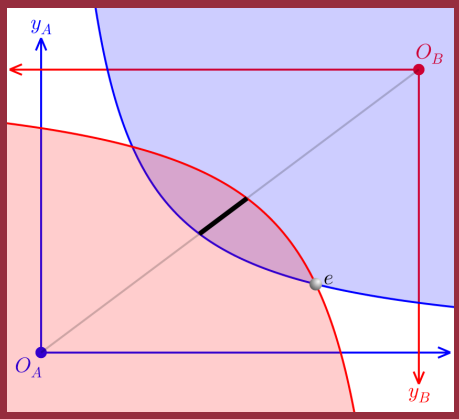
SUMMATIC

Online Microeconomics Assignments & Learning Resources



Summatic provides online questions and learning resources for **Intermediate Microeconomics** developed by economists at the University of Cambridge.

Our online platform includes an **interactive textbook** with full course coverage and graphical learning resources. Our **comprehensive and flexible assignments** can be used for a variety of purposes such as in-course exercises and diagnostic, formative, and summative assessments.

AUTHENTIC QUESTIONS AND INTERACTIVE LEARNING

Ask questions that go beyond multiple-choice. Students attempt full worked problems, and our platform allows students to answer with **formulas, equations, and more.**

Full worked problems provide explanations and guide students **step-by-step** through solutions. Interactive graphs allow students to **illustrate concepts** by drawing, dragging, and shading.

Full Worked Problems

Q8.1: The demand function is $q=-5p+70$.

a) (Weight: 1) Give an expression for the price elasticity of demand, ε, as a function of p. (Note that this is negative.)

Price elasticity of demand is given by: $\varepsilon(p)=\frac{p}{q}\cdot\frac{dq}{dp}$.

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We are given the demand q as a function of the price p, so we have:

$$\varepsilon(p)=\frac{p}{-5p+70}\cdot\frac{d}{dp}(-5p+70)=\frac{p}{p-14}$$

Attempt 1

$-5\cdot\frac{p}{q}$

Attempt 2

$=-5\cdot\frac{p}{-5p+70}$ +100%

b) (Weight: 1) Find the price elasticity of demand when $p=7$. Is demand elastic, inelastic, or unit elastic?

Substitute $p=7$ into the answer from part a) to get:

$$\varepsilon(7)=-1$$

$|\varepsilon|=1$, which means that the demand has unit elasticity.

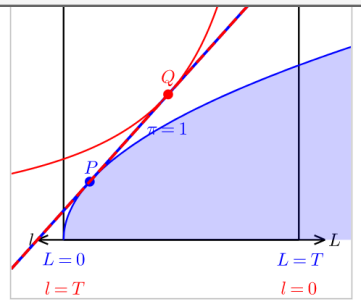
Attempt 1

Unit elastic +100%

-1

You have completed the condition, but click here to try another variant:

Interactive Graphs



$w=$ 1

$p=$ 1

Robinson Crusoe as a producer can produce $y\leq 2\sqrt{L}$ units of output using L units of labour.

The profit maximizing labour demand and output is shown as point $P=(L^*,y^*)$, with the corresponding iso-profit curve. The firm makes a profit of $\pi^*=p\cdot y^*-w\cdot L^*$.

Robinson the consumer faces a budget line $pc+wl=wT+\pi^*$. The

Varied Question Types

Variant 1 0%

Q7.1: Construct game payoffs in which both of these properties hold:

1. A weakly dominates (and does not strictly dominate) B.

2. Y strictly dominates X.

P1 \ P2	X		Y	
A	0 , 0		0 , 0	
B	0 , 0		0 , 0	

Enter a payoff matrix.

AUTOMATIC MARKING

Save time marking and provide students with instant feedback to understand where they may have gone wrong in solving problems.

View student attempts and scores with our **detailed performance analytics** to identify areas of strength and weakness amongst your cohort. Marks can be synchronised to your **Learning Management System.**

COURSE COVERAGE & TEXTBOOK ALIGNMENT

Course coverage includes all common topics in intermediate microeconomics to provide a full theoretical and practical grounding in concepts such as:

Consumer Theory
Competitive Equilibrium
Uncertainty and Information

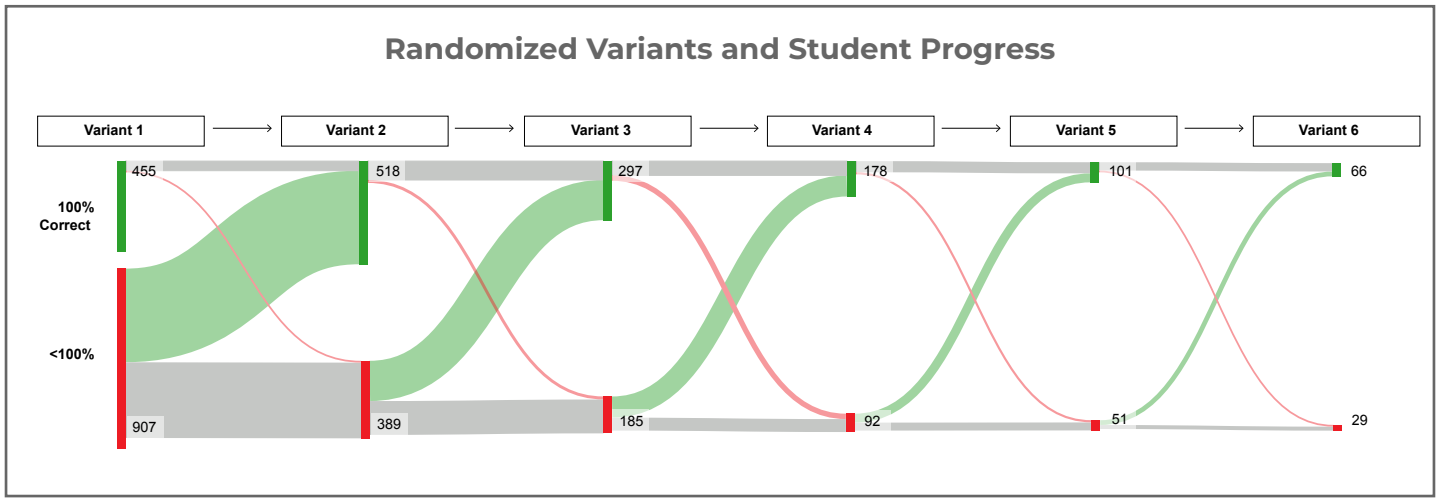
Producer Theory
Game Theory
Contracts

With **step-by-step graphical explanations**, our interactive textbook brings microeconomics to life.

IMPROVEMENT THROUGH RANDOMIZED PRACTICE

Summatic provides **instant feedback** on question attempts along with **worked solutions**, so students can deduce exactly where they went wrong and correct their answers. If students do not get a question completely right, they can also attempt **randomly generated question variants** until they have mastered the method.

The graph below shows **very strong learning** from one variant to another: the upwards diagonals represent students who failed to get a method right but were able to pick it up with the next variant. Results from Cambridge Judge Business School.



ENCOURAGING STUDENT ENGAGEMENT

Students appreciate the ability to progress independently using question variants and learning resources with Summatic.

For example, in our support of **Cambridge Judge Business School**, an average of **391 question attempts per student** demonstrated extremely high engagement with assessments and learning resources amongst the cohort. Most attempts (63%) were outside of the assigned questions, showing independent learning.

HOW TO WORK WITH US

Contact our CEO and economist Dr Charles Roddie at **charles.roddie@summatic.co.uk** to discuss how Summatic can provide your students with textbook aligned microeconomics support.