

# 3.1 Elasticity, welfare and policy

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_ **Total: 6 marks**

**KEY WORDS** elasticity • tax incidence • external cost • welfare

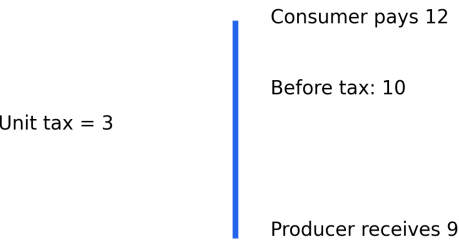
## Objective

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×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.<sup>[3]</sup>

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## 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. <sup>[3]</sup>

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