

DO NOT WRITE IN THIS AREA

12 Freddie recorded the number of runs he scored in each of 11 cricket matches.
Here are his results.

4 0 21 32 51 6 102 69 17 9 42

Find the interquartile range of his results.

0 4 6 9 17 21 32 42 51 69 102

~~0~~ ~~4~~ ~~6~~ ~~9~~ ~~17~~ (21) ~~32~~ ~~42~~ ~~51~~ ~~69~~ ~~102~~

median

~~0~~ ~~4~~ (6) ~~9~~ ~~17~~ ~~32~~ ~~42~~ (51) ~~69~~ ~~102~~

LQ

UQ

$$\begin{aligned} \text{IQR} &= \text{UQ} - \text{LQ} \\ &= 51 - 6 \\ &= 45 \end{aligned}$$

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



DO NOT WRITE IN THIS AREA

14 Here is the number of goals that Henri's team scored one summer in each water polo match.

~~7~~ ~~8~~ ~~9~~ ~~11~~ ~~13~~ 13 ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~20~~
 median

Find the interquartile range of the numbers of goals.
 Show your working clearly.

~~8~~ ~~8~~ 9 ~~11~~ ~~13~~ ~~13~~ ~~14~~ ~~15~~ 16 ~~17~~ ~~20~~
 LQ UQ

$$\begin{aligned} \text{IQR} &= \text{UQ} - \text{LQ} \\ &= 16 - 9 \\ &= 7 \end{aligned}$$

DO NOT WRITE IN THIS AREA

(Total for Question 14 is 2 marks)

DO NOT WRITE IN THIS AREA



P 6 5 0 1 4 A 0 1 3 2 6

14 Max kept a record of the marks he scored in each of the 11 spelling tests he took one term.

Here are his marks.

18 5 7 12 11 18 15 16 17 13 14

Find the interquartile range of the marks.

~~5~~ ~~7~~ ~~11~~ ~~12~~ ~~13~~ 14 ~~15~~ ~~16~~ ~~17~~ ~~18~~ ~~18~~
 median

~~5~~ ~~7~~ 11 ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~ 17 ~~18~~ ~~18~~
 LQ UQ

$$\begin{aligned} \text{IQR} &= \text{UQ} - \text{LQ} \\ &= 17 - 11 \\ &= 6 \end{aligned}$$

(Total for Question 14 is 3 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



13 Robert asked 11 people how many meetings they attended last week.

Here are the results in numerical order.

1 2 3 4 5 8 11 12 13 14 15
median

Find the interquartile range of the number of meetings.

1 2 4 5 6 7 8 11 12 13 14 15
LQ UQ

$$\begin{aligned} \text{IQR} &= \text{UQ} - \text{LQ} \\ &= 13 - 4 \\ &= 9 \end{aligned}$$

(Total for Question 13 is 2 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



10 Here are the test marks of 15 students.

~~7~~ ~~10~~ ~~14~~ ~~15~~ ~~16~~ ~~17~~ ~~18~~ 19 ~~20~~ ~~20~~ ~~23~~ ~~25~~ ~~30~~ ~~39~~ ~~40~~

median

Find the interquartile range of these marks.

~~7~~ ~~10~~ ~~14~~ 15 ~~16~~ ~~17~~ ~~18~~ ~~19~~ ~~20~~ ~~20~~ ~~23~~ 25 ~~30~~ ~~39~~ ~~40~~

LQ

uQ

$$IQR = uQ - LQ$$

$$= 25 - 15$$

$$IQR = 10$$

(Total for Question 10 is 2 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



10 Here are the numbers of goals scored by a hockey team in its 11 games this season.

~~0~~ ~~1~~ ~~2~~ ~~2~~ ~~3~~ 4 ~~4~~ ~~5~~ ~~7~~ ~~8~~ ~~11~~

median

Work out the interquartile range of the numbers of goals.

