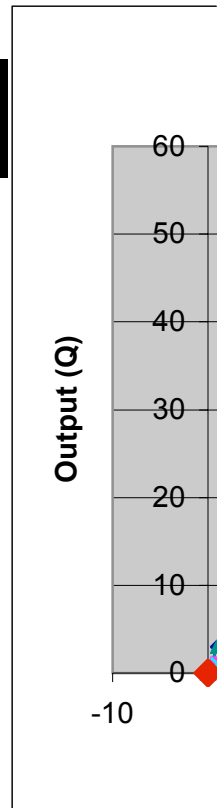


Profit Maximization Problem with One Input and One Output

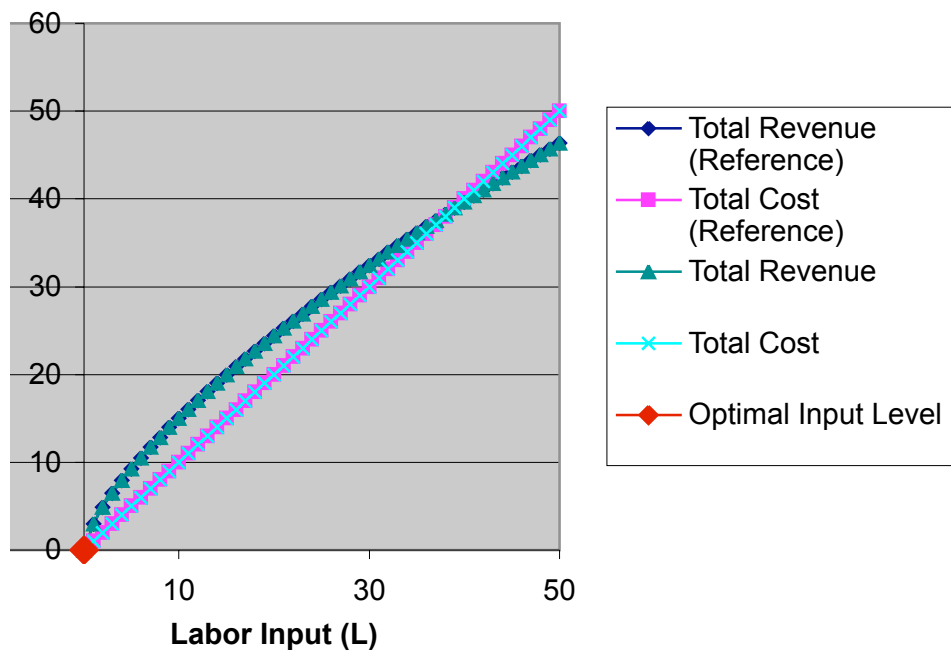
A	1	L*	11.85944	L*-ref	11.85944	L*-solver	0
α	0.7	Q*	5.647354	Q*-ref	5.647354	Q*-solver	0
P	3	π^*	5.082619	π^* -ref	5.082619	π^* -solver	0
w	1						

