Interpret exact and approximate tool outputs at a specified precision.

Key skills | Free preview

Learning target: Interpret exact and approximate tool outputs at a specified precision.

Technology may offer exact symbolic output and a rounded decimal display for the same quantity. Decide which form the task requires, retain unrounded values for further calculations and apply the requested rounding only at the reporting stage. Checking a result by substitution can reveal accuracy lost through premature approximation or an inappropriate output setting.

Try the mathematics

Task 1. Use an exact-capable calculator/CAS to evaluate sqrt(50), then request a decimal. State the exact value and its approximation to three significant figures and three decimal places. Verify by squaring the exact form.

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-o3-cross-ks-02/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 1; Outcome 3; Key skills; bullet 2; p. 33.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u1-o3-cross-ks-02. This is an internal identifier, not an official VCAA code.

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