

	A	B	C	D	E	F	G	H	I
1	<b>Problem: Production of P Head and H Head</b>								
2									
3									
4	<b>Week</b>	<b><math>X_i(1=P\text{-Head } 0=H\text{-Head})</math></b>	<b><math>C_i(1=\text{changeover})</math></b>	<b><math>P_i(Qp\text{-head})</math></b>	<b><math>H_i(Qh\text{-head})</math></b>	<b>Production Constraint P</b>	<b>Production Constraint H</b>		
5	Week 0	1							
6	Week 1	0	0	0	0	0	80		
7	Week 2	1	1	83	0	100	0		
8	Week 3	1	0	100	0	100	0		
9	Week 4	0	1	0	2	0	80		
10	Week 5	0	0	0	59	0	80		
11	Week 6	0	0	0	80	0	80		
12	Week 7	0	0	0	80	0	80		
13	Week 8	1	1	42	0	100	0		
14	Week 9	0	1	0	11	0	80		
15									
16									
17									
18					Decision Variables $\geq 0$		Constraint Limit on P Head		Constraint Limit on H Head
19					Constraint Non Negativity				
20									
21	<b>Inventory at end of week</b>	<b><math>I_i</math> (Inventory at end of week)</b>	<b>Demand P</b>	<b>Demand H</b>	<b>Inventory Constraint P</b>	<b>Inventory Constraint H</b>			
22	125	143	0	0					
23	70	105	55	38	44	30.4			
24	98	67	55	38	35.2	24			
25	154	37	44	30	0	0			
26	154	39	0	0	36	38.4			
27	109	50	45	48	36	38.4			
28	64	82	45	48	28.8	46.4			
29	28	104	36	58	28	45.6			
30	35	47	35	57	28	46.4			
31	0	0	35	58	0	0			
32									
33	<b>Cost Minimize</b>	<b>\$</b>	<b>126,034.74</b>						
34									
35			Objective, Minimize		Constraint Meet 80% Demand of Next Week P-Head		Constraint Meet 80% Demand of Next Week H-Head		