

1.2 Elasticity

Sub-topic	SL/HL core	HL
Price elasticity of demand (PED)		
Price elasticity of demand and its determinants	<ul style="list-style-type: none"> Explain the concept of price elasticity of demand, understanding that it involves responsiveness of quantity demanded to a change in price, along a given demand curve. Calculate PED using the following equation. $PED = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in price}}$ State that the PED value is treated as if it were positive although its mathematical value is usually negative. Explain, using diagrams and PED values, the concepts of price elastic demand, price inelastic demand, unit elastic demand, perfectly elastic demand and perfectly inelastic demand. Explain the determinants of PED, including the number and closeness of substitutes, the degree of necessity, time and the proportion of income spent on the good. Calculate PED between two designated points on a demand curve using the PED equation above. Explain why PED varies along a straight line demand curve and is not represented by the slope of the demand curve. 	
Applications of price elasticity of demand	<ul style="list-style-type: none"> Examine the role of PED for firms in making decisions regarding price changes and their effect on total revenue. Explain why the PED for many primary commodities is relatively low and the PED for manufactured products is relatively high. Examine the significance of PED for government in relation to indirect taxes. 	
Cross price elasticity of demand (XED)		
Cross price elasticity of demand and its determinants	<ul style="list-style-type: none"> Outline the concept of cross price elasticity of demand, understanding that it involves responsiveness of demand for one good (and hence a shifting demand curve) to a change in the price of another good. Calculate XED using the following equation. $XED = \frac{\text{percentage change in quantity demanded of good } x}{\text{percentage change in price of good } y}$ Show that substitute goods have a positive value of XED and complementary goods have a negative value of XED. Explain that the (absolute) value of XED depends on the closeness of the relationship between two goods. 	

Sub-topic	SL/HL core	HL
Applications of cross price elasticity of demand	<ul style="list-style-type: none"> Examine the implications of XED for businesses if prices of substitutes or complements change. 	
Income elasticity of demand (YED)		
Income elasticity of demand and its determinants	<ul style="list-style-type: none"> Outline the concept of income elasticity of demand, understanding that it involves responsiveness of demand (and hence a shifting demand curve) to a change in income. Calculate YED using the following equation. $YED = \frac{\text{percentage change in quantity demanded}}{\text{percentage change in income}}$ Show that normal goods have a positive value of YED and inferior goods have a negative value of YED. Distinguish, with reference to YED, between necessity (income inelastic) goods and luxury (income elastic) goods. 	
Applications of income elasticity of demand	<ul style="list-style-type: none"> Examine the implications for producers and for the economy of a relatively low YED for primary products, a relatively higher YED for manufactured products and an even higher YED for services. 	
Price elasticity of supply (PES)		
Price elasticity of supply and its determinants	<ul style="list-style-type: none"> Explain the concept of price elasticity of supply, understanding that it involves responsiveness of quantity supplied to a change in price along a given supply curve. Calculate PES using the following equation. $PES = \frac{\text{percentage change in quantity supplied}}{\text{percentage change in price}}$ Explain, using diagrams and PES values, the concepts of elastic supply, inelastic supply, unit elastic supply, perfectly elastic supply and perfectly inelastic supply. Explain the determinants of PES, including time, mobility of factors of production, unused capacity and ability to store stocks. 	
Applications of price elasticity of supply	<ul style="list-style-type: none"> Explain why the PES for primary commodities is relatively low and the PES for manufactured products is relatively high. 	