Calculate with matrices and solve matrix equations

Key skills | Free preview

Learning target: Calculate with matrices and solve matrix equations.

A matrix stores information in rows and columns, and its dimensions determine which operations are possible. Matrix multiplication follows row-by-column products and usually depends on order. An inverse can solve a matrix equation only when it exists; a nonzero determinant provides that test for a square matrix.

Try the mathematics

Task 1. Let A=[[2,1],[1,1]] and B=[[1,0],[2,1]]. Find A+B, AB and BA. Explain the evidence about commutativity.

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/sm-u1-o1-ks-07/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Specialist Mathematics; Unit 1; Outcome 1; Key skills; bullet 7; p. 62.

The learning target is a concise paraphrase. Aspire reference: sm-u1-o1-ks-07. This is an internal identifier, not an official VCAA code.

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