Choose methods to investigate a multivariable data set, including possible time-series data.

Key skills | Free preview

Learning target: Choose methods to investigate a multivariable data set, including possible time-series data.

With several variables, begin by identifying which relationship answers the investigation question and which other variables might affect interpretation. Combine displays, numerical summaries and a fitted model rather than relying on one coefficient. Report predictions with their domain and precision, and distinguish a useful descriptive association from a causal explanation or a reliable population conclusion.

Try the mathematics

Task 1. Five sessions record practice hours x=1,2,3,4,5 and scores y=52,54,55,54,55. Session type is weekday,weekday,weekend,weekday,weekend. Investigate whether score tends to rise with hours: describe a scatterplot and calculate a regression using Sxx=10,Syy=6,Sxy=6.

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-o2-cross-ks-01/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Units 3–4; Outcome 2; Key skills; bullet 1; p. 93.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u34-o2-cross-ks-01. This is an internal identifier, not an official VCAA code.

Free preview: share intact with attribution, without charging. Full resource rights are not included.

Original independent practice. Not published or endorsed by VCAA. The activity is not an official SAC, examination or complete treatment of every clause of a broad curriculum requirement.