

AVERAGES FROM TABLES

- 1) The number of goals scored in a football match are shown in the table below. Work out the total number of goals scored.

Goals	Frequency
0	4
1	5
2	3
3	6

- 2) The number of goals a team scored in a season are shown in the frequency table below.

Goals	Frequency
0	1
1	2
2	3
3	4

- Work out the mean number of points per game.
- What was the modal number of goals scored?

- 3) The table shows the shoe sizes of customers in a shoe store.

Shoe Size	Frequency
4	2
5	5
6	8
7	6
8	4

- Work out the average shoe size.
- Work out the modal shoe size.

- 4) A survey asked people how many siblings they have. The results are shown in the frequency table below.

Siblings	Frequency
0	3
1	7
2	10
3	5
4	2

- Work out the percentage of people with less than 2 siblings. Give your answer to the nearest percentage.
- Work out the mean number of siblings. Give your answer to the nearest integer.
- Work out the median number of siblings.

- 5) A total of 23 people signed up for a free TV trial. The frequency table below shows the number of hours of TV they watched during the trial period.

Hours of TV Watched	Frequency
$0 < h \leq 5$	2
$5 < h \leq 10$	6
$10 < h \leq 15$	8
$15 < h \leq 20$	4
$20 < h \leq 25$	3

- How many people watched more than 10 hours of TV?
 - What fraction of the people watched more than 15 hours of TV?
 - Estimate the mean number of hours of TV watched.
 - Explain why your answer to part c is an estimate.
- 6) 35 students were asked how many hours they spend playing video games in a week. The results are shown in the frequency table below.

Hours of Gaming	Frequency
$0 < h \leq 4$	8
$4 < h \leq 8$	12
$8 < h \leq 12$	6
$12 < h \leq 16$	4
$16 < h \leq 20$	5

- State the modal class interval.
 - Work out an estimate for the mean number of hours spent gaming.
 - State the class interval that contains the median number of hours of gaming.
- 7) The table shows the number of books read by 25 pupils last year.

Number of Books Read	Frequency
$0 < b \leq 3$	6
$3 < b \leq 6$	9
$6 < b \leq 9$	5
$9 < b \leq 12$	3
$12 < b \leq 15$	2

- State the modal class interval.
- State the class interval that contains the median number of books read.
- Estimate the mean number of books read. Give your answer to the nearest unit.
- Explain why your answer to part c is an estimate.

- 8) 100 people travel to an event. The distance they travelled is shown in the table below in kilometres.

Distance Travelled (km)	Frequency
$0 < d \leq 1.5$	14
$1.5 < d \leq 2.5$	25
$2.5 < d \leq 3.5$	28
$3.5 < d \leq 4.5$	11
$4.5 < d \leq 5.5$	8
$5.5 < d \leq 6.5$	14

- State the modal class interval.
 - State the class interval that contains the median distance travelled.
 - Estimate the mean distance travelled.
 - Explain why your answer to part c is an estimate.
- 9) A survey was given on how many hours of TV people watched this week. The results are shown in the frequency table below.

Hours	Frequency
0 – 5	6
6 – 10	4
11 – 15	5
16 – 20	x

Bob correctly estimated that the mean number of hours watched was 8.125
Work out the value of x.

- 10) The table shows the number of pets owned per household.

Number of Pets	Frequency
0	7
1	10
2	2x
3	x
4	3

The mean number of pets per household is 1.5625.
Work out the value of x.