Q25. Suppose the price elasticity of demand for a good is – 0.2. How will the expenditure on the good be affected if there is a 10 % increase in the price of the good?

Ans: Price elasticity of demand = -0.2

Percentage increase in price = 10%

$$e_d = \frac{\text{percentage change in demand}}{\text{percentage change in price}}$$

$$0.2 = \frac{\text{percentage change in demand}}{10}$$

-2 = percentage change in demand

Thus, percentage decrease in demand is less than the percentage increase in price. This means that when price increases and

Q26. Suppose there was a 4 % decrease in the price of a good, and as a result, the expenditure on the good increased by 2 %. What can you say about the elasticity of demand?
Ans: Percentage decrease in price = 4%
Increase in expenditure = 2%

$$\Delta E = \Delta P\left\{q + \left(1 + e_d\right)\right\}$$

Since the price has decreased, the expenditure on the good will increase. This implies that the percentage of change in demand has increased more than the percentage decrease in price.
Thus, elasticity = percentage of change in demand/ percentage change in price.
The numerator is more than the denominator. This means that elasticity is more than 1. We can say that the small change in price has led to a bigger change in demand, and as a result, the demand is elastic.

********** END **********