

CROSS PRICE ELASTICITY

CROSS PRICE ELASTICITY OF DEMAND

Responsiveness of
Demand for a good
to a change in
The price of another good

The formula for calculating the cross elasticity is:

$$\frac{\bullet \text{ Percentage change in quantity demanded}}{\bullet \text{ Percentage change in price of substitute or complement}}$$

Not related

RELATED GOODS

Substitutes

Complements



RELATED GOODS

Substitutes

Complements

Cross price Elasticity is

- Positive
- Negative

Cross price Elasticity is

- Positive
- Negative



$$\text{Cross P Elasticity} = \frac{\% \text{ change in Qd of XBOX ONE}}{\% \text{ change in } P_{\text{PS4}}}$$



Substitutes ?

"The two consoles are, in many ways, extraordinarily similar.. Both have Blu-Ray, DVR capabilities,.. processor specs also appear to be remarkably alike....."

Source:<http://www.forbes.com/sites/erikkain/2013/07/25/xbox-one-vs-ps4-why-sony-is-still-the-best-choice-for-gamers/>

Substitutes: Cross price elasticity is _____

$$\text{Cross P Elasticity} = \frac{\% \text{ change in Qd of Pepsi}}{\% \text{ change in } P_{\text{Coke}}}$$



As P_{Coke} increases - Quantity demanded of Coke decreases
&
Demand for Pepsi increases

Compliments: Cross price elasticity is

$\frac{\% \text{ change in } P_{\text{XBOX ONE}}}{\% \text{ change in } Q_{\text{TV}}}$



Microsoft has an extra HDMI input which allows for a deeper level of integration with your TV.

Maybe the Xbox One can even make TV more appealing to young

Maybe the Xbox One can even make TV more appealing to young



Compliments: Cross price elasticity is

Cross P Elasticity = $\frac{\% \text{ change in } Q_d \text{ of coffee}}{\% \text{ change in } P_{\text{cream \& sugar}}}$





The Cross Price Elasticity of Demand

- a *substitute* is positive.

$P_{XBOX} \uparrow \Rightarrow \uparrow D_{PS4}$

$P_{XBOX} \downarrow \Rightarrow \downarrow D_{PS4}$

- a *complement* is negative.

Price of pink dress $\downarrow \Rightarrow$ Demand for Pink Hat and shoes \uparrow



RELATED GOODS

Substitutes

Complements

Cross price Elasticity is

Positive

Negative

Cross price Elasticity is

Positive

Negative



Substitutes: WHY NOT?

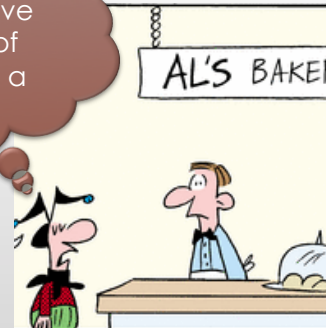
AL'S Bakery uses the finest RUM for their Cakes



What should I substitute it for?



Ok - I'll have a bottle of RUM and a Muffin.



RELATED GOODS

Substitutes

- PS4 & XBOX
- Coke & Pepsi
- Different shades and Styles of Pink dresses

Complements

- Tea & Milk
- Tea & Sugar
- Pink Dress & Pink accessories
- Left foot shoe & Right foot shoe.



INCOME ELASTICITY OF DEMAND

INCOME ELASTICITY OF DEMAND

- Measures how the quantity demanded responds to a change in income
- The formula for calculating the income elasticity of demand is
 - $$\frac{\text{Percentage change in quantity demanded}}{\text{Percentage change in income}}$$

INCOME ELASTICITY OF DEMAND

Normal Good

- income elasticity of demand > 1 – Income Elastic
- $1 >$ income elasticity of demand > 0 but less than 1 - *income inelastic*

Inferior Good

- Income elasticity of demand < 0 (negative)

