

Measures of Central Tendency & Spread

Given the data 2, 4, 5, 8, 8, 12, 3, 8, 7, 5
Determine:

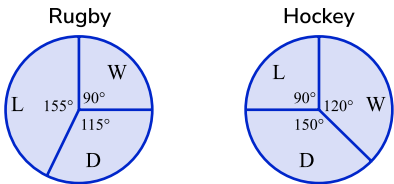
- a) The median
- b) The mode
- c) The mean

Find the range of each set of data:

- a) 4, 13, 8, 7, 4
- b) 154, 150.5, 159.3 151.2

Pie Charts

These pie charts show the outcomes of matches for a school's rugby and hockey teams.



The hockey team won 24 matches. How many did they lose?
Which team won more matches? Explain your answer.

Tables

Diz counts the number of occupants in 15 cars that park at the funfair.

Here are the results

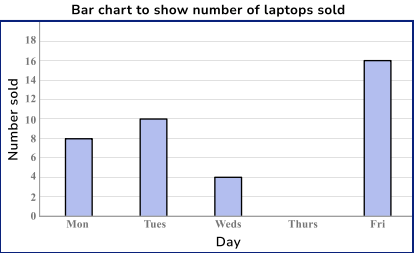
2 3 2 4 3
2 3 1 3 4
4 4 2 3 3

- a) Complete the table.
- b) What is the modal number of occupants in a car?

Number of occupants	Tally	Frequency
1		
2		
3		
4		

Bar Charts

The shop *IT4U* sold 13 laptops on Thursday. Add this information to the bar chart. How many more laptops were sold on Friday than Wednesday?



Surveys and Sampling

Kai wants to find out how much time students spend using their phone. He uses this question:

How many text messages do you send?

- ☐ 0 - 10
- ☐ 10 - 20
- ☐ 20 - 30
- ☐ 30 - 40

Give two things wrong with this question:

- 1:
- 2:

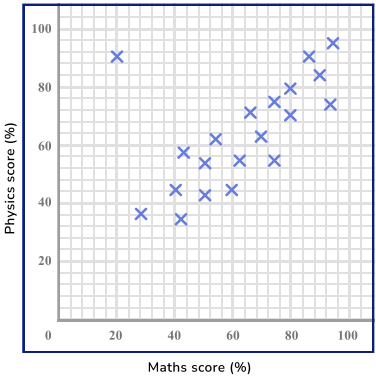
Sev is investigating attitudes towards exercise. He gives a questionnaire to the first twenty men he sees leaving a gym. His sample is biased; give two possible reasons why.

- 1:
- 2:

Scatter Graphs

This scatter graph shows how a group of students performed in class tests.

- a) Circle the outlier.
- b) Describe the correlation between maths score and physics score.
- c) Ignoring the outlier, draw a line of best fit through the data.
- d) Estimate the maths score if a student scored 60% on the physics test.



Stem and Leaf

This stem and leaf diagram shows the heart rate of some students 10 minutes after completing a fitness test.

- a) How many students took the fitness test?
- b) What is the range of student heart rates?
- c) What is the median heart rate?

KEY
5 | 7 means 57

4	7 9
5	1 2 8
6	9 9
7	0 1 2 4 8
8	3 3 5