Describe time-series features, smoothing when needed, and interpret unusual changes.

Key skills | Free preview

Learning target: Describe time-series features, smoothing when needed, and interpret unusual changes.

A time plot preserves observation order and can show a long-term trend, regular seasonal movement and irregular departures. A single spike differs from a lasting change in level, but a short series may not distinguish these confidently. Describe the pattern first, then use contextual evidence to propose an explanation rather than treating every unusual value as an error.

Try the mathematics

Task 1. Plot observations for periods 1–12: 10,20,12,22,14,24,16,40,18,28,35,45. Describe the repeating two-period pattern, the early trend and unusual features.

Continue with the full worksheet

The complete resource has 2 focused task sets and substantive worked solutions. Use an exercise book or print the A4 worksheet. This preview shows the first task without its full solution.

Find this resource: https://resources.aspiretopowerlearning.com.au/vce/skills/aspire-internal-gm-u34-o1-aos1-ks-15/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Units 3–4; Outcome 1; Key skills; Data analysis; bullet 15; p. 90.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u34-o1-aos1-ks-15. This is an internal identifier, not an official VCAA code.

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