Output Decision
Short Run with Capital Stock Fixed

Linear Demand Curve: P = A - B*Q
Total Cost Equation: TC = 1800 + 72*Q^2

A	1,200
B	0

	Q	Price	TR	TC	Profit	AC	AR	AR-AC	MC	MR	MR-MC
	0	1,200	0	1,800	-1,800	--	--		--	--	
	1	1,200	1,200	1,872	-672	1,872	1,200	-672	72	1,200	1,128
	2	1,200	2,400	2,088	312	1,044	1,200	156	216	1,200	984
	3	1,200	3,600	2,448	1,152	816	1,200	384	360	1,200	840
	4	1,200	4,800	2,952	1,848	738	1,200	462	504	1,200	696
	5	1,200	6,000	3,600	2,400	720	1,200	480	648	1,200	552
	6	1,200	7,200	4,392	2,808	732	1,200	468	792	1,200	408
	7	1,200	8,400	5,328	3,072	761	1,200	439	936	1,200	264
Profit max	**8**	1,200	9,600	6,408	**3,192**	801	1,200	399	1,080	1,200	**120**
	9	1,200	10,800	7,632	3,168	848	1,200	352	1,224	1,200	-24
	10	1,200	12,000	9,000	3,000	900	1,200	300	1,368	1,200	-168
	11	1,200	13,200	10,512	2,688	956	1,200	244	1,512	1,200	-312
	12	1,200	14,400	12,168	2,232	1,014	1,200	186	1,656	1,200	-456
	13	1,200	15,600	13,968	1,632	1,074	1,200	126	1,800	1,200	-600
	14	1,200	16,800	15,912	888	1,137	1,200	63	1,944	1,200	-744
Output max	**15**	1,200	18,000	18,000	**0**	1,200	1,200	**0**	2,088	1,200	-888
	16	1,200	19,200	20,232	-1,032	1,265	1,200	-65	2,232	1,200	-1,032
	17	1,200	20,400	22,608	-2,208	1,330	1,200	-130	2,376	1,200	-1,176
	18	1,200	21,600	25,128	-3,528	1,396	1,200	-196	2,520	1,200	-1,320
	19	1,200	22,800	27,792	-4,992	1,463	1,200	-263	2,664	1,200	-1,464
	20	1,200	24,000	30,600	-6,600	1,530	1,200	-330	2,808	1,200	-1,608
	21	1,200	25,200	33,552	-8,352	1,598	1,200	-398	2,952	1,200	-1,752
	22	1,200	26,400	36,648	-10,248	1,666	1,200	-466	3,096	1,200	-1,896
	23	1,200	27,600	39,888	-12,288	1,734	1,200	-534	3,240	1,200	-2,040

Equation	P = A - B*Q	TR = P*Q	TC = 1800 + 72*Q^2	Profit = TR - TC