

Question 1 a

The heights (in centimeters) of 8 plants were measured.
The results are shown below.

12.1, 18.4, 16.5, 11.5, 17.9, 18.0, 5.8, 23.4

Calculate the mean height of the plants.

14.7 cm



103.1 cm



15.5 cm



17.2 cm



Question 2 a

Lucy recorded her scores (out of 10) in spelling tests at school.
The scores are shown below.

5, 6, 8, 9, 6, 7, 9, 8, 9

What is Lucy's median score?

9



7



6



8



Question 2 b

Gordon records his times (in seconds) for running 100 m.
They are given below.

14.1, 14.2, 13.9, 14.1, 13.7, 13.5, 13.4

What is Gordon's median time?

13.8 seconds



14.0 seconds



14.1 seconds



13.9 seconds



Question 3 a

Josie did a survey of pocket money (in \$) amongst her friends.
The results of her survey are given below.

10, 5, 5, 10, 20, 4, 5, 15

Find the median amount of pocket money.

\$9.25



\$15



\$7.50



\$10



Question 3 b

The ages of a group of students are given below.

10, 15, 10, 11, 13, 15, 15, 15

Find the median age.

14



12



13



15



Question 3 c

The scores of a group of students in an English exam are given below.

82, 69, 40, 90, 55, 65, 78, 79, 58, 64

Find the median score.

68



67



60



65



Question 4 a

Kieran asked his friends how many brothers and sisters they have. The results are shown below.

1, 2, 0, 0, 1, 3, 1, 2, 2, 4

What is the mode number of brothers and sisters?

1 and 2



1.5



2



1 and 3



Question 4 b

The ages of a group of students are given below.

10, 14, 11, 12, 14, 13, 10, 15

What is the mode age?

12



10 and 14



13



12 and 14



Question 4 c

Frank did a survey of pocket money (in \$) among his friends.
The results of his survey are given below.

10, 5, 5, 10, 20, 4, 2, 15

What is the mode of the data?

\$10 and \$20



\$15



\$7.50



\$5 and \$10



Question 4 d

The temperature (in $^{\circ}\text{C}$) in a classroom was recorded daily.
The results are shown below.

19, 20, 18, 20, 19, 21, 18, 19, 22, 20

What is the mode of the temperatures?

19.5 $^{\circ}\text{C}$



19 and 20 $^{\circ}\text{C}$



19 and 21 $^{\circ}\text{C}$



20 $^{\circ}\text{C}$



Question 5 a

The number of people in each house on a street is given below.

Number of people	Frequency
0	2
1	5
2	7
3	6
4	4
5	3
6	1

Calculate the mean number of people in a house.

10.6



2.6



2.7



4



Question 5 b

The number of A's that a class got on a report is given below.

Number of A's	Number of children
0	5
1	6
2	4
3	4
4	2
5	3
6	5

Calculate the mean number of A's.

2.7



2.9



11.3



4.1



Question 5 c

The number of brothers and sisters that a class have is given below.

Number of brothers and sisters	Frequency
0	6
1	8
2	7
3	5
4	2
5	1

Calculate the mean number of brothers and sisters.

8.3



4.8



1.9



1.7



Question 5 d

The number of goals scored by a soccer team over a season is given below.

Number of goals	Number of matches
0	6
1	4
2	5
3	1
4	2
5	1

Calculate the mean number of goals scored.

3.2



5



1.6



1.9



Question 5 e

The number of pets that a group of children have is given below.

Number of pets	Frequency
0	6
1	7
2	5
3	5
4	1
5	2
6	1

Calculate the mean number of pets.

3.9



7.4



2.1



1.9



Question 6 a

The number of people in each house on a street is given below

Number of people	Frequency
0	2
1	5
2	7
3	6
4	4
5	3
6	1

Find the median number of people in a house.

14.5



2.5



2 and 3



2



Question 6 b

The number of people in each house on a street is given below.

Number of people	Frequency
0	2
1	5
2	7
3	6
4	4
5	3
6	1

Find the median number of people in a house.

14.5



2.5



2 and 3



2



Question 6 c

The number of A's that a class got on a report is given below.

Number of A's	Number of children
0	5
1	6
2	4
3	4
4	2
5	3
6	5

Find the median number of A's.

3



15



2



1



Question 6 d

The number of brothers and sisters that a class have is given below.

Number of brothers and sisters	Frequency
0	6
1	8
2	7
3	5
4	2
5	1

Find the median number of brothers and sisters.

2



15



2.5



1



Question 6 e

The number of goals scored by a soccer team over a season is given below.

Number of goals	Number of matches
0	6
1	4
2	5
3	1
4	2
5	1

Find the median number of goals scored.

10



1



0



2.5



Question 6 f

The number of pets that a group of children have is given below.

Number of pets	Frequency
0	6
1	7
2	5
3	5
4	1
5	2
6	1

Find the median number of pets.

3



14



2



1



Question 7 a

The heights of a group of children are given below.

Height, h (cm)	Frequency
$120 \leq h < 130$	7
$130 \leq h < 140$	6
$140 \leq h < 150$	4
$150 \leq h < 160$	5
$160 \leq h < 170$	3

Calculate an estimate of the mean height of the children.

136.4 cm



145 cm



707 cm



141.4 cm



Question 7 b

The speed of vehicles on a motorway is given below.

Speed, s (mph)	Number of vehicles
$50 \leq s < 60$	5
$60 \leq s < 70$	9
$70 \leq s < 80$	10
$80 \leq s < 90$	2
$90 \leq s < 100$	1

Calculate an estimate of the mean speed of the vehicles.

