Connect numerical, graphical and symbolic representations of relationships.

Key knowledge | Free preview

Learning target: Connect numerical, graphical and symbolic representations of relationships.

A graphing tool needs explicit rules, a suitable window and an interpretation of its inputs. Changing an intercept parameter shifts a linear graph without changing its gradient. A table can confirm a visually estimated intersection, and algebra provides an independent check. A graph’s continuous appearance does not remove integer or other practical domain restrictions.

Try the mathematics

Task 1. Enter y1=18+4x and y2=42+2x in a graphing tool. Use 0≤x≤20 and 0≤y≤130. Make a table at x=0,6,12,18 and find the intersection both graphically and algebraically.

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-kk-04/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 1; Outcome 3; Key knowledge; bullet 4; p. 33.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u1-o3-cross-kk-04. This is an internal identifier, not an official VCAA code.

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