1.13 Income and Cross Elasticities of Demand: 10-minute Pack

Total Marks

AQA 7136 · Calculators not allowed · about 10 minutes

Name: _____ Date: ____ / ____ / _____

Answer all questions in full sentences where required. Show all working for calculations. Total time guidance 10 minutes.

1 If two goods have XED = 0.3, state whether they are strong substitutes, weak substitutes or complements and give a one line justification.

(Total for Question 1 is 1 mark)

2 Define the cross elasticity of demand (XED) and state the formula, in the context of two goods such as tea and coffee.

(Total for Question 2 is 1 mark)

3 State briefly what a negative XED implies about the relationship between two goods, in the context of cars and petrol.

(Total for Question 3 is 1 mark)

© Revision Library | revisionlibrary.co.uk

4 Explain briefly one way a firm selling a complementary good (for example, a smart-phone case seller) might change its pricing strategy if the price of the related good (smartphones) falls sharply.

(Total for Question 4 is 1 mark)

---

5 A supermarket's value-range pasta sold 500 packs a week when average household income was £2,000 a month. When average household income rose to £2,400 a month, sales fell to 450 packs a week. Calculate the income elasticity of demand for the pasta and state what it shows about the good. Show your working.

(Total for Question 5 is 3 marks)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.13 Income and Cross Elasticities of Demand: 10-minute Pack

Question 1

XED = 0.3 indicates weak substitutes because XED > 0 but the small magnitude shows only a weak positive relation **B1**

Answer: Weak substitutes; positive but small XED (0.3) indicates a weak substitution effect.

Question 2

a measure of how the quantity demanded of one good responds to a change in the price of another good, calculated as percentage change in quantity demanded of good A divided by percentage change in price of good B **B1**

Answer: XED = % change in quantity demanded of good A / % change in price of good B, measuring the relationship between two goods.

Question 3

negative XED implies the goods are complements: an increase in the price of one reduces demand for the other, e.g. higher petrol prices reduce demand for car travel **B1**

Answer: Negative XED means the goods are complements, so a price rise in one reduces demand for the other.

Question 4

the firm might raise its price slightly to capture extra consumer surplus because lower smartphone prices increase demand for cases, but must balance with competitive pressures and elasticity of demand for the complement **B1**

Answer: They may raise price slightly because greater smartphone sales increase demand for cases, but must consider competition and elasticity so price rises are limited.

Question 5

% change in income = (2,400 - 2,000) / 2,000 x 100 = 20% and % change in quantity = (450 - 500) / 500 x 100 = -10% **M1**

YED = -10% / 20% = -0.5 (accept about -0.58 if the mid-point method is used) **A1**

negative YED shows the pasta is an inferior good: demand falls as income rises **B1**

Answer: YED = -0.5 (-10% / 20%), so the pasta is an inferior good.

© Revision Library | revisionlibrary.co.uk