

Revenue Numericals

Total Revenue (TR) = Price (P) × Quantity (Q)
 $TR = P \times Q$

Average revenue = AR = $\frac{TR}{Q}$ = $\frac{\text{Total Revenue}}{\text{Quantity}}$

Marginal Revenue = MR = $\frac{\Delta TR}{\Delta Q}$ or $TR_n - TR_{n-1}$

Eg Derive TR, AR and MR from the following

Price (₹)	=	0	10	20	30	40	50	60	70	80
Quantity (units)	=	8	7	6	5	4	3	2	1	

Solution

		(Q × P)	(TR/Q)	(TR _n - TR _{n-1})
Qty	Price	TR	AR	MR
8	0	0	0	-
7	10	70	10	70
6	20	120	20	50
5	30	150	30	30
4	40	160	40	10
3	50	150	50	-10
2	60	120	60	-30
1	70	70	70	-50

Q 2: Fill the following Table :

Q no	AR = P	Units	TR	MR
a.	10	? (10)	100	0
b.	11	9	? (99)	-1
c.	12	? (8)	96	-3
d.	13	7	? (91)	-5
e.	14	? (6)	84	-7
f.	15	5	? (75)	-9
g.	16	? (4)	64	-11

Solution

a) Units = $\frac{TR}{P} = \frac{100}{10} = 10 \text{ units}$

b) TR = $P \times Q = 11 \times 9 = 99$

c) Units = $\frac{TR}{P} = \frac{96}{12} = 8 \text{ units}$

d) TR = $P \times Q = 13 \times 7 = 91$

e) Units = $\frac{TR}{P} = \frac{84}{14} = 6 \text{ units}$

f) TR = $P \times Q = 15 \times 5 = 75$

g) Units = $\frac{TR}{P} = \frac{64}{16} = 4 \text{ units}$