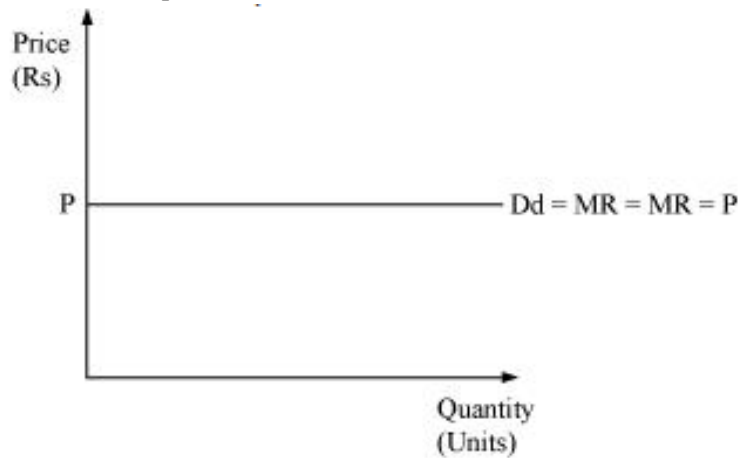




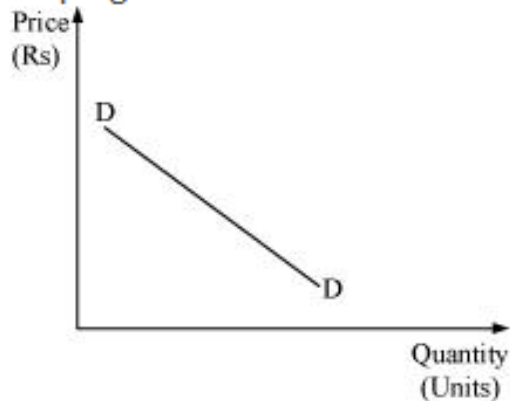
Q1. What would be the shape of the demand curve so that the total revenue curve is

- (a) a positively sloped straight line passing through the origin?
- (b) a horizontal line?

Ans:(a) **If the total revenue curve is a positively sloped straight line passing through the origin, then the slope of the demand curve will be a horizontal line parallel to the x-axis.**



(b) If the total revenue curve is a horizontal line, then the demand curve will be downward sloping.



Q2. From the schedule provided below calculate the total revenue, demand curve and the price elasticity of demand:

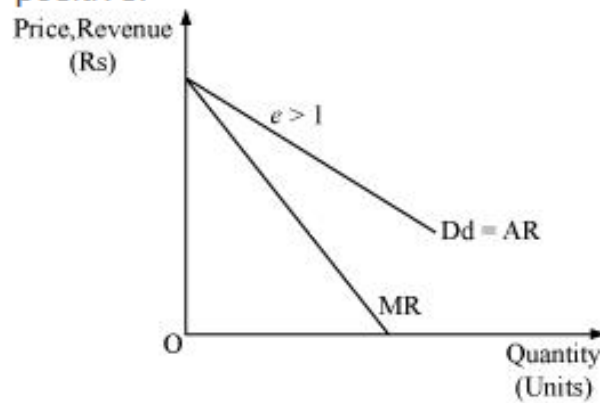
Quantity	1	2	3	4	5	6	7	8	9
Marginal Revenue	10	6	2	2	2	0	0	0	-5

Ans:

Quantity	MR	TR	AR	$Ed = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$
1	10	10	$\frac{10}{1} = 10$	—
2	6	$10 + 6 = 16$	$\frac{16}{2} = 8$	$\frac{1}{2} \times \frac{10}{1} = 5$
3	2	$16 + 2 = 18$	$\frac{18}{3} = 6$	$\frac{1}{2} \times \frac{8}{2} = 2$
4	2	$18 + 2 = 20$	$\frac{20}{4} = 5$	$\frac{1}{1} \times \frac{6}{3} = 2$
5	2	$20 + 2 = 22$	$\frac{22}{5} = 4.5$	$\frac{1}{0.5} \times \frac{5}{4} = 2.5$
6	0	$22 + 0 = 22$	$\frac{22}{6} = 3.6$	$\frac{1}{0.9} \times \frac{4.5}{5} = 1$
7	0	$22 + 0 = 22$	$\frac{22}{7} = 3.1$	$\frac{1}{0.5} \times \frac{3.6}{6} = 1.2$
8	0	$22 + 0 = 22$	$\frac{22}{8} = 2.7$	$\frac{1}{0.4} \times \frac{3.1}{7} = 1.1$
9	-5	$22 + (-5) = 17$	$\frac{17}{9} = 1.9$	$\frac{1}{0.8} \times \frac{2.7}{9} = 0.38$

Q3. What is the value of the MR when the demand curve is elastic?

Ans : When demand curve is elastic ($e_d > 1$), then according to the relationship $MR = P\left(1 - \frac{1}{e_d}\right)$, the fraction $\frac{1}{e_d}$ will be less than 1. Hence, MR will be positive when $P\left(1 - \frac{1}{e_d}\right)$ is positive.



***** END *****