

Scarcity & Opportunity Cost

AP Microeconomics | Unit 1 | scarcity, trade-offs, and the real cost of a choice

Running example. You have one free evening and three options: work a shift and earn \$60, tutor a neighbor and earn \$45, or go to a concert whose ticket costs \$40. You go to the concert.

1. Scarcity: why we have to choose

Scarcity

Wants are unlimited; the resources to satisfy them are limited. There is not enough of a resource to satisfy every want.

Scarcity is not poverty and not a shortage: it holds for everyone, always (a billionaire still has 24 hours in a day).

The four factors of production. *Land:* natural resources. *Labor:* people's work. *Capital:* tools, machines, buildings (**not** money). *Entrepreneurship:* organizing the other three and taking the risk.

scarcity $\Rightarrow$ choice $\Rightarrow$ trade-off

2. Opportunity cost: the next best alternative

Opportunity cost

The value of the **next best** alternative you give up. One alternative, not all of them.

Choosing the concert, you give up the shift (\$60), your next best option. *Not* \$105: with one evening you could never have done both the shift and the tutoring.

3. Explicit and implicit costs

Explicit cost	money you actually pay	the ticket: \$40
Implicit cost	what you give up without paying for it	the wage not earned: \$60
Opportunity cost of the concert	\$40 + \$60 = \$100	

Nothing is free: a *free* concert still costs \$60, because the implicit cost never goes away.

4. Opportunity cost per unit

In one hour a bakery can make 12 cookies *or* 4 pizzas.

From a table

$$\text{opportunity cost of 1 unit} = \frac{\text{what you give up}}{\text{what you get}}$$

$$1 \text{ pizza} : \frac{12 \text{ cookies}}{4 \text{ pizzas}} = 3 \text{ cookies}$$

$$1 \text{ cookie} : \frac{4 \text{ pizzas}}{12 \text{ cookies}} = \frac{1}{3} \text{ pizza}$$

The two answers are reciprocals, and each is measured in units of the *other* good.

Where students lose points

1. Adding up all the alternatives: it is only the next best one.
2. Counting only the money paid and forgetting the implicit cost.
3. Saying scarcity is a shortage, or that only the poor face it.
4. Calling money “capital”: capital is tools, machines and buildings.
5. Per-unit cost upside down, or in the wrong good’s units.

Now practise it

Theory sticks once you use it. On **sad-academy.com** you’ll find practice questions for this exact subtopic in the AP format, and an AI that grades your free-response answers against the scoring guidelines, the way an AP reader would.

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