Solving and rearranging with conditions

Key skills | Free preview

Learning target: Rearrange and solve elementary algebraic equations and inequalities by hand.

Solving an equation or inequality requires equivalent operations on both sides. Dividing an inequality by a negative value reverses its direction. Rearranging a formula often introduces a condition on a denominator, and special parameter values may need separate treatment. State both the solution and the conditions under which it is valid.

Try the mathematics

Task 1. Solve $3(2x-1) \leq 2x+9$ by hand and represent the solution on a number line. Check one included and one excluded value.

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-ks-03/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 1; Outcome 1; Key skills; bullet 3; p. 47.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u1-o1-ks-03. This is an internal identifier, not an official VCAA code.

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