

Mean, Median, Mode and Range-Questions

Key Stage 3: 2003 Paper 1 Level 3-5

1.

18. (a) There are four people in Sita's family.

Their shoe sizes are 4, 5, 7 and 10

What is the **median** shoe size in Sita's family?



.....

1 mark

(b) There are **three** people in John's family.

The **range** of their shoe sizes is **4**

Two people in the family wear shoe size 6

John's shoe size is **not 6** and it is **not 10**

What is John's shoe size?



.....

1 mark

Key Stage 3: 2003 Paper 1 Level 4-6

2.

13. (a) There are four people in Sita's family.
Their shoe sizes are 4, 5, 7 and 10

What is the **median** shoe size in Sita's family?



.....

.....
1 mark

- (b) There are **three** people in John's family.
The **range** of their shoe sizes is **4**
Two people in the family wear shoe size 6
John's shoe size is **not 6** and it is **not 10**

What is John's shoe size?



.....

.....
1 mark

Key Stage 3: 2005 Paper 1 Level 3-5

3.

12. (a) There are two children in the Smith family.

The **range** of their ages is **exactly 7 years**.

What could the ages of the two children be?

Give an example.



..... and

1 mark

(b) There are two children in the Patel family.

They are twins of the **same age**.

What is the **range** of their ages?



..... years

1 mark

4.

19. (a) Look at these three numbers.



Show that the **mean** of the three numbers is **10**



1 mark

Explain why the **median** of the three numbers is **10**



1 mark

(b) Four numbers have a mean of 10 and a median of 10, but **none** of the numbers is 10

What could the four numbers be?

Give an example.



1 mark

Key Stage 3: 2005 Paper 1 Level 4-6

5.

5. (a) There are two children in the Smith family.
The **range** of their ages is **exactly 7 years**.

What could the ages of the two children be?

Give an example.



..... and

.....
1 mark

- (b) There are two children in the Patel family.
They are twins of the **same age**.

What is the **range** of their ages?



..... years

.....
1 mark

6.

12. (a) Look at these three numbers.



Show that the **mean** of the three numbers is **10**



1 mark

Explain why the **median** of the three numbers is **10**



1 mark

(b) Four numbers have a mean of 10 and a median of 10, but **none** of the numbers is 10

What could the four numbers be?

Give an example.



1 mark

Key Stage 3: 2006 Paper 1 Level 4-6

7.

18. Hanif asked ten people:

'What is your favourite sport?'

Here are his results.

<i>football</i>	<i>cricket</i>	<i>football</i>	<i>hockey</i>	<i>swimming</i>
<i>hockey</i>	<i>swimming</i>	<i>football</i>	<i>netball</i>	<i>football</i>

(a) Is it possible to work out the **mean** of these results?



Yes

No

Explain how you know.



1 mark

(b) Is it possible to work out the **mode** of these results?



Yes

No

Explain how you know.



1 mark

Key Stage 3: 2007 Paper 2 Level 3-5

8.

10. These are the names of the twelve people who work for a company.

Ali	Claire	Kiki	Suki
Brian	Claire	Lucy	Tom
Claire	James	Ryan	Tom

- (a) What name is the **mode**?



1 mark

- (b) One person leaves the company. A different person joins the company.
Now the name that is the **mode** is **Tom**.

Write the missing names in the sentences below.



The name of the person who **leaves** is _____

The name of the person who **joins** is _____

1 mark

Key Stage 3: 2007 Paper 2 Level 4-6

9.

3. These are the names of the twelve people who work for a company.

Ali	Claire	Kiki	Suki
Brian	Claire	Lucy	Tom
Claire	James	Ryan	Tom

- (a) What name is the **mode**?



1 mark

- (b) One person leaves the company. A different person joins the company.
Now the name that is the **mode** is **Tom**.

Write the missing names in the sentences below.



The name of the person who **leaves** is _____

The name of the person who **joins** is _____

1 mark

Key Stage 3: 2008 Paper 1 Level 3-5

16. The table shows the temperatures in 10 cities on a day in December.

City	Temperature in °C
Athens	18
Barcelona	16
Berlin	7
Brussels	8
Dublin	9
Geneva	6
Madrid	12
Moscow	2
Paris	6
Rome	19

- (a) Which temperature was the **mode**?

 _____ °C

_____ 1 mark

- (b) In a different city, the temperature was **5°C lower** than in **Moscow**.

What was the temperature in this city?

 _____ °C

_____ 1 mark

Key Stage 3: 2008 Paper 1 Level 4-6

11.

9. The table shows the temperatures in 10 cities on a day in December.

City	Temperature in °C
Athens	18
Barcelona	16
Berlin	7
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Geneva	6
Madrid	12
Moscow	2
Paris	6
Rome	19

- (a) Which temperature was the **mode**?

