

Answer on Question #48800, 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.

$$\text{Total profit TP} = \text{TR} - \text{TC} = P \cdot Q - \text{TC}$$

$$\text{If } P = \$4, \text{ TP} = 4 \cdot 18 - 300 = -228;$$

$$\text{If } P = \$12, \text{ TP} = 12 \cdot 27 - 372 = -48;$$

$$\text{If } P = \$36, \text{ TP} = 36 \cdot 28 - 408 = 600.$$

So, no of the market prices from part (d) are long-run equilibrium prices.