D4=150
9	200		$z2^* + c2,3$	35850		Q2=D2+D3=200
10	0		<b>p3* = 2</b>			Q1=D1=350
11	150					
12	200	<b>Step 4:</b>	$c2,4 = A2+v2(D2+D3)+h2D3 =$	13050		
	3150		$c3,4 = A3+v3D3 =$	50		
			$z4^* = \min \quad z2^* + c2,4$	35850		
A	50		$z3^* + c3,4$	35900		
r	1,05		<b>p4* = 2</b>			
v	65					
h	68,25	<b>Step 5:</b>	$c2,5 = A2+v2(D2+D3+D4)+h2(D3+D4)+h3D4 =$	43275		
			$c3,5 = A3+v3(D3+D4)+h3D4 =$	20037,5		
			$c4,5 = A4+v4D4 =$	9800		
			$z5^* = \min \quad z2^* + c2,5$	66075		
			$z3^* + c3,5$	55887,5		
			$z4^* + c4,5$	45650		
			<b>p5* = 4</b>			
		<b>Step 6:</b>	$c4,6 = A4+v4(D4+D5)+h4D5 =$	76425		
			$c5,6 = A5+v5D5 =$	32550		
			$z6^* = \min \quad z4^* + c4,6$	112275		
			$z5^* + c5,6$	78200		
			<b>p6* = 5</b>			

**Step 7:**  $c_{5,7} = A_5 + v_5(D_5 + D_6) + h_5 D_6 = 112500$   
 $c_{5,6} = A_6 + v_6 D_6 = 39050$   
 $z_6^* = \min \quad \begin{array}{ll} z_4^* + c_{4,6} & 158150 \\ z_5^* + c_{5,6} & 117250 \end{array}$   
 **$p_7^* = 6$**

**Step 8:**  $c_{6,8} = A_6 + v_6(D_6 + D_7) + h_6 D_7 = 99012,5$   
 $c_{7,8} = A_7 + v_7 D_7 = 29300$   
 $z_8^* = \min \quad \begin{array}{ll} z_6^* + c_{6,8} & 177212,5 \\ z_7^* + c_{7,8} & 146550 \end{array}$   
 **$p_8^* = 7$**

**Step 9:**  $c_{7,9} = A_7 + v_7(D_7 + D_8) + h_7 D_8 = 75937,5$   
 $c_{8,9} = A_8 + v_8 D_8 = 22800$   
 $z_9^* = \min \quad \begin{array}{ll} z_7^* + c_{7,9} & 193187,5 \\ z_8^* + c_{8,9} & 169350 \end{array}$   
 **$p_9^* = 8$**

**Step 10:**  $c_{8,10} = A_8 + v_8(D_8 + D_9) + h_8 D_9 = 49450$   
 $c_{9,10} = A_9 + v_9 D_9 = 13050$   
 $z_{10}^* = \min \quad \begin{array}{ll} z_8^* + c_{8,10} & 196000 \\ z_9^* + c_{9,10} & 182400 \end{array}$   
 **$p_{10}^* = 9$**

**Step 11:**  $c_{9,11} = A_9 + v_9(D_9 + D_{10}) + h_9 D_{10} = 13050$   
 $c_{10,11} = A_{10} + v_{10} D_{10} = 50$   
 $z_{11}^* = \min \quad \begin{array}{ll} z_9^* + c_{9,11} & 182400 \\ z_{10}^* + c_{10,11} & 182450 \end{array}$   
 **$p_{11}^* = 9$**

**Step 12:**  $c_{9,12} = A_9 + v_9(D_9 + D_{10} + D_{11}) + h_9(D_{10} + D_{11}) + h_{10} D_{11} = 43275$

$$c_{10,12} = A_{10} + v_{10}(D_{10} + D_{11}) + h_{10}D_{11} = 20037,5$$

$$c_{11,12} = A_{11} + v_{11} = 9800$$

$$z_{12}^* = \min \quad z_9^* + c_{9,12} \quad 212625$$

$$z_{10}^* + c_{10,12} \quad 202437,5$$

$$z_{11}^* + c_{11,12} \quad 192200$$

$$p_{12}^* = 11$$

**Step 13:**  $c_{11,13} = A_{11} + v_{11}(D_{11} + D_{12}) + h_{11}D_{12} = 36450$

$$c_{12,13} = A_{12} + v_{12}D_{12} = 13050$$

$$z_{13}^* = \min \quad z_{11}^* + c_{11,13} \quad 218850$$

$$z_{12}^* + c_{12,13} \quad 205250$$

$$p_{13}^* = 12$$

<b>t</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>Total</b>
<b>Dt</b>	350	200	0	150	500	600	450	350	200	0	150	200	3150
<b>Qt</b>	350	200		150	500	600	450	350	200		150	200	3150
<b>It</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Setup cost</b>	50	50	0	50	50	50	50	50	50	0	50	50	500
<b>Holding cost</b>	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total cost</b>	50	50	0	50	50	50	50	50	50	0	50	50	500



