Answer on Question #44924, Economics, Microeconomics

a. ATC = TC/Q, MC = ΔTC/ΔQ, TR = P*Q, TP = TR — TC, TP per unit = TP/Q

Q	TC	ATC	MC	P = MR	TR	TP	TP per unit
10	110	11	-	17	170	60	6
15	150	10	8	17	255	105	7
20	180	9	6	17	340	160	8
25	225	9	9	17	425	200	8
30	300	10	15	17	510	210	7
35	385	11	17	17	595	210	6
40	480	12	19	17	680	200	5

b. If P = $17, we should produce the amount of output, for which MR = MC = P = 17. So, 35 units will be produced and sold. Total maximized profit will be $210 and profit per unit will be $6.

c. In the long-run all firms in industry receive normal profits (TP = 0) and ATC is minimal, so this industry is not in long-run equilibrium.