

1 Averages and range

- a) Write down the mode and the range of the cards.
b) Find the median and the mean.

Cards	4	9	3	9	7	2	8
In order	2	3	4	7	8	9	9

a) mode = 9, range = $9 - 2 = 7$

b) median = 7, mean = $42 \div 7 = 6$

2 Averages: a missing number

Four cards have a mean of 6.

- a) Work out the total of the four cards.
b) Three of the cards are 5, 9 and 3. Find the fourth card.

5	9	3	?
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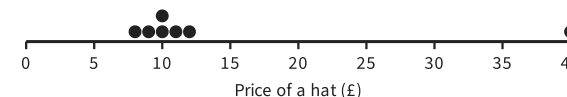
a) $4 \times 6 = 24$

b) $24 - 17 = 7$

3 Choosing the best average

The prices of seven hats in a shop.

- a) Find the median price.
b) Which describes the prices better, the mean or the median? Why?



a) £10

b) the median: £40 is an outlier

4 Averages: comparing

Ben and Cal each did five spelling tests.

- a) Who scored more on average?
b) Whose scores were more consistent? Why?

	Mean	Range
Ben	7	2
Cal	5	6

a) Ben: his mean is higher

b) Ben: his range is smaller

Averages and range revision mat answers

Foundation B

5 Mean from a frequency table

The goals scored in 20 football matches.

- a) Write down the mode.
b) Complete the table. Work out the mean.

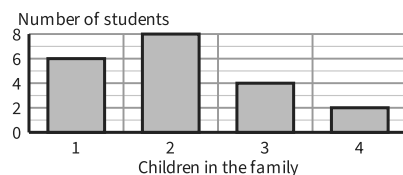
Goals	0	1	2	3	Total
Frequency	5	7	6	2	20
Goals × frequency	0	7	12	6	25

a) 1 goal

b) $25 \div 20 = 1.25$

6 Averages from a bar chart

- a) Write down the mode.
b) Work out the range.



a) 2 children

b) $4 - 1 = 3$

7 Estimated mean: grouped data

The masses of 10 parcels.

- a) Complete the midpoint column.
b) Complete the table. Estimate the mean mass.

Mass, m (kg)	Frequency	Midpoint	Freq × midpoint
$0 < m \leq 4$	3	2	6
$4 < m \leq 8$	5	6	30
$8 < m \leq 12$	2	10	20
Total	10		56

a) 6 and 10

b) $56 \div 10 = 5.6$ kg

8 Grouped data: averages

How long 30 people waited at a doctor's surgery.

- a) Write down the modal class.
b) How many people waited more than 10 minutes?

Time, t (minutes)	Frequency
$0 < t \leq 5$	4
$5 < t \leq 10$	11
$10 < t \leq 15$	9
$15 < t \leq 20$	6

a) $5 < t \leq 10$

b) $9 + 6 = 15$