**Cross Price Elasticity of Demand**

* **Introduction to cross price elasticity of demand.**
* **Calculation of cross price elasticity of demand.**

#### Cross price elasticity of demand

* Look at the two products below.



1. What would happen to the demand for tennis rackets if the price of tennis balls increased?

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**2.** What do you think would be the extent of the change in demand for tennis rackets if the price of tennis balls increased? (**Also you should explain why)**

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**3.** Assuming Tennis Rackets are **Good A** and Tennis Balls are **Good B** what do you understand by the term ‘Cross Price Elasticity of Demand’?

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**5.** Write the formula below for **Cross Price Elasticity of Demand**.

**6.** Look in the table on the next page and state whether you think that a change in the **price of Good B** would have a small, medium, large or no impact on **demand for Good A.**

**7.** Describe the cross elasticity of demand for the following types of products.

|  |  |
| --- | --- |
| Strong Substitutes |  |
| Weak Substitutes |  |
| Strong Complements |  |
| Weak Complements |  |

**8.** Now complete the numerical examples below.



* The **price of a ticket on the tram from Medical Center to Downtown** increases in price from **$3 to $4**.
* The number of customers on the **bus** service increases from **10,000 to 15,000**.

Using the formula above calculate the Cross Price Elasticity of Demand.

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10. The cross price elasticity of demand for pipes with respect to tobacco.

The price of tobacco rises from **£3** a packet to **£4** a packet. Demand for pipes falls from **20,000 to 10,000.**

* What **type** of goods are **tobacco and pipes**?

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* Calculate the Cross Price Elasticity of Demand for this product.

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* Illustrate the above relationship on the demand and supply diagrams below

###### Quantity Demanded and Supplied

### Price

 **Qty D/S**

###### Quantity Demanded and Supplied

### Price

 **Qty D/S**

###### Quantity Demanded and Supplied

### Price

**Quantity demanded/supplied**

**11.** What would be the value of the Cross Elasticity of Demand for shoes with respect to the price of **Pineapples and why?**

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Good A | Good B | Substitutes or Complements | Increase or decrease in demand for Good A as a result of a increase in price of Good B | Extent of the change in demand |
| **Pepsi** | *Coke* |  |  |  |
| **Toothpaste** | *Tooth-brush* |  |  |  |
| **Laptops** | *DVDs* |  |  |  |
| **CD player** | *CD* |  |  |  |
| **Shoe** | *Shoe lace* |  |  |  |
| **Bus travel** | *Train Travel* |  |  |  |
| **Mars Bar** | *Snickers Bar* |  |  |  |
| **Printer** | *Ink Cartridge* |  |  |  |