FOUNDATION

4.18 Averages from Frequency Tables: 10-minute Pack

EDEXCEL 1MA1 · Calculator allowed · about 10 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 The ages of 8 children at a club are recorded as:
Ages: 6, 7, 8
Frequency: 2, 3, 3
Write down the median age.

(Total for Question 1 is 1 mark)

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2 A class recorded the number of pets they have. The frequency table is:
Pets: 0, 1, 2
Frequency: 5, 4, 1
Work out the mean number of pets. Give your answer as a decimal to 1 decimal place.

(Total for Question 2 is 2 marks)

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3 The number of goals scored by a youth team in 12 matches is shown in the table:
Goals: 0, 1, 2, 3
Frequency: 4, 5, 2, 1
Find the median number of goals.

Goals	Frequency
0	4
1	5
2	2
3	1

(Total for Question 3 is 2 marks)

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4 A food bank recorded how many canned goods families collected. The table is:
Cans: 1, 2, 3, 4
Frequency: 3, 6, 2, 1
Calculate the mean number of cans. Give your answer as a decimal to 1 decimal place.

(Total for Question 4 is 3 marks)

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Mark scheme · 4.18 Averages from Frequency Tables: 10-minute Pack

Question 1

7 cao **B1**

Answer: 7 (the ordered data are 6,6,7,7,7,8,8,8; middle two are 7 and 7 so median 7).

Question 2

correct method: (0*5 + 1*4 + 2*1) / 10 or equivalent **M1**

0.6 awrt **A1**

Answer: 0.6 (total pets 0*5 +1*4 +2*1 = 6; mean = 6/10 = 0.6).

Question 3

identify middle positions 6th and 7th in ordered list of 12 scores **M1**

1 cao **A1**

Answer: 1 (ordered list has 4 zeros then 5 ones then 2 twos then 1 three; 6th and 7th values are both 1).

Question 4

correct method: (1*3 + 2*6 + 3*2 + 4*1) / 12 **M1**

calculation of total = 3 + 12 + 6 + 4 = 25 **M1**

2.1 awrt **A1**

Answer: 2.1 (total cans 25; mean = 25/12 = 2.083... rounded to 1 dp = 2.1).

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