

16.3 Formatting and Enhancing a Chart

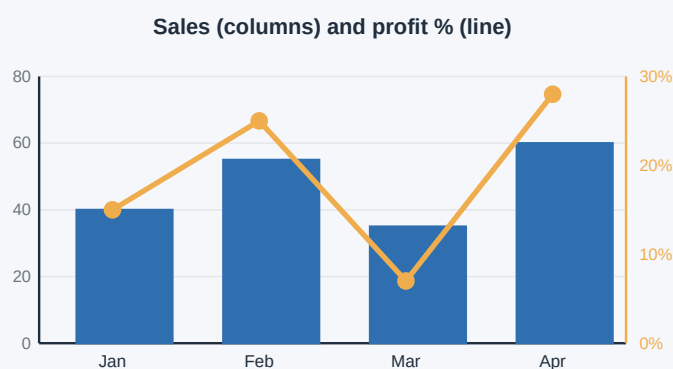
Syllabus 2026 - 2028

WHAT YOU NEED TO KNOW

- Add a second data series and a second axis
- Format numerical values to a specified number of decimal places and to display currency symbols
- Adjust the maximum and minimum values of an axis scale and set incremental values
- Enhance the appearance: extract a pie chart sector, change the colour scheme or fill patterns

Adding a second series and a second axis

Figure 84: A second data series and a second axis



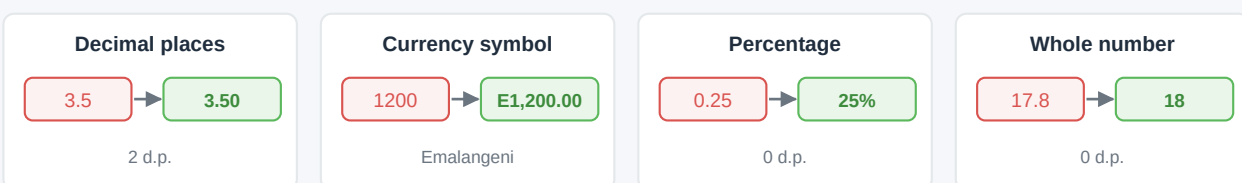
Second series and axis

Series 2 adds more data to compare
Use a second axis when the series use different units or sizes (here, money and percentages)
Each axis needs its own title and a different colour or style

- A **second data series** adds another set of values to the same chart, so two sets can be compared, for example sales and costs
- A **second axis** is added on the right when the series use different units or very different sizes, so both can be read clearly
- Give each axis a title and use different colours or chart types for each series (for example columns and a line)

Formatting numerical values

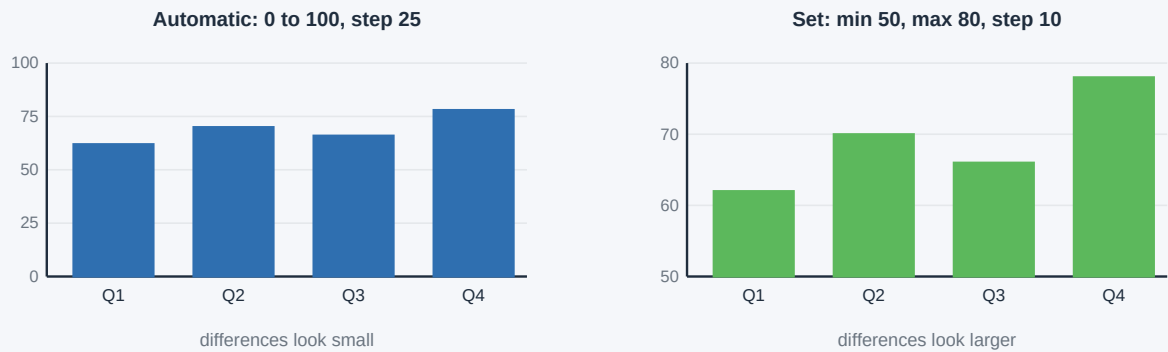
Figure 86: Formatting numerical values



- Format axis labels and data labels to a **specified number of decimal places**, for example 2 d.p.
- Add a **currency symbol** such as E, \$ or R to show that the values are money
- Be consistent: all values on one axis should use the same format

Axis scale

Figure 85: Axis scale: maximum, minimum and increment

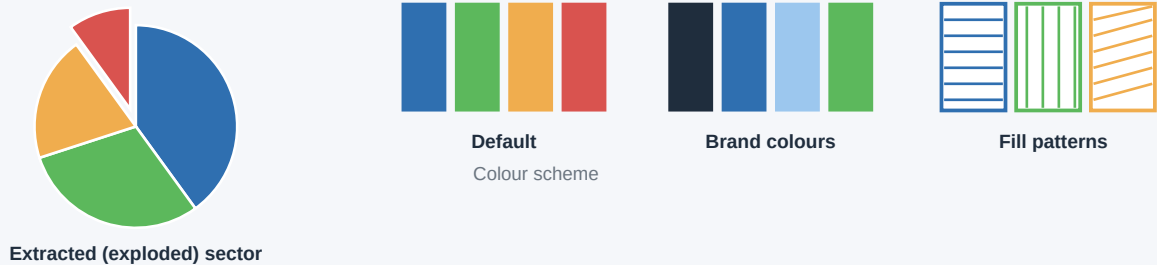


Setting	Meaning
Minimum	The lowest value shown on the axis
Maximum	The highest value shown on the axis
Increment (major unit)	The size of each step between axis labels

Setting suitable values makes a chart **fit the data** and easier to read. Be careful, because a minimum above zero can make small differences look larger than they are.

Enhancing the appearance

Figure 87: Enhancing a chart



- **Extract (explode) a pie sector** by dragging it out, to draw attention to one category
- Change the **colour scheme** to match a house style or to improve contrast
- Use **fill patterns**, such as stripes, so the chart can be understood in black and white print

EXAM TIP

When a task gives exact values (for example 'minimum 0, maximum 100, increment 20'), enter them **exactly**. Currency values need both the **symbol** and the right **decimal places**.

Key terms

Term	Meaning
Second axis	An extra value axis for a different scale.
Data series	A set of related values on a chart.
Decimal places	The number of digits after the decimal point.
Currency symbol	A symbol such as £ or \$ showing money.
Minimum	The lowest value on an axis.
Maximum	The highest value on an axis.
Increment	The step size between axis values.
Extract a sector	Pull one slice of a pie chart out.

Practice questions

Answer each question in full sentences. Command words used: State (give a short answer), Describe (say what it is like), Explain (give reasons), Analyse (break it down and examine it), Suggest (apply your knowledge to a situation), Compare and contrast (similarities and differences), Evaluate (weigh up and reach a judgement).

No.	Question	Marks
1	State two reasons for adding a second axis to a chart.	[2]
2	Describe how to display the values on a value axis with a currency symbol and two decimal places.	[3]
3	Explain why the minimum and maximum values of an axis may be changed.	[3]
4	Describe two ways to enhance the appearance of a pie chart.	[2]
5	Suggest how fill patterns could help a chart that will be printed in black and white.	[2]
6	Compare and contrast using a second data series with using a second axis.	[4]
7	Analyse how changing the minimum value of an axis can affect how the chart looks.	[4]
8	Evaluate the use of an extracted sector in a pie chart.	[5]

Total: 25 marks