

Averages and the Range

GCSE Mathematics • **Foundation Tier** • Grades 2–3 • Non-calculator

Name:

Class:

Total: / 45

Show all your working. Marks are given for correct method as well as the final answer.

1. Work out the mean of 4, 7, 9, 12. [2 marks]

Answer:

2. Work out the median of 3, 8, 5, 9, 4. [2 marks]

Answer:

3. Write down the mode of 2, 5, 5, 7, 9, 5. [1 mark]

Answer:

4. Work out the range of 12, 4, 19, 7. [2 marks]

Answer:

5. Work out the median of 6, 2, 9, 4. [2 marks]

Answer:

Answer:

6. Write down the mode of 3, 6, 3, 8, 6, 1. [2 marks]

Answer:

7. Explain why the list 2, 4, 6, 8 has no mode. [1 mark]

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Answer:

8. Work out the mean of 15, 22, 18, 25, 20. [2 marks]

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Answer:

9. Five numbers have a mean of 12. Work out their total. [2 marks]

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Answer:

10. Four numbers have a mean of 9. Three of them are 7, 11 and 6. Work out the fourth. [3 marks]

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Answer:

11. The mean of 5 numbers is 8. A sixth number, 20, is added. Work out the new mean. [3 marks]

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Answer:

12. A set of numbers has mean 15 and one value is removed, leaving 4 numbers with total 52. The original set had 5 numbers. Work out the value removed. [3 marks]

Answer:

13. The table shows goals scored in 20 matches. Write down the modal number of goals. [1 mark]

Goals	Frequency
0	4
1	7
2	6
3	3

Answer:

14. Using the same table, work out the total number of goals scored. [2 marks]

Answer:

15. Using the same table, work out the mean number of goals to 1 decimal place. [3 marks]

Answer:

16. Using the same table, work out the median number of goals. [3 marks]

Answer:

17. The grouped table shows heights. Write down the modal class. [1 mark]

Height h cm	Frequency
$140 < h \leq 150$	5
$150 < h \leq 160$	9
$160 < h \leq 170$	6

Answer:

18. Using the grouped table, estimate the mean height. [4 marks]

Answer:

19. Explain why the mean from a grouped table is only an estimate. [2 marks]

Answer:

20. Two classes sat the same test. Class A: mean 62, range 30. Class B: mean 58, range 12.

- (a) Which class did better on average? Explain. [2 marks]

- (b) Which class was more consistent? Explain. [2 marks]

Answer: