Answer on Question #62010 -Economics - Microeconomics

1.   The Brisbane Entertainment Centre is a performance venue, which hosts popular musicians from around the world. It has a maximum seating capacity of 13,500 people. In 2015, an artist priced their performance at a price of $50 per ticket and the show was completely sold out. The next year the same performer decided to increase the price to $100 per ticket but this time only 12,000 tickets were sold.

1. The point elasticity of demand at a price of $50 is 0.07% (rounded to two decimal places).
2. A 1% increase in the price of a ticket leads to a 0.11% (rounded to two decimal places) decrease in quantity demanded.
3. A 1% increase in price leads to a 0.07% (rounded to two decimal places) increase in quantity demanded.

Which of the above statements are true:

> Only 1 is true.
> Only 2 is true.
> Both 1 and 2 are true.
> Both 2 and 3 are true.
> All three are true.

Answer.
> Only 2 is true.
>
> Solution.
>
> The point price elasticity of demand is calculated as

$$K_d = \frac{\Delta Q}{Q1} : \frac{\Delta P}{P1}$$

$$K_d = \frac{13.5 - 12}{13.5} : \frac{50 - 100}{50} = 0.11$$

As Kd=0.11, it means that a 1% increase in the price of a ticket leads to a 0.11% (rounded to two decimal places) decrease in quantity demanded.