L	Q	TR	TC	π	TR-ref	TC-ref	π -ref
0	0	0	0	0	0	0	0
1	1	3	1	2	3	1	2
2	1.624505	4.873514	2	2.873514	4.873514	2	2.873514
3	2.157669	6.473008	3	3.473008	6.473008	3	3.473008
4	2.639016	7.917047	4	3.917047	7.917047	4	3.917047
5	3.085169	9.255508	5	4.255508	9.255508	5	4.255508
6	3.505144	10.51543	6	4.515432	10.51543	6	4.515432
7	3.904529	11.71359	7	4.713586	11.71359	7	4.713586
8	4.287094	12.86128	8	4.861282	12.86128	8	4.861282
9	4.655537	13.96661	9	4.96661	13.96661	9	4.96661
10	5.011872	15.03562	10	5.035617	15.03562	10	5.035617
11	5.357657	16.07297	11	5.07297	16.07297	11	5.07297
12	5.694123	17.08237	12	5.08237	17.08237	12	5.08237
13	6.022272	18.06682	13	5.066815	18.06682	13	5.066815
14	6.342926	19.02878	14	5.028777	19.02878	14	5.028777
15	6.656775	19.97033	15	4.970325	19.97033	15	4.970325
16	6.964405	20.89321	16	4.893214	20.89321	16	4.893214
17	7.266315	21.79895	17	4.798946	21.79895	17	4.798946
18	7.562942	22.68883	18	4.688825	22.68883	18	4.688825
19	7.854662	23.56399	19	4.563987	23.56399	19	4.563987
20	8.141811	24.42543	20	4.425432	24.42543	20	4.425432
21	8.424682	25.27405	21	4.274045	25.27405	21	4.274045
22	8.703539	26.11062	22	4.110617	26.11062	22	4.110617
23	8.978618	26.93585	23	3.935853	26.93585	23	3.935853
24	9.250131	27.75039	24	3.750392	27.75039	24	3.750392
25	9.51827	28.55481	25	3.554809	28.55481	25	3.554809
26	9.783209	29.34963	26	3.349628	29.34963	26	3.349628
27	10.04511	30.13533	27	3.135326	30.13533	27	3.135326
28	10.30411	30.91234	28	2.91234	30.91234	28	2.91234
29	10.56036	31.68107	29	2.681071	31.68107	29	2.681071
30	10.81396	32.44189	30	2.441889	32.44189	30	2.441889
31	11.06505	33.19514	31	2.195135	33.19514	31	2.195135
32	11.31371	33.94113	32	1.941125	33.94113	32	1.941125
33	11.56005	34.68015	33	1.680154	34.68015	33	1.680154
34	11.80416	35.41249	34	1.412493	35.41249	34	1.412493
35	12.04613	36.1384	35	1.138397	36.1384	35	1.138397
36	12.28604	36.85811	36	0.858105	36.85811	36	0.858105
37	12.52395	37.57184	37	0.57184	37.57184	37	0.57184
38	12.75994	38.27981	38	0.27981	38.27981	38	0.27981
39	12.99407	38.98221	39	-0.017788	38.98221	39	-0.017788
40	13.22641	39.67923	40	-0.320769	39.67923	40	-0.320769
41	13.45701	40.37104	41	-0.628958	40.37104	41	-0.628958



42	13.68594	41.05781	42	-0.942192	41.05781	42	-0.942192
43	13.91323	41.73969	43	-1.260314	41.73969	43	-1.260314
44	14.13894	42.41682	44	-1.583178	42.41682	44	-1.583178
45	14.36312	43.08936	45	-1.910643	43.08936	45	-1.910643
46	14.58581	43.75742	46	-2.242577	43.75742	46	-2.242577
47	14.80705	44.42115	47	-2.578854	44.42115	47	-2.578854
48	15.02688	45.08064	48	-2.919355	45.08064	48	-2.919355
49	15.24534	45.73603	49	-3.263965	45.73603	49	-3.263965
50	15.46247	46.38742	50	-3.612576	46.38742	50	-3.612576

Total Revenue & Total Cost



Profit Maximization Problem with Two Inputs and One Output

A	1	L*	3.814697	L*-ref	3.814697
α	0.5	K*	3.051758	K*-ref	3.051758
β	0.4	Q*	3.051758	Q*-ref	3.051758
		π^*	0.762939	π^* -ref	0.762939

P	2.5
w	1
r	1

max-data table

L*-solver	1
K*-solver	1
Q*-solver	1
π^* -solver	0.5

		Labor Input (L)						
		0	1	2	3	4	5	6
Capital Input (K)	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							

7

8

9

10

Profit Maximization Problem with Two Inputs and One Output

A	1	L*	3.814697	L*-ref	3.814697
α	0.5	K*	3.051758	K*-ref	3.051758
β	0.4	Q*	3.051758	Q*-ref	3.051758
		π^*	0.762939	π^* -ref	0.762939
P	2.5	max-data table 0.759228			
w	1				
r	1				

