

Year 9 Class 25 questions

Q1

There are 10 people in a futsal team. Their ages are: 13, 11, 12, 13, 13, 12, 12, 11, 13, 12.

What is the mean age? **12.2**

Q2

Find the median of this set of scores.

1.5 2.1 2.4 3 3.6 4 4.5 5.2

3.3

Q3

Points per netball game

4	1 3 4 4
5	2 2 5 6 7
6	3 3 3 5 6 9
7	2

What is the range?

31

Q4

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

79	54	70	83	59	44	64	74	73	82	87
54	62	45	75	52	61	50	67	57	68	75

4	4 5
5	0 2 2 4 7 9
6	1 1 4 8 8
7	0 3 4 5 9 9
8	2 5 7

4	4 5
5	0 2 4 4 7 9
6	1 2 4 7 8
7	0 3 4 5 5 9
8	2 3 7

4	4 5
5	0 2 3 4 8 9
6	1 2 2 5 8
7	0 1 4 5 8 9
8	2 4 7

4	4 6
5	0 2 3 3 7 8
6	1 2 4 5 7
7	0 3 4 5 6 9
8	2 6 7

Q5

Choose the best method for collecting data to determine the number of people attending a concert.

census sample

Q6

The "Flying Saucers" record their best discus results:

32.1m 35.6m 28.4m 32.3m 35.9m

42.1m 33.7m 24.1m 26.4m 27.3m

Find the mean length jumped. (Answer to 1 decimal place)

Mean = **31.8**

Q7

Mia records the number of plastic bottles she collects for recycling each week.

36 24 37 18 25 42 25

Find the mean number of bottles collected each week. (Answer to 1 decimal place)

Mean = **29.6**

Q8

Find the median of this set of scores.

10 7 15 6 9 10

9.5

Q9

Find the median of this set of scores.

15 6 17 6 9 12 11 15

11.5

Q10

Strawberry flavoured chocolates in a pack

0	7 7 8 9
1	0 5 5 6 6 6 7
2	1 3 6
3	2

What is the median?

16

Q11

Classroom size (square metres)

3	2 2 5 6 9
4	0 0 4 4 4 5
5	2 5

What is the median classroom size?

m² 40m²

Q12

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

104	73	95	66	82	89	82	71	100	106	87
76	95	70	89	94	84	99	71	97	78	65

6	5 6
7	0 1 1 3 6 8
8	2 2 4 7 9 9
9	4 5 5 7 9
10	0 4 6

6	5 6
7	0 1 1 3 7 8
8	2 2 4 7 9 9
9	4 5 5 7 8
10	0 4 6

6	5 6
7	0 1 2 3 6 8
8	2 2 4 7 9 9
9	4 4 5 7 9
10	0 4 6

6	5 6
7	0 1 1 5 6 8
8	2 2 4 7 9 9
9	4 4 5 8 9
10	0 4 6

Q13

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

97	84	70	98	104	100	65	71	78	89	87
71	95	94	89	82	66	82	106	77	73	95

6	5 6
7	0 1 1 3 6 8
8	2 2 4 7 9 9
9	4 5 5 7 9
10	0 4 6

6	5 6
7	0 1 1 3 7 8
8	2 2 4 7 9 9
9	4 5 5 7 8
10	0 4 6

6	5 6
7	0 1 2 3 6 8
8	2 2 4 7 9 9
9	4 4 5 7 9
10	0 4 6

6	5 6
7	0 1 1 5 6 8
8	2 2 4 7 9 9
9	4 4 5 8 9
10	0 4 6

Q14

What type of sampling is being used?

Surveying 50 out of 100 boys and 40 out of 80 girls.

- Stratified
- Random
- Systematic

Q15

What type of sampling is being used?

Checking 60 out of 300 plain chip packets and 40 of 200 salt and vinegar chip packets.

- Systematic
- Random
- Stratified

Q16

In his first 4 games of basketball, Nick scores 18, 22, 20 and 20 points.

How many points does he need to score in his 5th game to have a mean of 21 points per game?

25

Q17

Three packets of nails weigh 850 g, 1.25 kg and 950 g respectively.
When a fourth bag is added the mean weight is 975 g.

What was the weight of the fourth bag?

