

Marginal Analysis

Fill in the blank cells

Quantity (Q)	Price (P)	Revenue (R = P × Q)	Marginal Revenue (MR)	Total Cost (TC)	Marginal Cost (MC)
0	100	0	92	20	8
1	92	92		28	
2	84		60	32	4
3	76	228		36	
4	68			44	
5	60	300	12	58	22
6	52			80	
7	44	308		114	
8	36		-36	164	68
9	28			232	
10	20	200	—	320	—

Formulas:

- Revenue: $R(Q) = P(Q) \times Q$ where $P(Q)$ is the price at quantity Q and $R(Q)$ is the revenue at quantity Q .
- Marginal Revenue: $MR(Q) = R(Q + 1) - R(Q)$
- Marginal Cost: $MC(Q) = TC(Q + 1) - TC(Q)$

Underlying functions:

Demand: $P = 100 - 8Q$ Cost: $TC = 0.5Q^3 - 3Q^2 + 10Q + 20$