

4.1 Data types, tables and charts

Name: _____ Class: _____ Date: _____ **Total: 15 marks**

KEY WORDS qualitative • two-way table

Data types, tables and charts

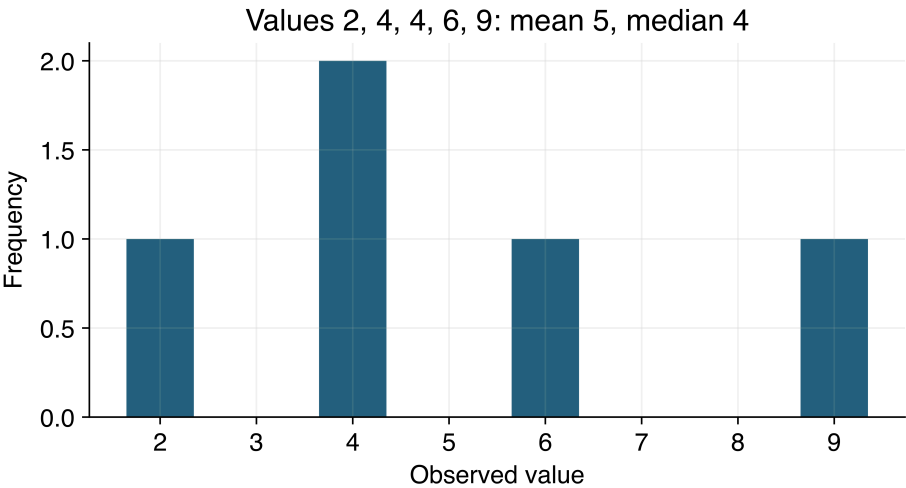
Objective

Classify data, extract from tables, build two-way tables and choose the right chart from the Core bank (rows S1–S4 Core).

1 Key knowledge and worked examples

Data types. Qualitative categorises (fruit), discrete counts (goals), continuous measures (height) – grouped or ungrouped. Extract from tables by reading row and column headers first, quoting units.

Two-way tables. Cross-tabulate two variables; cells must sum to their row and column totals: 30 students, 18 cricket, 15 tennis, 7 both fills a 2×2 with cells 11, 7, 8, 4 summing to 30. Chart choice: bars for categories, dual bars for comparisons, pie for parts-of-a-whole, lines for trends, scatter for correlation.



Original native-lesson illustration; labels belong to its worked example.

2 Practice

2.1 Classify: number of pets per household; favourite colour; mass of luggage. [3]

2.2 A two-way table shows 25 students: 14 play football, 11 basketball, 5 both. Fill the four cells and find how many play neither. [3]

2.3 Name the best chart for showing each: parts of a daily schedule; the trend of temperature over a week; comparing two classes' favourite subjects. [3]

3 Exam-style questions

3.1 (Original.) The two-way table below shows 40 shoppers by gender and purchase.

	Bought	Did not buy	Total
Male	12	a	20
Female	b	7	c
Total	25	d	40

(a) Find a , b , c and d . (b) A shopper is chosen at random: find the probability they are female AND bought. [4]

3.2 (Original.) From a printed train timetable extract: the departure time of the 3rd train on weekdays, and how many minutes the 2nd train takes versus the 4th (state your reads). (If the table is unavailable, describe exactly which cells you would read.) [2]