



## S13-10min Index Numbers: 10-minute Pack

EDEXCEL 1ST0 · Calculator allowed · about 10 minutes

Total Marks

Name: \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Answer ALL questions. Show all your working.**

- 1** A hairdresser uses 2019 as the base year for the price of a standard haircut. In 2019, a haircut cost £18. Using 2019 as the base year, the index number for the price of a haircut in 2024 is 130.

(a) Explain what an index number of 130 tells you about the price of a haircut in 2024, compared with 2019. (1)

(b) Work out the price of a haircut in 2024. (2)

.....  
(Total for Question 1 is 3 marks)

- 2** A council uses 2017 as the base year to track the daily fee for parking in the town centre car park. In 2017, the daily fee was £6.00. Using 2017 as the base year, the index number for the daily fee in 2021 is 90.

(a) Write down whether the daily parking fee increased or decreased between 2017 and 2021, and explain how you know. (1)

(b) Work out the daily parking fee in 2021. (2)

(c) Work out the percentage decrease in the daily parking fee from 2017 to 2021. (1)

.....  
(Total for Question 2 is 4 marks)

**3** For each statement about index numbers, write down whether it is True or False.

- (i)** The base year for an index number is chosen by the person constructing the index, and can be any year. **(1)**
- (ii)** Index numbers can only be used to track prices, and cannot be used for other quantities such as population or sales. **(1)**
- (iii)** If an index number for a given year is greater than 100, the quantity being measured has increased since the base year. **(1)**
- (iv)** Index numbers are given in the same units as the original data, such as pounds (£) or kilograms. **(1)**

**(Total for Question 3 is 4 marks)**

## Mark scheme · S13-10min Index Numbers: 10-minute Pack

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### Question 1

- (a) **B1** the price has increased by 30% since 2019 (the price in 2024 is 130% of the 2019 price), oe
- **(a) Answer: The price has increased by 30 % since 2019.**
- (b) **M1**  $18 \times (130/100)$ , oe
- (b) **A1** 23.40 cao
- **(b) Answer: £23.40**

### Question 2

- (a) **B1** Decreased, because the index number (90) is less than 100, oe
- **(a) Answer: Decreased**
- (b) **M1**  $6.00 \times (90/100)$ , oe
- (b) **A1** 5.40 cao
- **(b) Answer: £5.40**
- (c) **B1** 10 (%) cao
- **(c) Answer: 10 %**

### Question 3

- (i) **B1** True cao
- **(i) Answer: True**
- (ii) **B1** False cao
- **(ii) Answer: False**
- (iii) **B1** True cao
- **(iii) Answer: True**
- (iv) **B1** False cao
- **(iv) Answer: False**