



H22-10min Weighted and Geometric Mean: 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 weighted means and geometric means, write down whether it is True or False.
- (i) In a weighted mean, giving a data value a larger weight increases how much it influences the mean. (1)
- _____
- (ii) The weights used in a weighted mean must always add up to 1 (or 100%). (1)
- _____
- (iii) For a set of positive numbers that are not all equal, the geometric mean is always less than the arithmetic (simple) mean. (1)
- _____
- (iv) The geometric mean can be used to average a data set containing negative numbers in exactly the same way as for positive numbers. (1)
- _____

(Total for Question 1 is 4 marks)

2 A market trader buys three types of fruit:

Fruit	Price per kg	Quantity bought (kg)
Apples	£2.40	3
Plums	£3.60	5
Pears	£1.80	2

(a) Work out the total weight of fruit bought. **(1)**

.....
(b) Work out the total amount spent, in pounds. **(2)**

.....
(c) Hence work out the weighted mean price per kg paid by the trader, giving your answer to the nearest penny. **(2)**

.....
(Total for Question 2 is 5 marks)

Mark scheme · H22-10min Weighted and Geometric Mean: 10-minute Pack

Question 1

- (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**

Question 2

- (a) **B1** 10 (kg) cao
- **(a) Answer: 10 kg**
- (b) **M1** 2.40×3 , 3.60×5 , 1.80×2 (= 7.20, 18.00, 3.60), oe
- (b) **A1** 28.80 cao
- **(b) Answer: £28.80**
- (c) **M1** $28.80 / 10$, ft from (a) and (b)
- (c) **A1** 2.88 (pounds) cao
- **(c) Answer: £2.88 per kg**