L*-solver	1								
K*-solver	1								
Q*-solver	1								
π^* -solver	0.5								
		Labor Input (L)							
		0	1	2	3	4	5	6	
Capital Input (K)	0	0	-1	-2	-3	-4	-5	-6	
	1	-1	0.5	0.535534	0.330127	0	-0.40983	-0.876276	
	2	-2	0.29877	0.665165	0.713637	0.59754	0.376273	0.080303	
	3	-3	-0.120386	0.486603	0.719688	0.759228	0.67508	0.503075	
	4	-4	-0.647247	0.155722	0.539189	0.705506	0.733051	0.662023	
	5	-5	-1.240865	-0.269567	0.243063	0.51827	0.641749	0.657452	
	6	-6	-1.880819	-0.760384	-0.133318	0.238363	0.446837	0.539382	
	7	-7	-2.555234	-1.299938	-0.569389	-0.110468	0.174867	0.336899	
	8	-8	-3.256508	-1.877476	-1.05198	-0.513016	-0.157162	0.068624	
	9	-9	-3.979438	-2.48564	-1.572081	-0.958877	-0.537615	-0.252696	
	10	-10	-4.720284	-3.11914	-2.123213	-1.440568	-0.958128	-0.6179	

7	8	9	10
-7	-8	-9	-10
-1.385622	-1.928932	-2.5	-3.094306
-0.272276	-0.66967	-1.103691	-1.568374
0.264494	-0.026795	-0.361158	-0.731584
0.516301	0.311444	0.058258	-0.235387
0.591487	0.460866	0.277405	0.049706
0.544081	0.479231	0.357544	0.188273
0.405497	0.400124	0.334298	0.217862
0.195851	0.245048	0.230475	0.162516
-0.071091	0.02872	0.061685	0.038688
-0.385433	-0.238281	-0.160852	-0.141794

Profit Maximization Problem with Two Inputs and One Output

A	1	L*	3.814697	L*-ref	3.814697	Level
α	0.5	K*	3.051758	K*-ref	3.051758	1
β	0.4	Q*	3.051758	Q*-ref	3.051758	2
P	2.5	π^*	0.762939	π^* -ref	0.762939	3
w	1	max-data table		0.759228		4
r	1					

L*-solver	1							
K*-solver	1							
Q*-solver	1							
π^* -solver	0.5							
		Labor Input (L)						
		0	1	2	3	4	5	6
Capital Input (K)	0	0	-1	-2	-3	-4	-5	-6
	1	-1	0.5	0.535534	0.330127	0	-0.40983	-0.876276
	2	-2	0.29877	0.665165	0.713637	0.59754	0.376273	0.080303
	3	-3	-0.120386	0.486603	0.719688	0.759228	0.67508	0.503075
	4	-4	-0.647247	0.155722	0.539189	0.705506	0.733051	0.662023
	5	-5	-1.240865	-0.269567	0.243063	0.51827	0.641749	0.657452
	6	-6	-1.880819	-0.760384	-0.133318	0.238363	0.446837	0.539382
	7	-7	-2.555234	-1.299938	-0.569389	-0.110468	0.174867	0.336899
	8	-8	-3.256508	-1.877476	-1.05198	-0.513016	-0.157162	0.068624
	9	-9	-3.979438	-2.48564	-1.572081	-0.958877	-0.537615	-0.252696
	10	-10	-4.720284	-3.11914	-2.123213	-1.440568	-0.958128	-0.6179

from	to
-999	0.2
0.200001	0.5
0.500001	0.6
0.600001	0.7

7	8	9	10
-7	-8	-9	-10
-1.385622	-1.928932	-2.5	-3.094306
-0.272276	-0.66967	-1.103691	-1.568374
0.264494	-0.026795	-0.361158	-0.731584
0.516301	0.311444	0.058258	-0.235387
0.591487	0.460866	0.277405	0.049706
0.544081	0.479231	0.357544	0.188273
0.405497	0.400124	0.334298	0.217862
0.195851	0.245048	0.230475	0.162516
-0.071091	0.02872	0.061685	0.038688
-0.385433	-0.238281	-0.160852	-0.141794

Profit Maximization Problem with Two Inputs and One Output

A	1	L*	3.814697	L*-ref	3.814697	Level	
α	0.5	K*	3.051758	K*-ref	3.051758	1	
β	0.4	Q*	3.051758	Q*-ref	3.051758	2	
P	2.5	π^*	0.762939	π^* -ref	0.762939	3	
w	1	max-data table				0.759228	4
r	1						

