Functions, domains, codomains and ranges

Key knowledge | Free preview

Learning target: Understand functions, their rules and notation, and domain, codomain and range, including the largest allowable real domain.

A function gives exactly one output for each allowed input. Its codomain is the declared target set; its range is the set actually reached. State restrictions before evaluating or reversing a rule. A graph or table can be a function even when two different inputs share the same output.

Try the mathematics

Task 1. Let $f:[-1,3]\to R$ have rule $f(x)=x^2+2$. State its domain, codomain and range. Find $f(-1)$, $f(0)$ and $f(3)$, and explain why f has no inverse function on this whole domain.

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-u1-o1-kk-01/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 1; Outcome 1; Key knowledge; bullet 1; p. 46.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u1-o1-kk-01. This is an internal identifier, not an official VCAA code.

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