



# GCSE Maths Takeaway 79 - Averages from Frequency Tables

Name: .....

Date: .....

The table shows the marks scored in a mental arithmetic test by 30 students.

Mark	Frequency
4	3
5	1
6	2
7	8
8	6
9	5
10	5

Questions provided by JustMaths

What should go in the shaded box?

a) Which mark is the mode?  (1)

b) Which mark is the median?  (1)

c) What is the range of the data?  (1)

d) Calculate the mean mark  (3)

A) 7  
B) 8  
C) 5  
D) 9 and 10

Correct Answer: A B C D

Explanation:

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a) Which mark is the mode?  (1)

b) Which mark is the median?  (1)

c) What is the range of the data?  (1)

d) Calculate the mean mark  (3)

A) 10 - 4  
B) 5 - 3  
C) 2  
D) 6

Correct Answer: A B C D

Explanation:

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### How do you work out the mean?

Hours Sleep	Frequency	Frequency x Hours Sleep
4	1	4
5	1	5
6	1	6
7	5	35
8	5	40
9	6	54
10	7	70
Total = 49	Total = 26	Total = 214

a)  $214 \div 7$       b)  $26 \div 214$

c)  $214 \div 26$       d)  $214 \div 49$

Correct Answer: A B C D

Explanation:

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The following table shows the weight of Easter Eggs

Weight of Easter Eggs (g)	Frequency	Mid Point	Mid-Point x Freq	Cumulative Frequency
100 ≤ w < 200	18	150	2700	18
200 ≤ w < 300	16	250	4000	34
300 ≤ w < 500	10	400	4000	44
500 ≤ w < 800	12	650	7800	56
800 ≤ w < 1000	4	900	3600	60
TOTALS	60		22100	

What does the circled number represent?

**A** The total number of eggs that weigh between 200g and 300g

**B** The total weight of the eggs in the 200 to 300g category

**C** The average weight of the Easter Eggs between 200g and 300g

**D** The number of eggs that weighed less than 300g

Correct Answer: A B C D

Explanation:

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TOTALS	60		22100	

Which calculation would give you the estimate for the mean weight?

**A**  $60 \div 22100$

**B**  $22100 \div 60$

**C**  $60 \div 5$

**D**  $22100 \div 5$

Correct Answer: A B C D

Explanation:

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