



H24-10min Weighted and Chain Base Index Numbers: 10-minute Pack

EDEXCEL 1ST0 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

- 1** For each statement about index numbers, write down whether it is True or False.
- (i) The base year (or base period) of an index number always has an index value of 100. (1)
- _____
- (ii) If a quantity has decreased since the base year, its index number will be a negative number. (1)
- _____
- (iii) If a price index rises from 100 to 250, the price has increased by 250%. (1)
- _____
- (iv) Index numbers allow you to compare how a quantity has changed over time without needing to know its actual original value. (1)
- _____

(Total for Question 1 is 4 marks)

2 A furniture shop uses 2019 as the base year for the price of a particular sofa, when it cost £480. In 2023, the index number for the sofa's price is 137.5.

(a) Work out the price of the sofa in 2023. (2)

.....
(b) Write down the percentage increase in the price of the sofa from 2019 to 2023. (1)

.....
(c) A newspaper reports 'the cost of living has increased by 37.5% since 2019', using only this sofa's price index as evidence. Comment on whether this claim is fully justified. (2)

(Total for Question 2 is 5 marks)

Mark scheme · H24-10min Weighted and Chain Base Index Numbers: 10-minute Pack

Question 1

- (i) **B1** True cao
- (i) **Answer: True**
- (ii) **B1** False cao
- (ii) **Answer: False**
- (iii) **B1** False cao; correct increase is 150%
- (iii) **Answer: False**
- (iv) **B1** True cao
- (iv) **Answer: True**

Question 2

- (a) **M1** $480 \times (137.5/100)$, oe
- (a) **A1** 660 cao
- (a) **Answer: £660**
- (b) **B1** 37.5 (%) cao
- (b) **Answer: 37.5%**
- (c) **B1** the claim is not fully justified because it is based on the price of a single item (one sofa), oe
- (c) **B1** the general cost of living covers many different goods and services, which may have changed in price by different amounts, so a single item's index cannot represent overall cost-of-living change; a weighted index across many goods would be needed instead, oe
- (c) **Answer: The claim is not fully justified: it is based on the price of only one item, but the cost of living covers many goods and services that may have changed by different amounts. An overall cost-of-living index would need to combine (weight) many items, not rely on a single sofa's price.**