Answer on Question #48539, Economics, Microeconomics

L	q	MP	FC	VC	TC	AVC	ATC	MC
0	0	-	192	0	192	-	-	-
1	3	3	192	36	228	12,00	76,00	12
2	9	6	192	72	264	8,00	29,33	6
3	18	9	192	108	300	6,00	16,67	4
4	24	6	192	144	336	6,00	14,00	6
5	27	3	192	180	372	6,67	13,78	12
6	28	1	192	216	408	7,71	14,57	36

(d) If this firm operates in a perfectly competitive market and P = $4.00 per unit of output, the firm will produce the quantity, for which MR = MC = P = $4, so q = 18 units. If the market price is $12.00, for MR = MC = P = $12 q = 3 units. If the market price is 36.00, for MR = MC = P = $12 q = 28 units.

(e) In the long-run the profits are zero for perfectly competitive market.
Total profit TP = TR — TC = P*Q — TC
If P = $4, TP = 4*18 — 300 = -228;
If P = $12, TP = 12*27 — 372 = -48;
If P = $36, TP = 36*28 — 408 = 600.
So, no of the market prices from part (d) are long-run equilibrium prices.