

Learning Objective: To be able to find the mean and median from a table of discrete data

Copy tables neatly into your books as you work through the questions

Find the mean and median for the following tables of discrete (or rounded) data

Number of siblings	frequency
0	5
1	7
2	12
3	8
4	3
5	0
6	1

Number of Pets	frequency
0	8
1	12
2	6
3	2
4	1

Number of books read Recently	Frequency
0	22
1	18
2	0
3	3
4	42
5	18
6	6
7	1

Number hours Watching TV	frequency
0	1
1	3
2	7
3	13
4	8
5	2
6	1

Number of close friends	frequency
0	1
1	23
2	47
3	34

Number of steps walked to nearest thousand	Frequency
0	0
1000	3
2000	7
3000	11
4000	23
5000	8

Extension:

- 1) Comment briefly on the distribution of the third table. Can you explain why the frequency is distributed in such a way?
- 2) Can you find the value of  $x$  in the table below so that the mean is 1.52

Number of brothers	Frequency
0	5
1	8
2	$x$
3	2
4	2

Learning Objective 1: To be able to estimate the mean from a table of continuous (or grouped) data

Extension Learning Objective 2: To be able to estimate the median using a linear interpolation

Copy the tables neatly into your book as you work through the questions

Estimate the mean for the following tables of continuous data

Weight (kg)	Frequency
$30 \leq w < 40$	3
$40 \leq w < 50$	4
$50 \leq w < 60$	12
$60 \leq w < 70$	23
$70 \leq w < 80$	17
$80 \leq w < 90$	6

Time (s)	Frequency
$0 \leq t < 20$	23
$20 \leq t < 40$	41
$40 \leq t < 60$	60
$60 \leq t < 80$	57

Height (m)	Frequency
$1 \leq x < 1.2$	1
$1.2 \leq x < 1.4$	2
$1.4 \leq x < 1.6$	17
$1.6 \leq x < 1.8$	15
$1.8 \leq x < 2.0$	5

length (cm)	Frequency
$0 \leq l < 1$	5
$1 \leq l < 1.2$	7
$1.2 \leq l < 1.5$	12
$1.5 \leq l < 1.6$	13
$1.6 \leq l < 2.0$	8

Time (minutes)	Frequency
$0 \leq t < 1$	3
$1 \leq t < 5$	15
$5 \leq t < 7$	18
$7 \leq t < 10$	2

Age (years)	Frequency
0 – 9	45
10 – 19	51
20 – 29	33
30 – 39	28
40 +	7

Extension: estimate the median for each of the tables of data above