

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

a. Work out the mean number of points per game.
b. 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

a. Work out the average shoe size.
b. 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

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

a. State the modal class interval.
b. State the class interval that contains the median distance travelled.
c. Estimate the mean distance travelled.
d. 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.