

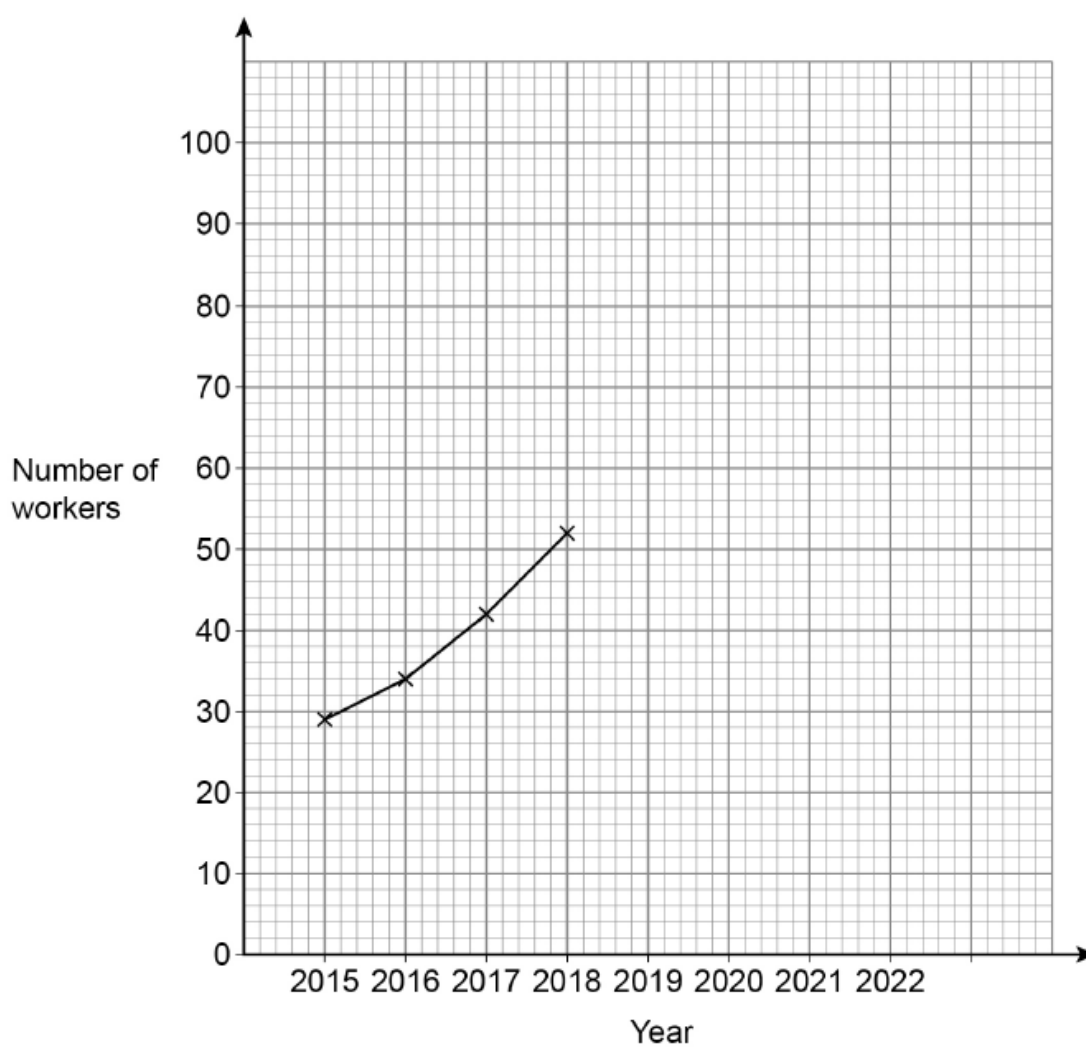
Statistics – GCSE Mathematics**1. No.6**

The table shows the number of workers at a company in different years.

Year	2015	2016	2017	2018	2019	2020	2021	2022
Number of workers	29	34	42	52	62	70	76	80

A time-series graph is drawn to represent the data.