L*-solver	1								
K*-solver	1								
Q*-solver	1								
π^* -solver	0.5								
		Labor Input (L)							
		0	1	2	3	4	5	6	
Capital Input (K)	0	0	-1	-2	-3	-4	-5	-6	
	1	-1	0.5	0.535534	0.330127	0	-0.40983	-0.876276	
	2	-2	0.29877	0.665165	0.713637	0.59754	0.376273	0.080303	
	3	-3	-0.120386	0.486603	0.719688	0.759228	0.67508	0.503075	
	4	-4	-0.647247	0.155722	0.539189	0.705506	0.733051	0.662023	
	5	-5	-1.240865	-0.269567	0.243063	0.51827	0.641749	0.657452	
	6	-6	-1.880819	-0.760384	-0.133318	0.238363	0.446837	0.539382	
	7	-7	-2.555234	-1.299938	-0.569389	-0.110468	0.174867	0.336899	
	8	-8	-3.256508	-1.877476	-1.05198	-0.513016	-0.157162	0.068624	
	9	-9	-3.979438	-2.48564	-1.572081	-0.958877	-0.537615	-0.252696	
	10	-10	-4.720284	-3.11914	-2.123213	-1.440568	-0.958128	-0.6179	

from	to
-999	0.2
0.200001	0.5
0.500001	0.6
0.600001	0.7

7	8	9	10
-7	-8	-9	-10
-1.385622	-1.928932	-2.5	-3.094306
-0.272276	-0.66967	-1.103691	-1.568374
0.264494	-0.026795	-0.361158	-0.731584
0.516301	0.311444	0.058258	-0.235387
0.591487	0.460866	0.277405	0.049706
0.544081	0.479231	0.357544	0.188273
0.405497	0.400124	0.334298	0.217862
0.195851	0.245048	0.230475	0.162516
-0.071091	0.02872	0.061685	0.038688
-0.385433	-0.238281	-0.160852	-0.141794

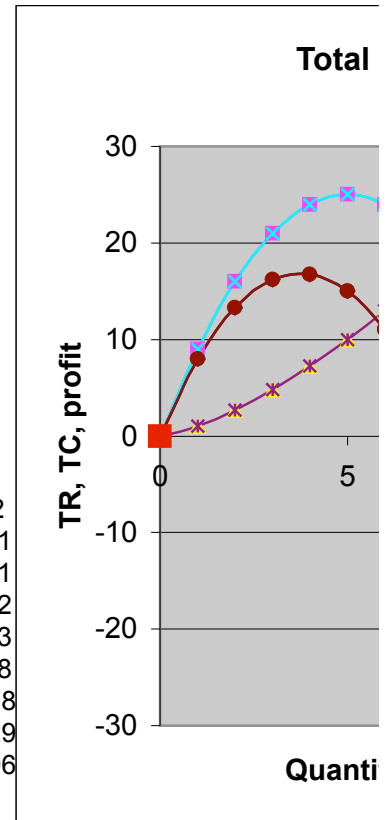
Profit Maximization Problem with One Input and One Output