 _____ °C

 1 mark

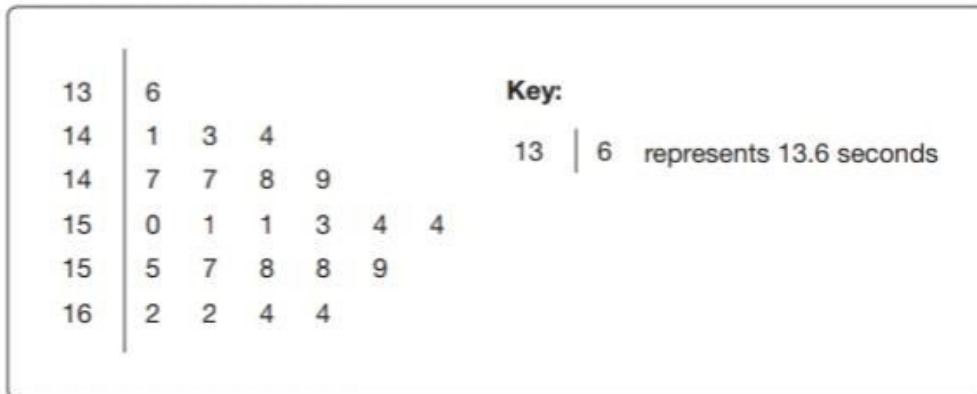
- (b) In a different city, the temperature was **5°C lower** than in **Moscow**.
What was the temperature in this city?

 _____ °C

 1 mark

12.

25. A pupil recorded the times of **23** people running the 100 metres.
The stem-and-leaf diagram shows the results.



- (a) Two of the people ran the 100 metres in **14.7 seconds**.

How many of them ran the 100 metres **faster** than this?



_____ people

_____ 1 mark

- (b) What was the **range** of times?



seconds

_____ 2 marks

21. Gita threw three darts.

Use the information in the box to work out what numbers she threw.

The lowest number was 10

The range was 10

The mean was 15



Gita's numbers were _____, _____ and _____

_____ mark

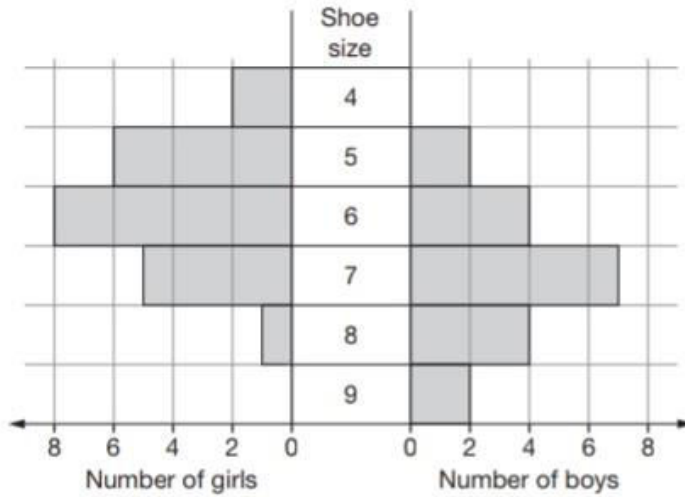
Key Stage 3: 2009 Paper 2 Level 3-5

14.

16. Kim asked some pupils:

To the nearest whole number, what is your shoe size?

The chart shows her results.



- (a) How many pupils had **size 6** shoes?

1 mark

- (b) Kim asked **more girls** than boys.

How many more?

1 mark

- (c) Who had the bigger **range** of shoe sizes?

Girls Boys Both the same

Explain your answer.

1 mark

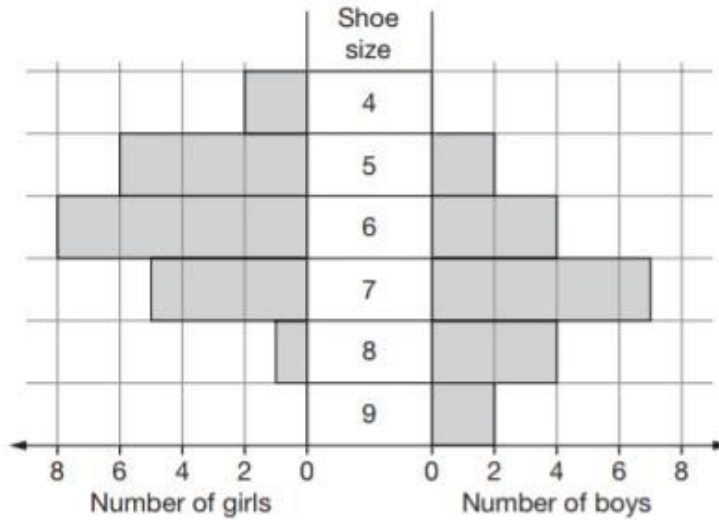
Key Stage 3: 2009 Paper 2 Level 4-6

15.

7. Kim asked some pupils:

To the nearest whole number, what is your shoe size?

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(a) How many pupils had **size 6** shoes?



1 mark

(b) Kim asked **more girls** than boys.

How many more?



1 mark

(c) Who had the bigger **range** of shoe sizes?



Girls

Boys

Both the same

Explain your answer.



1 mark