

3.1 Elasticity, welfare and policy

Name: _____ Class: _____ Date: _____

Total: 6 marks**KEY WORDS** elasticity • tax incidence • external cost • welfare

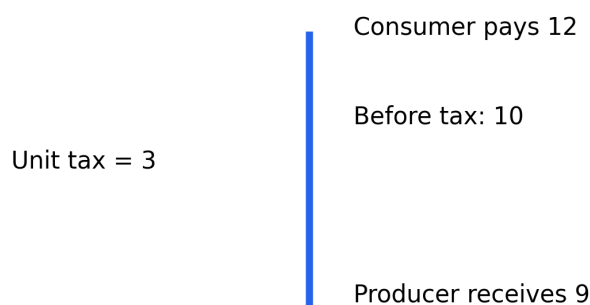
Objective

Apply the supported native methods to original data and justify a qualified transfer conclusion.

1 Key knowledge and worked examples

Percentage changes need a stated convention. PED uses quantity demanded and own price on the same demand relation; PES uses quantity supplied. YED and cross-price elasticity compare different determinants. A unit tax creates a price wedge; relative responsiveness shapes burden. An externality concerns third-party costs/benefits, not merely an expensive transaction. Public goods and information failure have different mechanisms.

Original tax wedge: prices, not a welfare-area diagram



Per-item burden: consumer 2; producer 1. Quantity not supplied.

An original market's pre-tax price is 10. After a unit tax, consumers pay 12 and producers receive 9. Calculate the wedge and burden, then qualify a welfare claim.

Tax per item = consumer price – producer receipt = $12 - 9 = 3$ currency units/item. Consumer burden = $12 - 10 = 2$ units/item; producer burden = $10 - 9 = 1$ unit/item. The stated burden split concerns this equilibrium, not a universal tax rule. Tax revenue = tax per item $\times$ post-tax quantity; that quantity must be known. Revenue is a transfer, while welfare effects require changes in surplus, resource use and any external harm. A corrective tax can reduce inefficient overproduction, but only with

the relevant external-cost model and evidence. Collection cost, evasion and access matter.

2 Practice

2.1 For the worked case, state the method, show its application and give a limitation.^[3]

3 Exam-style questions

3.1 A subsidy expands a product with an unpriced external cost. Is greater output necessarily a welfare gain? Compare a better-targeted policy. ^[3]