375 mph



75 mph



64.4 mph



69.4 mph



Question 7 c

The time that people waited in a doctor's surgery are given below.

Time, t (mins.)	Number of people
$0 \leq t < 10$	9
$10 \leq t < 20$	7
$20 \leq t < 30$	6
$30 \leq t < 40$	2
$40 \leq t < 50$	1

Calculate an estimate of the mean waiting time.

83 mins.



25 mins.



16.6 mins.



11.6 mins.



Question 7 d

The distance that a group of children travel to school is given below.

Distance, d (km)	Number of children
$0 \leq d < 2$	10
$2 \leq d < 4$	8
$4 \leq d < 6$	4
$6 \leq d < 8$	3
$8 \leq d < 10$	2

Calculate an estimate of the mean distance.

3.4 km



2.4 km



18.6 km



5 km



Question 7 e

The speed of vehicles on a motorway is given below.

Speed, s (mph)	Number of vehicles
$50 \leq s < 60$	5
$60 \leq s < 70$	9
$70 \leq s < 80$	10
$80 \leq s < 90$	2
$90 \leq s < 100$	1

Calculate an estimate of the mean speed of the vehicles.

64.4 mph



69.4 mph



375 mph



75 mph



Question 7 f

The time that people waited in a doctor's surgery are given below.

Time, t (mins.)	Number of people
$0 \leq t < 10$	9
$10 \leq t < 20$	7
$20 \leq t < 30$	6
$30 \leq t < 40$	2
$40 \leq t < 50$	1

Calculate an estimate of the mean waiting time.

83 mins.



25 mins.



16.6 mins.



11.6 mins.



Question 7 g

The distance that a group of children travel to school is given below.

Distance, d (km)	Number of children
$0 \leq d < 2$	10
$2 \leq d < 4$	8
$4 \leq d < 6$	4
$6 \leq d < 8$	3
$8 \leq d < 10$	2

Calculate an estimate of the mean distance.

18.6 km



5 km



2.4 km



3.4 km



Question 8 a

The heights of a group of children are given below.

Height, h (cm)	Frequency
$120 \leq h < 130$	7
$130 \leq h < 140$	6
$140 \leq h < 150$	4
$150 \leq h < 160$	5
$160 \leq h < 170$	3

Find the class interval that contains the median height.

$130 \leq h < 140$ cm



135 cm



$140 \leq h < 150$ cm



$120 \leq h < 130$ cm



Question 8 b

The heights of a group of children are given below.

Height, h (cm)	Frequency
$120 \leq h < 130$	7
$130 \leq h < 140$	6
$140 \leq h < 150$	4
$150 \leq h < 160$	5
$160 \leq h < 170$	3

Find the class interval that contains the median height.

135 cm



$130 \leq h < 140$ cm



$140 \leq h < 150$ cm



$120 \leq h < 130$ cm



Question 8 c

The speed of vehicles on a motorway is given below.

Speed, s (mph)	Number of vehicles
$50 \leq s < 60$	5
$60 \leq s < 70$	9
$70 \leq s < 80$	10
$80 \leq s < 90$	2
$90 \leq s < 100$	1

Find the class interval that contains the median speed.

$$50 \leq s < 60 \text{ mph}$$



$$70 \leq s < 80 \text{ mph}$$



$$60 \leq s < 70 \text{ mph}$$



$$65 \text{ mph}$$



Question 8 d

The time that people waited in a doctor's surgery are given below.

Time, t (mins.)	Number of people
$0 \leq t < 10$	9
$10 \leq t < 20$	7
$20 \leq t < 30$	6
$30 \leq t < 40$	2
$40 \leq t < 50$	1

Find the class interval that contains the median waiting time.

$10 \leq t < 20$ mins.



15 mins.



$20 \leq t < 30$ mins.



$0 \leq t < 10$ mins.



Question 8 e

The distance that a group of children travel to school is given below.

Distance, d (km)	Number of children
$0 \leq d < 2$	10
$2 \leq d < 4$	8
$4 \leq d < 6$	4
$6 \leq d < 8$	3
$8 \leq d < 10$	2

Find the class interval that contains the median distance.

$0 \leq d < 2$ km



$2 \leq d < 4$ km



3 km



$4 \leq d < 6$ km



Question 8 f

The speed of vehicles on a motorway is given below.

Speed, s (mph)	Number of vehicles
$50 \leq s < 60$	5
$60 \leq s < 70$	9
$70 \leq s < 80$	10
$80 \leq s < 90$	2
$90 \leq s < 100$	1

Find the class interval that contains the median speed.

$$50 \leq s < 60 \text{ mph}$$



$$70 \leq s < 80 \text{ mph}$$



$$60 \leq s < 70 \text{ mph}$$



$$65 \text{ mph}$$



Question 8 g

The time that people waited in a doctor's surgery are given below.

Time, t (mins.)	Number of people
$0 \leq t < 10$	9
$10 \leq t < 20$	7
$20 \leq t < 30$	6
$30 \leq t < 40$	2
$40 \leq t < 50$	1

Find the class interval that contains the median waiting time.

$20 \leq t < 30$ mins.



$0 \leq t < 10$ mins.



$10 \leq t < 20$ mins.



15 mins.



Question 8 h

The distance that a group of children travel to school is given below.

Distance, d (km)	Number of children
$0 \leq d < 2$	10
$2 \leq d < 4$	8
$4 \leq d < 6$	4
$6 \leq d < 8$	3
$8 \leq d < 10$	2

Find the class interval that contains the median distance.

$$2 \leq d < 4 \text{ km}$$



$$3 \text{ km}$$



$$0 \leq d < 2 \text{ km}$$



$$4 \leq d < 6 \text{ km}$$

