

Exercise walk-through

2.6

Real v. Nominal GDP

AP Macroeconomics

Real vs nominal GDP

Fictional economy: billions of dollars

Year	Nominal GDP	GDP deflator	Real GDP
1 (base)	1,000	100	1,000
2	1,320	110	1,200

$$\text{Real GDP}_2 = \frac{1320}{110} \times 100 = 1200$$

$$\text{Real growth} = \frac{1200 - 1000}{1000} \times 100 = 20\%$$

Nominal GDP GDP rose 32%; **Real GDP** GDP rose 20%. The 10% price rise compounds with output growth: $1.20 \times 1.10 = 1.32$.

Exercises 2.1-2.3

2.1 State the difference between nominal and real GDP. [2]

2.2 Nominal GDP is \$600 billion and the price index is 120. Find real GDP. [2]

2.3 State why real GDP is preferred for measuring economic growth. [1]

Exercises 2.1-2.3

2.1 State the difference between nominal and real GDP. [2]

2.1

- nominal GDP uses current prices; real GDP uses constant base-year prices to remove the effect of inflation

2.2 Nominal GDP is \$600 billion and the price index is 120. Find real GDP. [2]

2.2

- $\text{real} = \frac{600}{120} \times 100 = \$500 \text{ billion}$

2.3 State why real GDP is preferred for measuring economic growth. [1]

2.3

- it removes price changes, so it shows the true change in output

Exercise 3.1

3.1 Real GDP is measured using

[1]

☐

A current prices

B base-year prices

C future prices

D zero prices

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[1]

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A current prices

B base-year prices

C future prices

D zero prices

3.1 B

- base-year prices.

Exercise 3.2

3.2 The GDP deflator equals

[1]

- ☐ **A** $\frac{\text{real}}{\text{nominal}} \times 100$
- B** $\frac{\text{nominal}}{\text{real}} \times 100$
- C** nominal – real
- D** the CPI

Exercise 3.2

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[1]

☐ **A** $\frac{\text{real}}{\text{nominal}} \times 100$

B $\frac{\text{nominal}}{\text{real}} \times 100$

C nominal – real

D the CPI

3.2 B

• $\frac{\text{nominal}}{\text{real}} \times 100.$

Exercise 3.3 (a)

3.3 Nominal GDP is \$800 billion and real GDP is \$640 billion.

(a) Find the GDP deflator.

[2]

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(a) Find the GDP deflator.

[2]

(a)

- $\frac{800}{640} \times 100 = 125$

Exercise 3.3 (b)

3.3 Nominal GDP is \$800 billion and real GDP is \$640 billion.

(b) State whether prices have risen or fallen since the base year.

[1]

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[1]

(b)

- risen (the deflator is above 100)