Choose and apply a suitable standard model to a practical situation.

Key skills | Free preview

Learning target: Choose and apply a suitable standard model to a practical situation.

An investigation begins by defining the decision, variables and assumptions before selecting a model. Calculate several cases and locate any threshold where the preferred option changes. A recommendation should connect the mathematics to the quantity the user actually expects, and should distinguish known prices from assumptions about future use, fees and the validity of the pricing rule.

Try the mathematics

Task 1. A club compares two invented printing plans. A costs $25 plus $3 per bundle; B costs $10 plus $5 per bundle. Let x be a non-negative integer. Form models, tabulate costs for x=2,4,6,8,10 and find the break-even input.

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-u1-o2-cross-ks-02/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 1; Outcome 2; Key skills; bullet 2; p. 33.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u1-o2-cross-ks-02. This is an internal identifier, not an official VCAA code.

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