~~0~~ ~~1~~ 2 ~~7~~ ~~7~~ ~~4~~ ~~4~~ ~~6~~ 7 ~~8~~ ~~11~~

LQ

uQ

$$\begin{aligned} \text{IQR} &= 7 - 2 \\ &= 5 \end{aligned}$$

(Total for Question 10 is 2 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



15 Here are the numbers of aces that Rutger served in each of 11 tennis matches.



(a) Find the interquartile range of the numbers of aces.
Show your working clearly.



$$IQR = 11 - 2 = 9 \quad (2)$$

Kim also plays in 11 tennis matches.

For Kim

the median number of aces is 11

the interquartile range of the numbers of aces is 5

(b) State, giving a reason, whether Rutger or Kim

(i) served more aces on average,

Kim served more aces on average than Rutger,
this is shown by a higher median, 11 compared to 8

(1)

(ii) was more consistent with the number of aces served.

Kim was more consistent than Rutger
this is shown by a lower IQR, 5 compared to 9

(1)

(Total for Question 15 is 4 marks)



14 Sandeep sat 11 tests in January 2020
Each test was marked out of 60

Here are his test results.

45 41 35 44 38 47 47 39 37 43 42

(a) Find the interquartile range of these test results.
Show your working clearly.

~~35~~ ~~37~~ ~~38~~ ~~39~~ ~~41~~ 42 ~~43~~ ~~44~~ ~~45~~ ~~47~~ ~~47~~
med
~~35~~ ~~37~~ 38 ~~39~~ ~~41~~ ~~42~~ ~~43~~ ~~44~~ 45 ~~47~~ ~~47~~
LQ UQ

$$\begin{aligned}
 \text{IQR} &= 45 - 38 \\
 &= 7
 \end{aligned}$$

(3)

Sandeep also sat some tests in May 2020
Each test was marked out of 60

The median of the May 2020 test results is 42
The interquartile range of the May 2020 test results is 12

(b) In which month, January or May, were Sandeep's test results more consistent?
Give a reason for your answer.

More consistent in January shown by a lower IQR

(1)

(Total for Question 14 is 4 marks)



DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

15 Here is a list giving the numbers of runs scored last week by the eleven members of cricket team A.

2 3 4 6 21 26 27 32 34 61 72

The interquartile range of the numbers of runs scored last week by the eleven members of cricket team B was 42

Using a suitable calculation, write down one comparison between the numbers of runs scored by the members of cricket team A and the members of cricket team B. Show your working clearly.

~~2~~ ~~3~~ ~~4~~ ~~6~~ ~~21~~ 26 ~~27~~ ~~32~~ ~~34~~ ~~61~~ ~~72~~
med

~~2~~ ~~3~~ 4 ~~6~~ ~~21~~ ~~26~~ ~~27~~ ~~32~~ 34 ~~61~~ ~~72~~
LQ UQ

$$IQR = 34 - 4$$

$$= 30$$

Team A is more consistent, shown by a lower IQR

(Total for Question 15 is 3 marks)



P 7 2 4 4 3 A 0 1 5 2 6

11 Twenty students took a Science test and a Maths test.

Both tests were marked out of 50

The table gives information about their results.

	Median	Interquartile range
Science	27	18
Maths	24.5	11

Use this information to compare the Science test results with the Maths test results.
Write down two comparisons.

- 1 Pupils did better in Science, shown by a higher median
- 2 Pupils more consistent in Maths, shown by lower IQR

(Total for Question 11 is 2 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA



January 2021 P2H

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

12 15 people were asked how long, in minutes, they had been waiting for a bus.

Here are the results.

~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ 8 ~~9~~ ~~10~~ ~~11~~ ~~12~~ ~~14~~ ~~15~~ ~~16~~
med

Find the interquartile range of these times.

~~1~~ ~~2~~ ~~3~~ 4 ~~7~~ ~~8~~ ~~10~~ ~~11~~ ~~9~~ ~~10~~ ~~11~~ 13 ~~14~~ ~~15~~ ~~16~~
LQ *UQ*

$$\begin{aligned} \text{IQR} &= 13 - 4 \\ &= 9 \end{aligned}$$

..... minutes

(Total for Question 12 is 2 marks)



P 6 6 3 0 1 A 0 1 3 2 6