Two-way tables: fact sheet

Planner week 16 · Learn these facts

Two-way table

rows × columns

with totals

Two things at once

e.g. adult/child and film

Fill it in

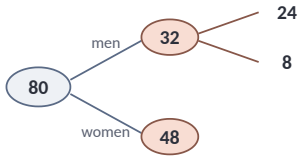
start with the given numbers

then the easy gaps

Each row adds to its total

Each column too

Frequency tree



Branches split the total

Pairs add up to the one before

Missing numbers

total − known part

80 − 48 = 32 men

Subtract to find the gap

Probability

number wanted ÷ total

37 ÷ 61

Check which total: all, or a group?

Percentages

45 of the 150

45 ÷ 150 × 100 = 30%

Part ÷ whole × 100

Check

grand total

in the corner

Rows and columns both add to it

Read carefully

“of the men”	only the men
“of the people”	everyone

Key words

- **Two-way table** shows two kinds of information together
- **Frequency tree** branches split a group, then split again
- **Total** the sum of a row or column
- **Probability** wanted ÷ total

Exam tips

- Put every number from the question in first.
- Then fill the gaps by subtracting.
- Check every row and column adds up.
- Frequency tree: each pair adds to the bubble it came from.
- Probability: read which group is being chosen from.
- Cross off each fact as you use it.

Two-way tables and frequency trees: fact sheet

Two-way tables · Planner week 16 · Learn the method

Worked example

QUESTION

80 people were asked if they like coffee. 48 of them are women.
24 of the men like coffee. 37 of the women like coffee.
Complete the two-way table.

	Like coffee	Do not like	Total
Men	24		
Women	37		48
Total			80

ANSWER

1. Men: 80 − 48 = 32. Men who do not like coffee: 32 − 24 = 8
2. Women who do not like coffee: 48 − 37 = 11
3. Totals: like coffee 24 + 37 = 61, do not like 8 + 11 = 19

	Like coffee	Do not like	Total
Men	24	8	32
Women	37	11	48
Total	61	19	80

Check: 61 + 19 = 80 ✓

Fill in what you are told, then subtract to find the gaps.

How to do it

1. Draw or read the table or tree.
2. Put in every number from the question.
3. Work out the gaps: total − part.
4. Check everything adds up.
5. Probability: wanted ÷ the right total.

Model answer:

The completed table. Every row and column adds up.

Watch out

- Using the grand total when the question picks from one group.
- Not checking the totals.
- Putting a number in the wrong branch.