The first four points have been plotted.



(a) Complete the graph.

[2 marks]

(b) Estimate the number of workers at the company in 2023

[1 mark]

Answer

2. No.16

The table shows information about the ages of members of two clubs.

	Median age (years)	Interquartile range of ages (years)
Swimming club	21.2	7.3
Cycling club	29.7	4.6

Compare the average age and consistency of ages for the members of the two clubs.

[2 marks]

Average _____

Consistency _____

3. No.13

Liam takes part in long jump competitions.

Here is some information about 40 of his jumps.

Length of jump, d metres	Number of jumps	Midpoint	
$7.0 \leq d < 7.4$	15		
$7.4 \leq d < 7.8$	18		
$7.8 \leq d < 8.2$	7		
Total = 40			

Work out an estimate of the mean distance of these 40 jumps.

Give your answer as a decimal.

[3 marks]

Answer _____ m

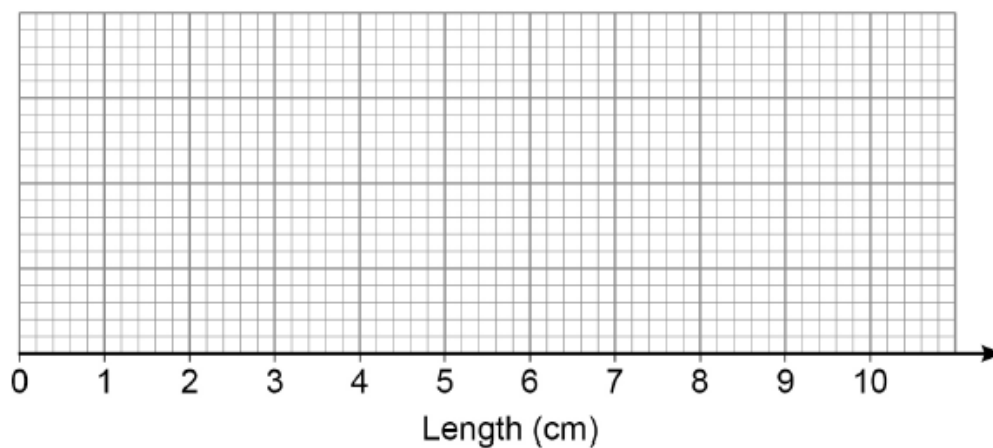
4. No.16

Here is some information about the lengths, in cm, of leaves.

- Shortest length = 2.4
- Longest length = 9
- Upper quartile = 7
- Median length = 6
- Interquartile range = 3

Draw a box plot to show this information.

[3 marks]



5. No.3

Rick claims most of the flats in his 8-floor building are energy efficient.

He samples 45 flats from floors 1 to 5

Give a reason why this sample may **not** be useful in testing Rick's claim.

[1 mark]

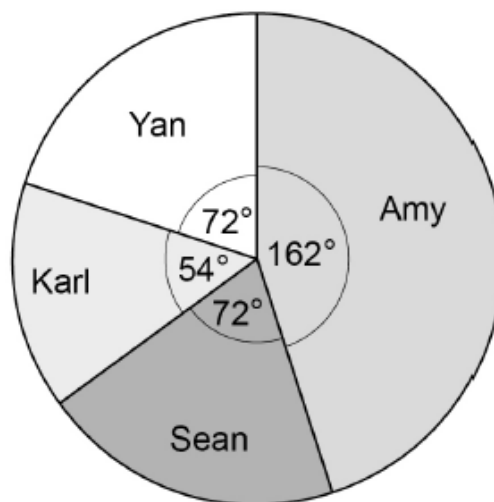
6. No.8

Four people are taking part in a television talent show.

Here are Amy's marks from the 6 judges.

8	9	9	6	9	10
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The pie chart represents the phone vote.



Amy's total score is found by

$4 \times$ the **mean** of her marks
+
her **percentage** of the phone vote

Work out Amy's total score.

[4 marks]

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Answer _____