

## National 5 Maths Median and IQR/SIQR

SQA past paper and specimen paper  
questions and answers by topic

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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

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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**

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Answer:

16



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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

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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**

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**

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Answer:

5.25



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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

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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)*