Impose appropriate restrictions or constraints when computing.

Key skills | Free preview

Learning target: Impose appropriate restrictions or constraints when computing.

Technology can evaluate only inputs within a function’s mathematical domain. In triangle problems, an impossible inverse-trigonometric input often signals inconsistent measurements or an incorrectly constructed ratio. Check the admissible range before interpreting an error message. When two angles share a valid sine value, test both against the triangle angle sum rather than trusting one principal output.

Try the mathematics

Task 1. A=30°, a=4 and b=10 are proposed for a triangle. Enter the sine-rule ratio b*sin(A)/a using degree mode, or =10*SIN(30*PI()/180)/4. Explain the result before requesting inverse sine.

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-o3-cross-ks-10/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 2; Outcome 3; Key skills; bullet 10; p. 41.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u2-o3-cross-ks-10. 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.