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National 5 Maths
Median and IQR/SIQR

SQA past paper and specimen paper questions and answers by topic

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National 5 Maths
SQA 2015 Paper 1
Question 10

National 5 Maths
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Ten couples took part in a dance competition.

The couples were given a score in each round.

The scores in the first round were

16 27 12 18 26 21 27 22 18 17

(a) Calculate the median and semi-interquartile range of these scores. **3**

(b) In the second round, the median was 26 and the semi-interquartile range was 2·5.

Make two valid comparisons between the scores in the first and second rounds. **2**

Answers:

(a) Median = 19.5

SIQR = 4.5

(b) On average, the second round's scores were higher.

The second round's scores were more consistent.

(or equivalent statements)

National 5 Maths
SQA 2017 Paper 1
Question 2

National 5 Maths
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The number of calls received by the police was recorded over 10 days.
The results are shown below.

198 216 218 230 232 247 248 250 265 267

Find the semi-interquartile range of this data. **2**

Answer:

16

National 5 Maths
SQA 2019 Paper 1
Question 5

National 5 Maths
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The midday temperatures in Grantford were recorded over a nine day period.

The temperatures, in °C, were

4 7 4 3 6 10 9 5 3

(a) Calculate the median and semi-interquartile range for these temperatures. **3**

Over the same nine day period the midday temperatures in Endoch were also recorded.

The median temperature was 8 °C, and the semi-interquartile range was 1·5 °C.

(b) Make two valid comments comparing the midday temperatures of Grantford and Endoch during this period. **2**

Answers:

(a) Median = 5

SIQR = 2.25

(b) On average, temperatures in Grantford are lower.

Temperatures in Grantford are less consistent.

(or equivalent statements)

National 5 Maths
SQA 2021 Paper 1
Question 5

National 5 Maths
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The number of absentees at Applegrove High School was recorded each day over a four-week period.

The results are shown below.

7	8	8	11	12	14	14	15	17	17
18	20	20	21	23	24	25	26	27	29

Find the semi-interquartile range of this data. **2**

Answer:

5.25

National 5 Maths
SQA 2023 Paper 1
Question 9

National 5 Maths
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A magazine company conducted a survey of the ages of its readers.

A sample of ten readers' ages, in years, are shown below.

33 55 38 47 36 41 42 41 35 31

(a) Calculate the median and interquartile range of the ages of readers for this sample. **3**

A newspaper company also conducted a survey of the ages of its readers.

The median age of a sample of its readers was 41 years and the interquartile range was 9 years.

(b) Make two valid comments comparing the ages of the readers of the magazine and the ages of the readers of the newspaper. **2**

Answers:

(a) Median = 39.5

IQR = 7

(b) On average, the ages of the newspaper readers are higher.

The ages of the newspaper readers are more varied.

(or equivalent statements)

National 5 Maths
SQA 2024 Paper 1
Question 5

National 5 Maths
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The prices, in pounds (£), of the cameras on display in a shop are listed below.

155 160 190 210 230 240

(a) Calculate the median and the interquartile range of these prices. **3**

On a website, a sample of camera prices have a median of £195 and an interquartile range of £73.

(b) Make two valid comments comparing the **prices** of the cameras in the shop and on the website. **2**

Answers:

(a) Median = 200

IQR = 70

(b) On average, the prices are lower on the website.

The prices in the shop are more consistent.

(or equivalent statements)

National 5 Maths
SQA 2025 Paper 1
Question 3

National 5 Maths
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Ten pupils record the length of time, in minutes, it takes them to walk to school one morning.

3 11 13 15 15 16 17 18 19 22

Calculate the interquartile range of these times. **2**

Answer:

5