A	1	L*-solver	0
α	0.7	Q*-solver	0
		π *-solver	0

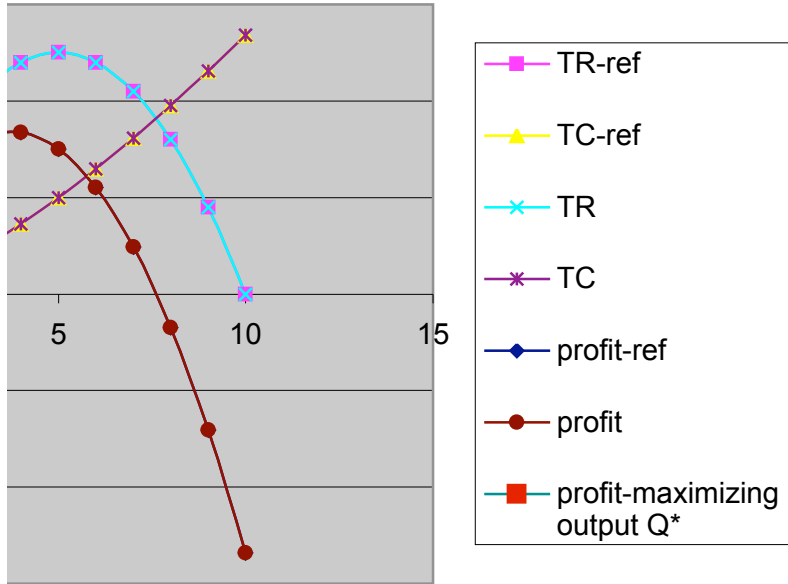
a	10
b	-1

w	1
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Q	TR	TC	π	TR-ref	TC-ref	π -ref
0	0	0	0	0	0	0
1	9	1	8	9	1	8
2	16	2.6918	13.3082	16	2.6918	13.3082
3	21	4.803987	16.19601	21	4.803987	16.19601
4	24	7.245789	16.75421	24	7.245789	16.75421
5	25	9.966177	15.03382	25	9.966177	15.03382
6	24	12.93137	11.06863	24	12.93137	11.06863
7	21	16.11695	4.883048	21	16.11695	4.883048
8	16	19.50422	-3.504218	16	19.50422	-3.504218
9	9	23.07829	-14.07829	9	23.07829	-14.07829
10	0	26.82696	-26.82696	0	26.82696	-26.82696



Total Revenue, Total Cost & Profit

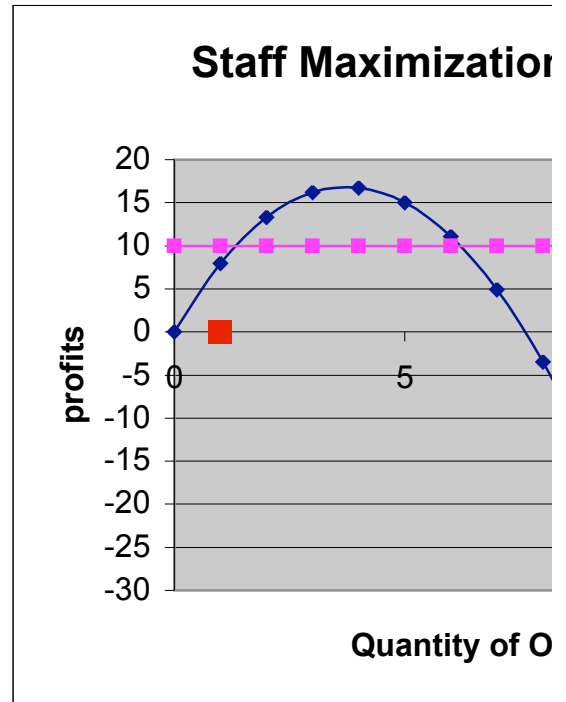


Quantity of Output (Q)

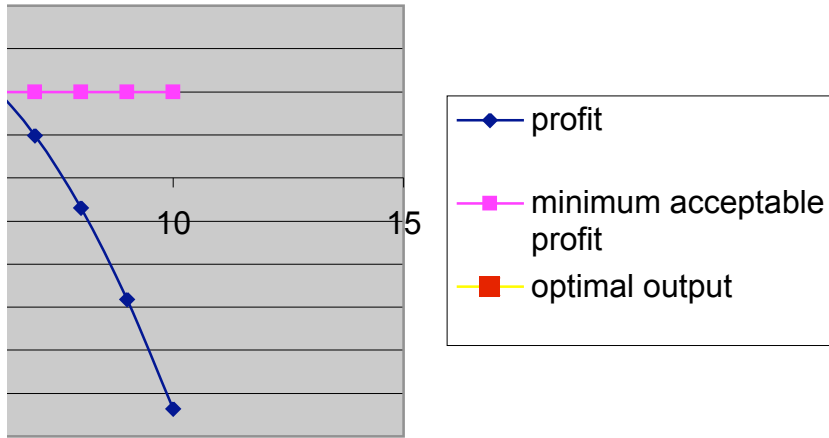
Profit Maximization Problem with One Input and One Output

A	1	$U(L^\wedge)$	0
α	0.7	L^\wedge	1
a	10	π_0	10
b	-1	π^\wedge	8
w	1	Q^\wedge	1

Q	TR	TC	π	π_0
0	0	0	0	10
1	9	1	8	10
2	16	2.6918	13.3082	10
3	21	4.803987	16.19601	10
4	24	7.245789	16.75421	10
5	25	9.966177	15.03382	10
6	24	12.93137	11.06863	10
7	21	16.11695	4.883048	10
8	16	19.50422	-3.504218	10
9	9	23.07829	-14.07829	10
10	0	26.82696	-26.82696	10



ation Subject to Profit Constraint



γ of Output (Q)