Justifying the selected tool function

Key skills | Free preview

Learning target: Choose suitable technological functions and justify the choice.

A method choice should be justified by the requested result and the structure of the problem. Exact algebra, numerical refinement, plots and simulation each contribute something different. Explain why your selected function is suitable and how you will check its output. State any limits of the technology result before interpreting it in the application.

Try the mathematics

Task 1. For the tank task, justify when to use a symbolic solver, a plot and Newton iteration. Explain which output is suitable for ordering a side length to the nearest millimetre.

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-mm-u2-o3-ks-09/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 2; Outcome 3; Key skills; bullet 9; p. 57.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u2-o3-ks-09. 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.