Select concepts or models suited to an extended application or structured investigation.

Key knowledge | Free preview

Learning target: Select concepts or models suited to an extended application or structured investigation.

A model should be checked against observations that were not used solely to choose its constant. Inverse variation is plausible for a fixed divisible task performed by equally productive workers, but communication and workspace constraints can disrupt it. Compare predicted and observed values, explain discrepancies and state the range in which the proposed model has useful support.

Try the mathematics

Task 1. A packing job takes 12 hours with 2 workers, 8 hours with 3, 6 hours with 4 and 5 hours with 6. Form an inverse model using the first observation, test every row and predict for 5 workers.

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-u2-o2-cross-kk-03/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 2; Outcome 2; Key knowledge; bullet 3; p. 40.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u2-o2-cross-kk-03. This is an internal identifier, not an official VCAA code.

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