Form and solve linear equations, including paired equations, from verbal situations.

Key skills | Free preview

Learning target: Form and solve linear equations, including paired equations, from verbal situations.

Two simultaneous equations impose two conditions on the same unknowns. Label the quantities and their units before translating the context. A solution must satisfy both conditions, and its values must also make sense in the setting. Elimination, substitution, graph intersections and inverse matrices are alternative representations of the same solution when the coefficient matrix is invertible.

Try the mathematics

Task 1. A group buys 18 tickets. Adult tickets cost $14 and student tickets $9; the total is $207. Form and solve simultaneous equations for the two ticket counts.

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-o1-aos3-ks-04/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). General Mathematics; Unit 1; Outcome 1; Key skills; Linear functions, graphs, equations and models; bullet 4; p. 32.

The learning target is a concise paraphrase. Aspire reference: aspire-internal-gm-u1-o1-aos3-ks-04. This is an internal identifier, not an official VCAA code.

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