850

Q18

The mean height of 5 basketball players is 175 cm.
When a 6th player was added to the team, the mean height increased to 177 cm.

How tall was the 6th player?

187

Q19

If the median of this set is 9, find A.

11 20 3 16 A 6

A = 7

Q20

If the median of this set is 10.5, find A.

14 5 A 10 14 16 5 8

A = 11

Q21

If the median of this set is 15, find A.

18 9 A 9 12 16 20 18

A = 14

Q22

5	0 0 1 2 3
6	0 2 2 3 4 4 4 5
7	0 1 1 1 2 3 3 8 8 9
8	2 3 3

Find the mean. (Answer to one decimal place)

67.1

Find the mode.

64 64 and 71 71 71 and 78

Find the range. 33

Find the median. 67.5

Q23

8	0 0 1
9	0 2 2 3 3 8
10	0 4 4 6 6 8 9 9 9
11	1 2 2 4

Find the mean. (Answer to one decimal place)

100.1

Find the mode.

112 109 82 and 83 106 and 109

Find the range. 34

Find the median. 104

Q24

3		3	4	5				
4		1	2	3	8			
5		0	0	0	4	5	5	6
6		0	1	1	3	3		
7		0						

Find the mean. (Answer to one decimal place)

51.2

Find the mode.

63 50 50 and 55 61

Find the range. 37

Find the median. 52

Q25

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

75	82	104	84	87	89	70	95	100	71	66
65	71	99	94	76	89	98	82	78	106	94

6		5	6				
7		0	1	1	3	6	8
8		2	2	4	7	9	9
9		4	5	5	7	9	
10		0	4	6			

6		5	6				
7		0	1	1	3	7	8
8		2	2	4	7	9	9
9		4	5	5	7	8	
10		0	4	6			

6		5	6				
7		0	1	2	3	6	8
8		2	2	4	7	9	9
9		4	4	5	7	9	
10		0	4	6			

6		5	6				
7		0	1	1	5	6	8
8		2	2	4	7	9	9
9		4	4	5	8	9	
10		0	4	6			

Q26

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

93	98	104	84	115	124	114	83	109	102	107
113	108	118	116	123	90	91	96	102	120	91

8		3	4				
9		0	1	2	3	6	8
10		2	2	4	7	8	9
11		2	4	5	6	8	
12		0	3	4			

8		3	4				
9		0	0	2	3	7	8
10		2	2	4	7	8	9
11		1	3	4	6	8	
12		0	3	4			

8		3	4				
9		0	1	1	3	6	8
10		2	2	4	7	8	9
11		3	4	5	6	8	
12		0	3	4			

8		3	4				
9		0	1	2	3	6	8
10		2	2	4	6	8	9
11		2	4	5	7	8	
12		0	1	4			

Q27

Construct a stem-and-leaf plot from the data set. Then match the correct plot with yours.

108	83	113	90	107	97	93	92	118	120	116
90	102	109	123	111	84	102	104	124	98	114

8		3	4				
9		0	1	2	3	6	8
10		2	2	4	7	8	9
11		2	4	5	6	8	
12		0	3	4			

8		3	4				
9		0	0	2	3	7	8
10		2	2	4	7	8	9
11		1	3	4	6	8	
12		0	3	4			

8		3	4				
9		0	1	1	3	6	8
10		2	2	4	7	8	9
11		3	4	5	6	8	
12		0	3	4			

8		3	4				
9		0	1	2	3	6	8
10		2	2	4	6	8	9
11		2	4	5	7	8	
12		0	1	4			

Q28

The table shows the number of students at Caboolture High.

Year	No. of students
7	142
8	152
9	148
10	137
11	115
12	110
Total	804

A stratified random survey of 40 students was conducted:

What percentage of students should be from Year 8?

24.1% 21.4% 16.2% **→** 18.9%

How many Year 9 students should be surveyed?

5 148 **→** 7 11

Q29

A school with 630 students is conducting a random survey. Each student is given an identity number from 1 to 630. The number 0.7 is given to identify a student to survey.

What is the identity number of the student to be surveyed?

441

Q30

A school with 720 students is conducting a random survey. Each student is given an identity number from 1 to 720. The number 0.35 is given to identify a student to survey.

What is the identity number of the student to be surveyed?

252