

Exercise walk-through

1.6

Marginal Analysis and Consumer Choice

AP Microeconomics

How the three systems answer the three questions

an economic system

a society's way of answering **what, how, and for whom** to produce

market

decentralised: prices and profit decide, with no planner

command

central planning guides production and allocation

mixed

markets for most goods, the state for public goods and redistribution

why markets work

prices carry **information** and **incentives** automatically – no one needs to know the whole system

where they fail

public goods, externalities, market power, and inequality of outcome

Prices coordinate decentralized choices; market failures can prevent an efficient outcome.

Exam tips

- Opportunity cost is the next-best alternative given up; **ignore sunk costs** in any decision.
- Comparative advantage (lower opportunity cost) determines specialisation and the gains from trade.
- Apply marginal analysis: keep doing an activity while **$MB > MC$** , checking where net benefit is greatest.
- Maximise utility by equalising the **marginal utility per dollar** across goods.
- Read opportunity cost from the magnitude of the PPC slope; a bowed curve shows increasing cost.

Check yourself

- 1 Why does the PPC bow outward?
- 2 Absolute or comparative advantage: which drives trade?
- 3 Should a sunk cost affect your next decision?
- 4 What rule does marginal analysis give?

Answers 1. resources are not equally suited to both goods 2. comparative 3. no – it is already spent 4. compare MB and MC; maximize feasible net benefit

Exercises 2.1-2.3

2.1 State the law of diminishing marginal utility.

[1]

2.2 State the utility-maximizing rule.

[1]

2.3 A consumer buys where marginal benefit equals marginal cost. Explain why buying one more unit would lower net benefit.

[2]

Exercises 2.1-2.3

2.1 State the law of diminishing marginal utility.

[1]

2.1

- each additional unit consumed adds less extra satisfaction than the previous one
-

2.2 State the utility-maximizing rule.

[1]

2.2

- allocate spending so that $\frac{MU}{P}$ is equal for all goods
-

2.3 A consumer buys where marginal benefit equals marginal cost. Explain why buying one more unit would lower net benefit.

[2]

2.3

- beyond $MB = MC$, the next unit's marginal cost exceeds its marginal benefit, so it subtracts from total net benefit

Exercises 3.1-3.2

3.1 A consumer maximizes total net benefit where

[1]

☐

A $MB > MC$

B $MB = MC$

C $MB < MC$

D the price is lowest

3.2 The law of diminishing marginal utility says that extra units give

[1]

☐

A more added satisfaction

B less added satisfaction

C zero cost

D a higher price

Exercises 3.1-3.2

3.1 A consumer maximizes total net benefit where

[1]

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A $MB > MC$

B $MB = MC$

C $MB < MC$

D the price is lowest

3.1 B

- $MB = MC$.

3.2 The law of diminishing marginal utility says that extra units give

[1]

☐

A more added satisfaction

B less added satisfaction

C zero cost

D a higher price

3.2 B

- less added satisfaction.

Exercise 3.3 (a)

3.3 Good X has $MU = 20$ and $P = \$4$. Good Y has $MU = 15$ and $P = \$5$.

(a) Find $\frac{MU}{P}$ for each good.

[2]

Exercise 3.3 (a)

3.3 Good X has $MU = 20$ and $P = \$4$. Good Y has $MU = 15$ and $P = \$5$.

(a) Find $\frac{MU}{P}$ for each good.

[2]

(a)

- X: $\frac{20}{4} = 5$; Y: $\frac{15}{5} = 3$

Exercise 3.3 (b)

3.3 Good X has $MU = 20$ and $P = \$4$. Good Y has $MU = 15$ and $P = \$5$.

(b) State which good the consumer should buy more of.

[1]

Exercise 3.3 (b)

3.3 Good X has $MU = 20$ and $P = \$4$. Good Y has $MU = 15$ and $P = \$5$.

(b) State which good the consumer should buy more of.

[1]

(b)

- buy more of good X (its MU/P is higher)