Representing sample spaces and events

Key knowledge | Free preview

Learning target: Recognise different representations of sample spaces and events.

A sample space records elementary outcomes rather than only the values of a summary variable. Events collect outcomes with a common property. Tables, lists and diagrams should describe the same underlying experiment consistently. Equal probability for outcomes is an assumption to justify; it is not guaranteed by the number of entries.

Try the mathematics

Task 1. Toss two independent fair coins. List the ordered sample space, assign probabilities, and define X as the number of heads. Give the events $X=1$ and $X\geq 1$ and their probabilities.

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-09/

Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 1; Outcome 1; Key knowledge; bullet 9; p. 47.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u1-o1-kk-09. This is an internal identifier, not an official VCAA code.

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